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Use of gender statistics in policymaking and policy monitoring

Gender Policy Monitoring in Swiss Higher Education Institutions

Note from the Swiss Federal Statistical Office*

Abstract

In 2000, the Swiss Government launched a Programme on Equal Opportunities for Women and Men at Universities as well as an Action Plan in order to promote equal opportunities at the newly created universities of applied sciences.

Various funding instruments (mentoring, bonuses for the appointment of female professors, etc.) have since been implemented in Switzerland. In addition, a monitoring instrument with different sets of indicators was developed from 2013 – 2016, which is used by the institutions of the higher education sector.

Most data are provided by the Federal Statistical Office (FSO) on a yearly basis. Gender issues are a cross-cutting element and reflected in its set of educational indicators and its publications. This paper will shed light on the gender monitoring instruments by presenting the approach used for data collection by FSO, its method and some findings, and will discuss parameters for further evaluation.

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I. The Swiss Higher Education Area and its Gender Policy

A. The Swiss Higher Education Institutions

1. The Swiss Higher Education Area is characterised by three types of higher education institution: ten universities and two Federal Institutes of Technology in Zurich and Lausanne (UNI), seven public (and one privately sponsored) universities of applied sciences (UAS) as well as 14 universities of teacher education (UTE), some of which are integrated into universities of applied sciences. All types are managed and financed differently, and have different characteristics which are also reflected in debates on gender issues.

2. As in other European countries, the number of students at the UNI, UAS and UTE has risen constantly over the past 20 years to more than 240 000. The number of diplomas (teacher’s diploma, Bachelor’s, Master’s, and doctorate) has grown faster than student numbers to over 53 000 in this period. The growth in costs has been only slightly higher than the growth in student numbers and the number of teaching staff. Higher education costs about CHF 11 billion per year; staffing costs account for about 70% of this amount. In 2016, more than 89 000 persons were employed, corresponding to 59 000 full-time equivalents (FTE). The difference between headcounts and FTE indicate a large number of part-time employed staff, which is one of the characteristics of the Swiss Higher Education Institutions.

Graph 1 Development of higher education institutions: students, graduates, staff and costs (2007 = index 100; first year for costs)

B. Programmes on Equal Opportunity and University Development

3. In international comparison, Switzerland used to perform poorly in terms of the representation of women at the professorship level at universities, although more than half of all master's degrees are awarded to women. Aware of these problems, the Swiss

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1 A full-time equivalent is equal to a work-time percentage of 100% during 12 months.

2
Confederation launched a programme on "Equal Opportunities for Women and Men at Universities” in 2000, which provided subsidies of CHF 3.35 million with the objective of increasing the proportion of female professors from 7% to 14% by 2006. The first programme consisted of three strategic priorities and modules:

- increasing the appointment of female professors, supported by a financial incentive system;
- promoting young scientists through coaching, special training services and networking;
- introducing and establishing childcare at university sites (BBW 2004 / 1d).

4. The first programme was financed by the former Swiss University Conference (SUC), had a duration of three years and was aimed at the 10 cantonal universities. The former SUC was the joint federal and cantonal body responsible for university policy cooperation. Further programmes of equal duration followed: At the end of its funding period, each programme was evaluated with regard to its achievements by external evaluators (BBW 2004, Buero Bass 2012 and 2018). Thus, progress was measured, targets and priorities adapted and new objectives defined for the following periods. It would go beyond the scope of this paper to discuss the different priorities of each programme period.

5. The universities of applied sciences were established in Switzerland in the mid-1990s. The intention was, according to Lepori and Mueller (2016), to upgrade the Swiss vocational training system to tertiary education and to support small and medium-sized enterprises and revitalise the economy through applied research and development (aR&D). In a similar manner, the former teacher training colleges were transformed into universities of teacher education. As the choice of study subjects at that time was – and still is as we will see in the next chapters – a gender-specific matter, the UAS (and UTE) had to develop action plans for the promotion of equal opportunities for women and men right from the beginning, if they wanted to profit from funding of these programmes. While men still prefer the STEM field subjects of Science, Technology, Engineering and Mathematics, women predominantly opt for study subjects such as Health, Social work or Teaching. It was therefore decided that gender equality measures should focus on the proportion of the under-represented sex among students, young scientists, lecturers, administrative and technical staff, and promote an increase in the respective gender percentage.

