Speaker Series: The Social Role of Colleges – how they support regional economic, social and cultural development

# Universities of Applied Sciences as Actors of Regional Development? Evidence from the Swiss Education System

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## Land Acknowledgement

I wish to acknowledge this land on which the University of Toronto operates. For thousands of years it has been the traditional land of the Huron-Wendat, the Seneca, and the Mississaugas of the Credit. Today, this meeting place is still the home to many Indigenous people from across Turtle Island and I am grateful to have the opportunity to work on this land.







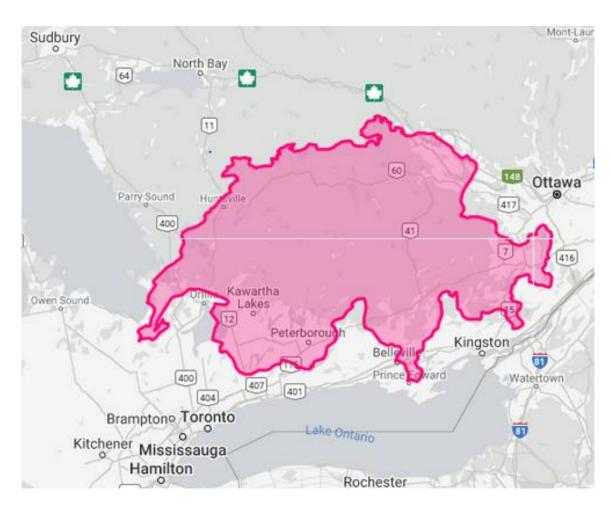
- Education in Switzerland: VET and the position of Universitites of Applied Sciences (UAS)
- 2. UAS: Mission, Staff, Graduates, Employment, Equity
- 3. UAS as actors of regional development?
- 4. Theorizing the role of Colleges/UAS







### 1 Education in Switzerland



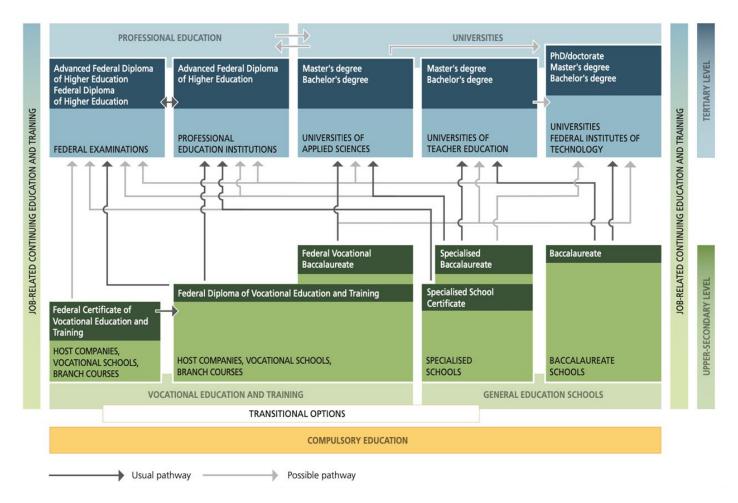
- 8.5 Mio
- Official Languages: German, French, Italian & Romansh
- Governance: Direct Democracy and Federalism
- 26 Cantons
   (Provinces) with
   major autonomies
   e.g. in education







### 1 Swiss System of Postcompulsary Education



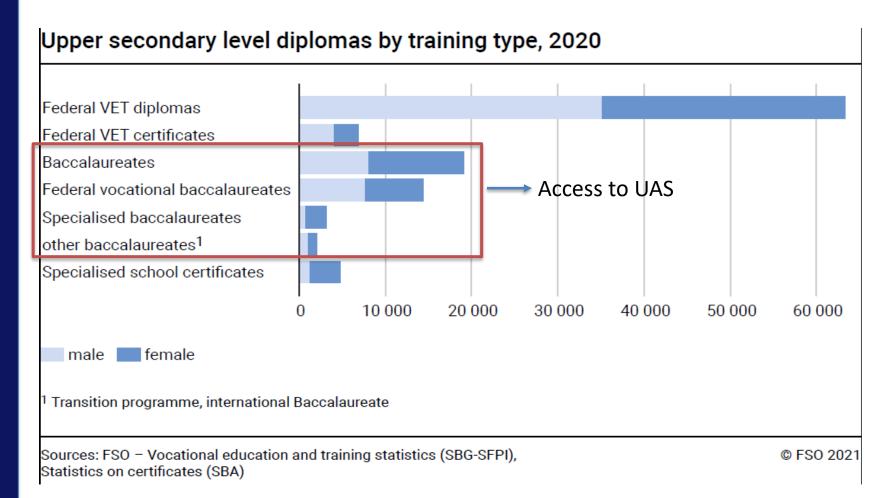






(SERI, 2021)

