Women in Physics in Finland

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Overview

The general trends in the numbers of female students in physics departments and the career development of women in physics have not changed much in Finland in recent years. In the 2000s the percentage of women at the PhD level has been 20% to 30%, and in some physics departments almost half the new students are women. However, the 10 female physics professors make up only 7% of all physics professors in Finland [1, 2]. Physics can be studied at nine universities in Finland, and the number of female students varies significantly among them. Technical universities typically have the lowest representation of women.

All universities and the Academy of Finland (the main funding body supporting fundamental science) have to some extent a written gender equality program, but it is not very clear how they control whether the guidelines are followed. There is still no systematic gathering and summing up of the data nationwide due to a lack of resources and political interest.

Challenges in Promotion of Equality and Outreach

• How to increase girls’ participation in the STEM subjects?
  • Girls interested and talented in science or engineering are too often pushed into the direction of medicine instead of STEM fields by their relatives and society
  • Outreach activities taken by universities usually reach only older (high school stage) students, and those already interested in science – little effect on earlier stages where the foundations for the future are laid.
  • No consistent funding or paid responsible coordinators for organizing activities, gathering and keeping track of statistics. Efforts are not well coordinated over the country, and depend on a handful of individuals who volunteer for this cause in addition to their actual full-time jobs.

Issues in Professional Life

• Despite Finland having a high percentage of women in the labor market and being a forerunner in gender equality in many areas, working life is very gender-segregated [3, 4]
  • Women are in the majority in the public sector; health care, social services and basic education...
  • ... but are underrepresented in engineering, the natural sciences, economics and finance
  • Salaries tend to be low in many of the ‘women’s fields’
  • Awareness of this issue has been raised, partly due to recent political developments, but change is very slow especially in physics and engineering

• Glass ceiling to higher positions: The average percentage of female professors over all disciplines is around 24%, even though for the last 30 years already, 50% to 60% of university graduates have been women. Natural sciences and engineering have the lowest numbers of female professors [2]. In industry the problems are similar; women rarely make it to top executive positions [5].

• Finland allows rather long child care leaves for any one of the parents until a child turns 3 years – however, in 97% of cases such leave is taken by the mother, only 1-3% of fathers take additional leave after the 54 days of dedicated paternity leave [6].

Common Problematics for Women

• Problematic behavior of older, established persons is tolerated silently, even if problems are “public knowledge”
  • Small number and low visibility of female role models
  • Old tradition of socializing even discussing business in gender-separated places, most prominently in sauna

• Potential rising problem: “generation conflicts” building up among women – those without children may experience belittlement of their problems or being looked down upon, and may be casually discriminated when it comes to holidays or working hours [1]

Examples of Recent Activities: Helsinki University

• Women in Science Network was launched in spring 2014 at the Kumpula Science Campus of the University of Helsinki.
  The network is quite active:
  • Up-to-date website (http://blogs.helsinki.fi/kumpulawomen/) containing information on campaigns related to women in science, announcements of events, and biographies of female researchers in the natural sciences
  • Regular lunch meetings, which anyone interested can attend
  • Seminars on education and equality in the natural sciences
  • Helsinki Association of Women Researchers (http://blogs.helsinki.fi/tutkijanaiset/) organizes seminars on gender equality issues and more informal meetings for women researchers, physicists also have participated

References

5. Ministry of Social Affairs and Health, Representation of women and men in senior corporate management at http://ulkaisut.valtioneuvosto.fi/handle/10024/74518 (Finnish, summary also in English)

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