6. The “Federal Act on the Promotion of Universities and the Coordination in the Swiss Higher Education Area” came into force on 1 January 2015. This Act was implemented to harmonise structures and policies within the Swiss Higher Education Area and to support cooperation among universities of all types. The division of competences between the Swiss Confederation and the cantons, as well as their tasks and responsibilities were regulated in a special agreement. A new body, called swissuniversities, was set up with the idea of integrating all types of HEI under one roof in order to streamline and strengthen the cooperation and coordination of higher education policy, including programmes on equal opportunity and university development.

7. This new approach was already reflected in the 4th programme period from 2013 – 2016 which set a target to increase the percentage of female full and associate professors to 25% and that of female assistant professors (or equivalent) to 40%. Given the differences between the HEI and between the departments of each HEI, the universities were pushed to develop their own action plans in order to ensure equal opportunities. Various funding instruments (mentoring, bonuses for the appointment of female professors, etc.) have since been implemented in Switzerland. Thus, each HEI was forced to build up a gender monitoring system suitable for describing progress according to their individually set targets.
8. As a result of these equal opportunities programmes, commissions that deal with gender issues have been established at all universities and gender studies and are part of the universities’ portfolio today. Almost every university, be it UNI, UAS or UTE type, has set up a specific action plan and monitoring system in order to promote equal opportunities and measure the outcome or impact of its gender policies (e.g. FHNW 2016, ETHZ 2017/18). It would go beyond the scope of this paper to discuss the various projects of the individual programmes.

9. The current programme period (2017-2020) focuses on the following issues:
   - introducing a mentoring programme for women to prepare them for management tasks with the aim of increasing the proportion of women in management functions (including professorships) in the STEM sector by supporting career development through mentoring;
   - introducing a Transferable Skills Training Programme for postdoctoral students with the aim of developing and offering a range of courses in order to strengthen their methodological, social and personal skills, and
   - introducing diversity in management training programmes.

A total of CHF 12 million has been earmarked for projects within the programme for 2017-2020.

C. Official statistics, the Swiss University Information System and its role in gender monitoring

10. In view of the gender policy just described, many monitoring systems have been developed; they all vary slightly from each other, and are based on indicators which once again reflect the structure of the three types of universities. Most monitoring systems and evaluations demand data that is mainly provided by the Swiss Federal Statistical Office and based on its Swiss University Information System (SUIS). This is an institution in which representatives of the universities, the university cantons and the Swiss Confederation work together in order to compile statistics on higher education throughout Switzerland. The same abbreviation also stands for a database containing data on students, diplomas, staff and costs in higher education.

11. Higher education students and diplomas: The SUIS student and graduate database was created in the 1970s, to meet a growing need for coordination and planning by the Confederation and the cantons in the university sector. It provides information with regard to the structure of higher education institutions, various socio-demographic factors and statistical information on how courses are run. All persons enrolled have an individual identification number that enables personal data to be treated anonymously and flow analyses to be carried out. The database serves as the basis for the scientific analysis of courses at Swiss higher education institutions. It is used to calculate indicators and to make forecasts about student number trends. Since the academic year 2012/13, when a unique identifier for statistical purposes was introduced in the educational system, it has been possible to make longitudinal analyses for all levels of education and training.

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2 For further information see: https://www.swissuniversities.ch/en/organisation/projects-and-programmes/p-7/
12. University staff statistics: Statistical surveys of university staff have been carried out at UNI and the federal institutes of technology since 1980, at UAS since 2000 and at UTE since 2005. The survey collects administrative data contained in the university staff registers. The university staff statistics were revised in 2012. As for students, the Swiss unique identifier has been introduced in the statistics to identify persons, which will enable the educational path of students and staff to be studied in the mid-term. At the same time, in view of the introduction of the Federal Act mentioned above, staff categories have been harmonised and reference periods modified: now data on persons relate to a reference date (31.12) whereas the data in FTE relate to the civil year for all types of higher education institution. This revision has had an impact on some time series, while still allowing trends to be monitored. Gender issues in form of personal characteristics such as gender, age, and nationality are recorded along with activity-related characteristics such as personnel category, field of study, type or volume of work. Data of the HEI staff allow, with some limitations, comparisons of the use of resources between the different types of universities, between institutes, departments, staff categories or between different performance categories such as lecture or research, etc. In addition, questions on the impact of education policy issues, such as gender equality, can be answered. Furthermore, the surveys provide data for the calculation of indicators and for international comparative studies.