## 1 VET as Major Track





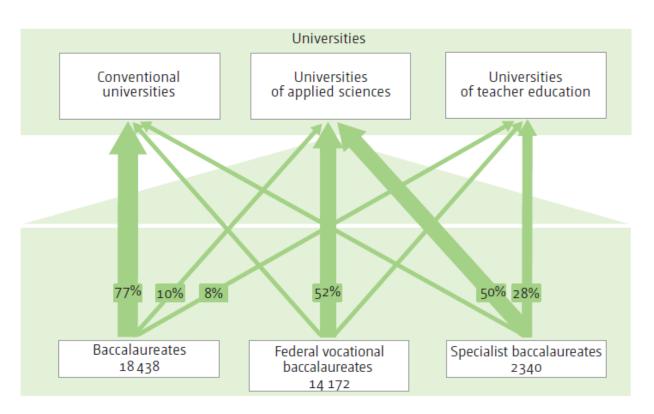




## Pathways to Higher Education

#### 190 Transitions to higher education, 2014 cohort

Transitions up to 2016, i.e. up to two years after completion of baccalaureate Data: FSO (SHIS); calculations: SCCRE



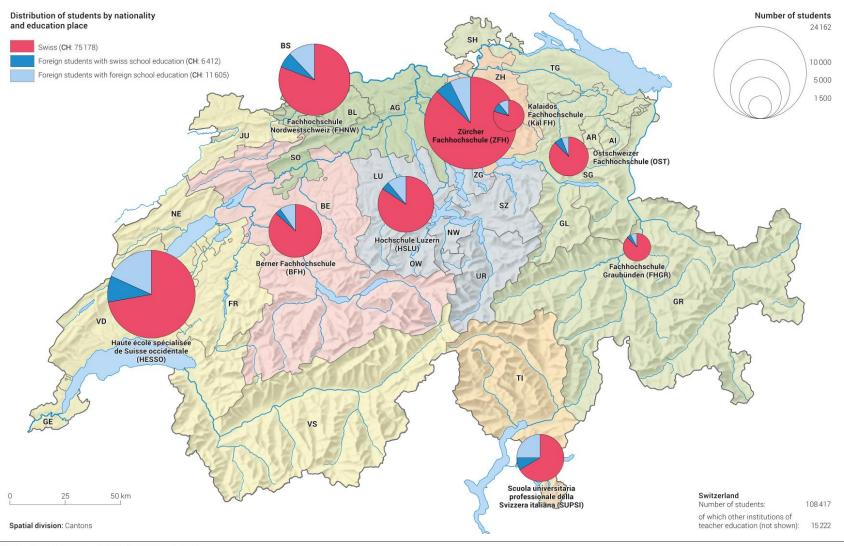
(SKBF 2018, 180)

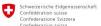






#### Situation and size of universities of applied sciences in Switzerland, 2021/22





Eidgenössisches Departement des Innern EDI Département fédéral de l'intérieur DFI Bundesamt für Statistik BFS Office fédéral de la statistique OFS







Source: FSO - Students and graduates in higher education institutions & FSO. ThemaKart, Neuchâtel 2022 / KM05-00995-15-c-kant-2022-e

## Universities of Applied Sciences

#### **Teaching**

- Practical and labor market orientation combined with academic work
- Bachelor as standard qualification (some Master, no PhD)

#### Federal Law on UAS, Art 4.

"The study programs enables students in particular

- to work independently or within a group in their professional field.
- to develop and apply methods of problem solving.
- to carry out their professional activities based on latest findings of science and practice.
- to perform leadership tasks and social responsibility as well as to communicate successfully.
- to think and act in a holistic and interdisciplinary manner.
- to take responsibility for the preservation of the environment and the basis of of human life."