13. University financial statistics: In the higher education sector, analytical accounting provides information on the costs and activities of the three types of higher education institution. It indicates both public and private sources of funding (funding of student tuition fees, R&D funded by the Swiss Confederation or within EU-FRP and mandates of enterprises, etc.). The expenses of universities have been surveyed since the financial year 1996 and their costs surveyed since 2006; the costs of UAS have been surveyed since 2000 and costs of UTE since 2008.

14. There is no such thing as a gender monitoring system provided by the Swiss Statistical Office. Instead, it has opted for a holistic approach by integrating a gender perspective into statistics – following the recommendation of the UN Statistics Division (2016) – and has introduced core variables into its surveys and, as far as possible, into its register data sets. As for education, all basic statistics include information on gender and female ratios. Special publications are dedicated to this topic, such as Women and Science (SSO, 2019), and a new concept in popular science communication, a Science Slam, has been developed to reach a broad audience (see Aksözen et al, 2019).

15. For further information and a statistical overview of Switzerland’s higher education landscape, please consult our publication on Statistics of higher education institutions (2018 edition) or surf our website: https://www.bfs.admin.ch/bfs/en/home/statistics/education-science.html.
II. Staff employment patterns at Swiss Higher Education Institutions

D. The “Leaky Pipeline”

16. As Salminen-Karlsson stated with her FESTA\(^3\) partners: “Statistics can be a powerful tool to increase awareness of gender issues. Many people who have believed that the academe is reasonably gender equal have been convinced about the opposite when confronted with "hard facts" on what the situation actually looks like” (2016:24). And gender statistics reveal “leaky pipelines”, the continuous decline in the proportion of women across the different stages of academic careers. G2 shows this known phenomenon.

Graph 2 Women’s ratio of students, diploma MA, PhD, Habilitations, assistants & research associates, lecturers and professors at Swiss HEI, 2000-2016;
* UTE students (2001) and UTE personnel (2002)

17. The graph shows what gender equality looks like in Swiss HEI: in 2017, of the 18348 Master’s degrees awarded by Swiss HEI, 9484 were awarded to women. The situation already looks different for PhD certificates, 2291 of which were awarded to men and 1860 to women. For a classical academic career at a university, a habilitation is required in the German-speaking academic world (less in the French and Italian-speaking part of Switzerland). This is another thesis that is dedicated to a research question and requires several years of research work. The average age of those who obtain a habilitation is 42;

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\(^3\) FESTA stands for Female Empowerment in Science and Technology Academia and was a project funded within the EU Seventh Framework Programme (FP7/2007-2013)
significantly fewer women than men pursue this career path; in 2017 there were 61 out of 205.

18. There are relatively clear career paths at universities, with professors at the top, lecturers responsible for teaching, and assistants and research associates (including PhD students) being involved in research. Women are outnumbered at all these levels, and especially at the top. Such clear career paths are less common at the UAS and UTE. For this reason, we take a brief look at the staff of the three types of higher education institutions before analysing gender (in)equality at the universities (UNI) by means of a longitudinal analysis (Chapter III below).

E. Female ratio among academic staff

19. Graphs 3 – 5 show the female ratio among academic staff for UTE, UAS and UNI, indicated for the years at the beginning and end of a Programme on Equal Opportunity and University Development period. The good news: Progress is being made. However, female ratios differ considerably.

Graph 3 a-c: annual change in female ratio among academic staff at UTE, 2000-2016

20. At the UTE, it is high in absolute terms for all low-level personnel categories. In 2017, of the 901 assistants and research associates, 620 were women. Of the lecturers, 1349 were women and 1013 men and of the professors 194 were women and 211 men, who were again in the majority in the highest personnel category. Among the students, almost 83 % were female.

21. At the UAS, most of which emerged from higher technical vocational schools, men are consistently in the majority, whether among students, where the female ratio was 28% in 2017 or among academic staff. This gap can be even greater between the different fields of studies, in particular in STEM subjects (as the average value per university type suggests).

22. An in-depth analysis of the employment and career patterns at the UAS and UTE will be the subject of another analysis and the topic of a forthcoming publication.
Graph 4 a-c: annual change in female ratio among academic staff at UAS, 2000-2016

23. The loss of women in the course of an academic career can be observed particularly at universities, where in 2017 women and men were equally represented among students. 44% of women were engaged as assistants or associates in research, a third in teaching and only 22% made it to the top where 1012 women out of 4444 held a professorship.

Graph 5 a-c: annual increase in female ratio among academic staff at UNI, 2000-2016

24. There are differences within the universities and between departments, and the two Federal Institutes of Technology, with predominately STEM fields, have set up the “Fix the Leaky Pipeline” Programme with the aim to support women in their career building and to fix the ‘leaky pipeline’ of women in science. So much for the descriptive statistical information; the next chapter reveals further elements on this phenomenon including a comparison between STEM and non-STEM fields at UNI.
III. First results of a longitudinal analysis on women’s career patterns at Swiss universities

F. Introduction and methodological considerations

25. The university staff categories have been stable and distinct over many years. Furthermore, most of the public equal opportunities programmes have aimed at the universities, which have established internal gender monitoring tools more systematically than the two younger types of institutions. Therefore the insights from this type of institution will also apply to the other types.

26. In general, younger men outnumber younger women in all fields except for the categories “Research assistants” and “Assistants and PhD students” in the non-STEM fields. The share of female academic staff has risen or maintained the level between 2013 and 2017 (Tables 1a, 1b and 1c).

27. The causes for the discrepancy between the categories could lie in the earliest phases of the academic track. A cohort\(^4\) breakdown of people who started to work at a university in the same year shows that, even if the percentages of reduction differ little between the genders, more women than men tend to abandon the university system after one, two or three years. The abandonment rates of academic staff in the first three years are fairly high (see Tables 2a and 2b) and the staff turnover is quick. People who leave tend to be replaced in roughly equal number by a new supply of employees for each gender. Since the absolute entry-numbers remain consistently higher for men than for women, even if later the career opportunities for men and women are supposed to be equal, there will still be more males than females in the higher positions.

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\(^4\) The absolute numbers refer to the entry categories in 2013.

\(^5\) A cohort includes all the people who started to work at a university in the same year.
This paper aims to analyse persons who do not leave the universities. This separation should allow the difference between genders during a potential academic career to be addressed.

The unique identifier for each and every person in the Swiss staff statistics at Higher Education Institutions was introduced in 2013. With 2017 as the latest year for data collection, the data comprises five years. The anonymised dataset of each staff member allows us to follow the development of each person’s status. The comparison of the changes in status between genders may highlight career paths and the effectiveness of equal opportunity programmes. The status comprises besides others information on the ratio between teaching and research, the FTE, the funding, the type of contract and the official category of staff.

This paper focuses on the last item. The change in this variable best reflects and summarises the career improvement of the academic personnel. The main object of support and equal opportunity programmes concentrates on this group up to the age of 45, since the chances of pursuing or continuing an academic career diminish after this age. For this reason, older individuals are omitted from the analysis. Even if academic careers sometimes allow stopovers in the private sector, most academic careers (around 90%) develop continuously at universities. Therefore, the datasets include only persons who have been employed at a university for the whole time period 2013-2017. Persons with an annual employment rate of lower than 5% were excluded, under the assumption that they cannot follow a career path at a university at such a negligible rate.

Monitoring of the staff categories is further detailed by separating assistants and research associates, while keeping professors and lecturers as before. At universities, the category ‘assistants’ comprises PhD students as well, who can be found primarily at this type of institution.

A more detailed classification has already been introduced at the request of the former SUC and will be integrated into our basic statistical information set on UNI staff; this update will possibly be available on our website by the end of July 2019.

G. Results

The population of interest is made up of nearly 8100 persons of whom ca 60% are men and ca 40% women.
34. After five years (Table 3), about 27% of this academic personnel has changed staff category. The percentage is very similar for both men (26.7%) and women (27.7%).

35. The most stable staff category is professors (over 90% were still in the same category five years later); those who have attained the status of professor are not likely to lose it before they retire. Female professors (94.4%) are slightly more likely to remain in their position than men (90.3%).

36. The staff category with the largest change is “Assistants and PhD students”, with more than 35%. About 32% of both genders shift their category from “Assistants and PhD students” to “Research associates”. The duration of the observation period is slightly longer than the regular time frame of a PhD study programme. PhD graduates who remain in the academic system often continue as research associates. Changes to “Lecturer and teaching staff” or “Professors” are in total below 5%, with similar proportions for both genders.

37. The largest difference between men and women shows the category change from “Lecturer and teaching staff” to “Research associates”. While 7% of the men who were lecturers in 2013 became research associates in 2017, more than 15% of the women made this change. Often people work in both teaching and research, the focus of their duties change from year to year according to the needs in the university institutes and the available projects. Further investigation on the actual amount of teaching and research might help to understand this finding.