"Lecturers must have a university degree, an interest in research, and a teaching qualification. For teaching in specific subjects, several years of professional experience in the respective industry is also a prerequisite." (Art 12)

#### Research

Applied Research: Grants often require a industry partner

"The universities of applied sciences conduct applied research and development and thus ensure the connection to science and practice. They integrate the research results into teaching." (Art. 9)

(Bundesgesetz über die Fachhochschulen/ Federal law on the universities of applied sciences)



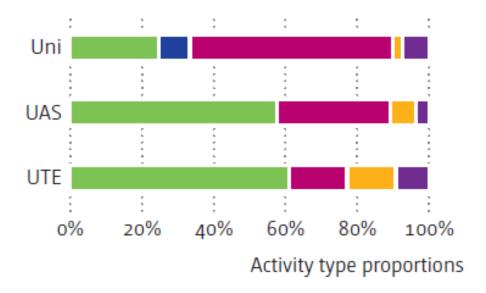




## 179 Proportion of activity types by type of institution, 2016

In FTE of academic personnel

Data: FSO



- Teaching with basic education (BA/MA)
- Teaching with advanced education (Doctorate)
- Research and development
- Continuing education and training
- Services

Centre for the Study of

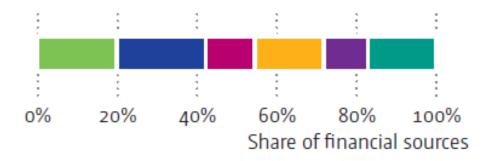
(SKBF 2018, 174)

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## 252 Composition of financial sources, 2015

Data: FSO



- Federation: Student flat-rate
- Canton: FHV contributions within catchment region
- Canton: FHV contributions outside catchment region
- Rest of financing from those running the schools
- Tuition fees
- other sources of income (third-party funds etc.)



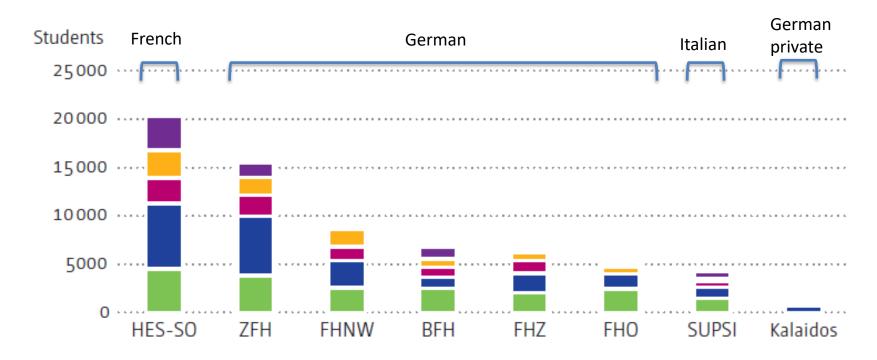


(SKBF 2018, 228)



#### 244 Student numbers at Bachelor's and Master's level, 2016

Data: FSO



- Architecture, construction and planning, Technology and IT, Chemistry and life sciences, Agriculture and forestry
- Business administration and services
- Design, Music, Theatre and other arts
- Social work, Applied psychology, Applied linguistics, Sport
- Health

(SKBF 2018, 222)







## Graduates of universities of applied sciences by field of study and level of graduation, 2020

	Bachelor	Master
Architecture, Construction and Planning	855	175
Engineering and IT	2 647	329
Chemistry and Life sciences	428	158
Agriculture and Forestry	90	0
Business, Management and Services	4 526	974
Design	665	243
Sport	36	23
Music, Theatre and Other Arts	885	1 191
Applied Linguistics	105	38
Social Work	1 527	86
Applied Psychology	200	105
Health	2 018	149
Total	13 982	3 471

Source: FSO - SHIS-studex

Graduation rate: 90% social work / 75% Business



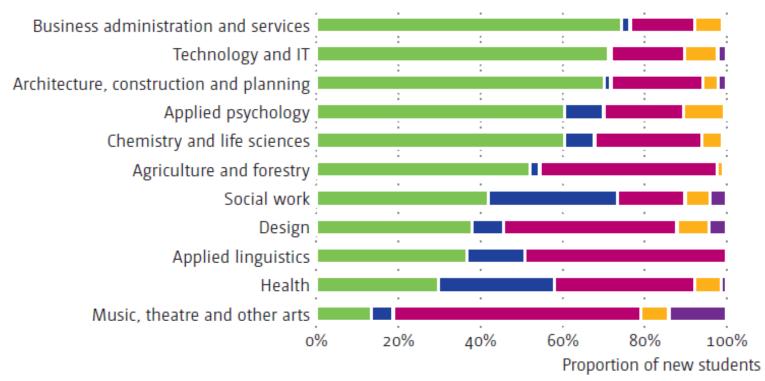




#### 246 Enrolments for a Bachelor's degree by admission qualification, 2016

without foreign admission qualifications

Data: FSO (SHIS)