38. In general, the status of professor is hard to achieve and only a small fraction of those who start an academic career attain it. The promotion to “Professor” after five years at a university concerns 7.3% of the “Research associates” and 7.4% of the “Lecturer and teaching staff”. In both cases, the difference in advancement between the genders slightly benefits men over women.

39. In the STEM fields, the ratio of men to women in the observation group is 70% to 30%, significantly higher than the overall ratio (60% to 40%, see above). The male preponderance in the scientific and technical sector still persists in the younger generations of academics.

40. After 5 years, 23.5% of the whole academic personnel have changed staff category, with little difference between men and women (23.7% and 22.6% respectively). These changes

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Table 3: Change in staff category between 2013 and 2017
Academic staff aged 45 or younger
All subjects, in %

<table>
<thead>
<tr>
<th>Women</th>
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<tbody>
<tr>
<td>from</td>
<td>Professors</td>
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<tr>
<td>Professors</td>
<td>94.4%</td>
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<tr>
<td>Lecturers and teaching staff</td>
<td>6.7%</td>
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<tr>
<td>Research associates</td>
<td>5.6%</td>
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<tr>
<td>Assistants and PhD students</td>
<td>0.3%</td>
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<th>Men</th>
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<td>Professors</td>
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<tr>
<td>Professors</td>
<td>90.3%</td>
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<tr>
<td>Lecturers and teaching staff</td>
<td>7.7%</td>
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<tr>
<td>Research associates</td>
<td>8.5%</td>
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<tr>
<td>Assistants and PhD students</td>
<td>0.4%</td>
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<th>Total</th>
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<td>from</td>
<td>Professors</td>
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<tr>
<td>Professors</td>
<td>91.3%</td>
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<tr>
<td>Lecturers and teaching staff</td>
<td>7.4%</td>
</tr>
<tr>
<td>Research associates</td>
<td>7.3%</td>
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<tr>
<td>Assistants and PhD students</td>
<td>0.3%</td>
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Directorate staff has been excluded

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6 The categories were observed only at the initial (2013) and at the final point (2017). Intermediate steps have not been analysed. People who started at a University, left and returned, have been excluded.
percentages are smaller than the overall ones. People in the STEM faculties tend to stay longer in the same staff category and mobility is slower than in non-STEM fields (Table 4).

41. For “Assistants and PhD students”, 72% of the women and 69% of the men remain in the category (overall rate, considering all subjects: 64% for both genders). Often people start work at universities as assistants and then take up a PhD programme; or, they can become assistants after completing their doctoral studies. Assuming that a doctoral programme must have been concluded five years after the start, this would mean that, in the STEM fields, people either start before their Master graduation or their PhD studies take longer. In any case, all these phases tend to take longer than for their colleagues in the non-STEM subjects.

42. The largest difference between the genders is the remaining proportion in “Lecturer and teaching staff”. Men keep their category in 86.6% of the cases, whereas only 67.7% of women do the same. Almost 20% of female “Lecturer and teaching staff” become “research associates”. This dynamic is highly interesting and needs further analysis in the future.

43. Between 6%-7% of the research associates become professors after five years, with no considerable gender difference. A look at the “Lecturer and teaching staff” shows that nearly 10% of the women and 7% of the men attain the status of professor after five years at a university. In this case the gender difference is more relevant, and in favour of women. On the one hand, this discrepancy could be affected by the absolute numbers, which are noticeably smaller for women than for men. On the other hand, women who start in STEM fields and success in teaching are more likely to become professors.

44. Finally, a glimpse at the non-STEM fields alone (Table 5; change ratio for both genders around 27%) reveals the two following major facts: firstly, significantly more women than men have not moved from the category “Research associates” after five years. This might suggest that advancement and mobility are, for several reasons, slower and more difficult for women than for men. Secondly, the difference in the rate of change from the category “Research associates” to the category “Professors” is noticeably higher (11%) for men than for women (5%). It seems that women in non-STEM fields have more difficulties than their male colleagues to reach the highest status.

45. Almost 17% of the men and 11% of the women that were “Research associates” in 2013 are lecturers in 2017. Apparently women prefer – or get stuck in – research activities, while men move more quickly to teaching. As many people, men and women alike, often work in both research and teaching and as the attribution of the staff categories is related to the main

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Table 4: Change in staff category between 2013 and 2017

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<tr>
<td>Professors</td>
<td>95.0%</td>
<td>5.0%</td>
<td>0.0%</td>
<td>95.9%</td>
<td>3.3%</td>
<td>0.8%</td>
<td>95.7%</td>
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<td>Lecturers and</td>
<td>9.7%</td>
<td>67.7%</td>
<td>19.4%</td>
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<td>86.6%</td>
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<td>Lecturers and</td>
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<td>Research</td>
<td>6.9%</td>
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<td>Assistants</td>
<td>0.0%</td>
<td>1.5%</td>
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Directorate staff has been excluded
activity, this difference could also partly be the consequence of external circumstances (e.g.: number and extent of research projects in the institutes or teaching needs, etc.).

IV. Conclusion

46. As reported to the OECD for its 2018 edition on Education at a Glance, the tertiary attainment of women in Switzerland has increased twice as fast as that of men over the past decade. Whether or not this is the result of the above mentioned programmes on equal opportunity and university development cannot be answered conclusively, despite gender monitoring in Higher Educational Institutions (by the SSO) and evaluation (by external evaluators). However, Switzerland today has one of the smallest gender gaps in tertiary attainment across all OECD countries.

47. The situation is different when you look at the staff and their (promotion) mobility in the higher educational institutions, despite the numerous projects under the Programmes on Equal Opportunity and University Development.

48. The first findings of our analysis reveal that mobility among the staff categories after five years at a Swiss University (2013-2017) is often similar in both genders across the various academic fields. However, we have noticed that women tend to remain for a longer time than men in the category “Research associates”. Further, it appears harder for women to take the final step in their career and become professors, especially in the non-STEM subjects. This difficulty in achieving the highest position is well known and has been vastly described in the literature.

49. As an overall evaluation, it appears that some progress has been made in relation to the equality of career chances of the men and women, who have stayed in the Swiss university system for the whole period 2013-2017.

50. With regard to the STEM-fields, female shares remain almost unchanged after five years, but this might rather be related to the persisting underrepresentation of women – with few exceptions – in the scientific and technical subjects. It seems to be hard to motivate more female school-leavers to start studies in STEM-subjects.

51. Change is slow and difficult. Although more needs to be done in Switzerland, equal opportunity programmes for young academics at universities already seem to have had an effect within the observation period that corresponds approximately to the duration of the last programme.
52. Still, the gender gap in the university headcounts persists and is sometimes quite wide. As already mentioned, obstacles for females might appear in the transition to higher positions, often at ages when balancing work and family become most onerous.

53. Presenting and discussing possible political interventions, some of which have been the subject of debate for years (i.e. quotas or measures for work-life balance) is not the goal of this paper.

V. Acknowledgements

54. Thanks to the colleagues from the domain ‘students and exams’ at the Federal Statistical Office for important details on the data.

VI. Literature and further information

Aksözen, Mehmet; Zafarana, Elena; Bajic, Merlina; Herrmann, Vera: Science Slams – a new concept for presenting gender statistics. UNECE Work Session on gender Statistics. Neuchâtel, Switzerland, 15 – 17 May 2019

Bundesamt fuer Bildung und Wissenschaft: Evaluation Bundesprogramm Chancengleichheit von Frau und Mann an Universitäten, Bericht zu Umsetzung und Wirkungen des Programms 2000 bis 2003; Schriftenreihe BBW 2004 / 1d


Buero Bass: Evaluation des Teilprogramms «Chancengleichheit von Frau und Mann an den Universitäten» (SUK P-4, 2013-2016/17); Schriftenreihe des Staatssekretariats für Bildung, Forschung und Innovation, Bern, 2018

ETH Zurich (ETHZ): Gender Monitoring 2017/18, Zürich 2018

Fachhochschule Nordwestschweiz (FHNW): Aktionsplan Chancengleichheit FHNW 2017-20, Windisch 2016

Lepori, Benedetto and Mueller, Christoph: Fachhochschulen als Akteure im schweizerischen Forschungs- und Innovationssystem, Schriftenreihe SBFI, 2016


Robertson, Judy; Williams, Alison; Jones, Derek; Isbel, Lara und Loads, Daphne ed. EqualBITE: Gender equality in higher education. Rotterdam: Sense Publishers, 2017.

Salminen-Karlsson, Minna with FESTA partners: The FESTA handbook of organizational change: Implementing gender equality in higher education and research institutions; Uppsala University 2016