- Federal vocational baccalaureate
- Specialised baccalaureate
- Baccalaureate
- Other Swiss certificate
- Other



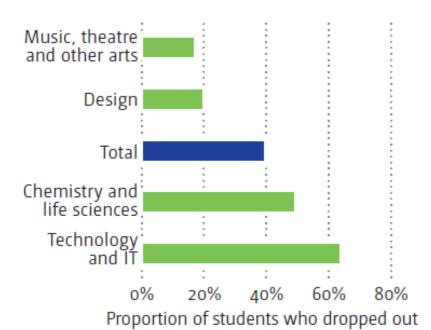
(SKBF 2018, 225)





#### 247 Proportion of students with a baccalaureate who initially began their degree at a conventional university but did not finish the course

Measured by all students with a baccalaureate on entering a university of applied sciences in 2015, only selected specialisations are shown Data: FSO (LABB); calculations: SCCRE







of their university studies

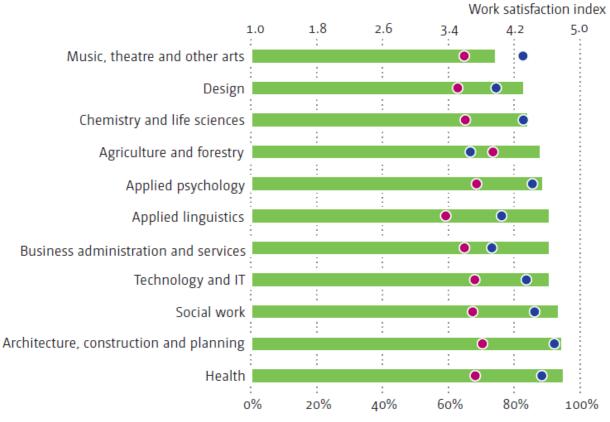
(SKBF 2018, 225)



#### 257 Labour market situation 1 year after graduation, 2015

1st cycle graduates (Bachelor's, diploma), provided they have not started a Master's at the time of being surveyed, and 2nd cycle graduates

Data: FSO (Graduate Survey); calculations: SCCRE



Proportion in employment/in suitable employment

- Employment rate
- Proportion of gainfully employed with qualification-appropriate work
- Work satisfaction (upper axis)



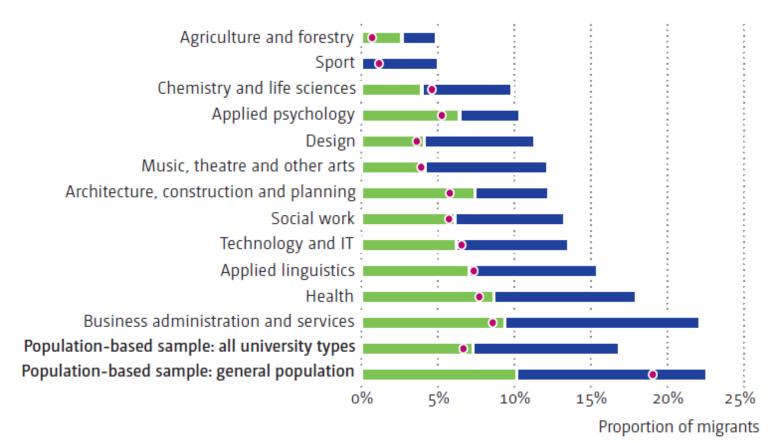
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#### 264 Proportion of students with a migration background by specialisation, 2013

Bachelor's students with a Swiss university admission qualification.

Data: FSO (Social and Economic Conditions of Student Life, PISA 2006, SLFS 2006); calculations: SCCRE



First generation migrants

Second generation migrants

Proportion of foreigners



(SKBF 2018, 237)





### UAS as actors of regional development?







# Research on UAS as actors of regional development

- Exclusively economic research available (focus always on STEM)
  - In UAS regions, the share of R&D personnel increases significantly compared to companies outside UAS regions. (Lehnert et al., 2020)
  - In UAS regions, the number of patents filed increases more than in regions without UAS. (Pfister et al., 2021)
  - Innovation effects have a positive impact on average company profits after a UAS establishment. Only in high tech intensive and already large labor markets. (Schlegel et al., 2022)







## Multilevel Perspective on UAS

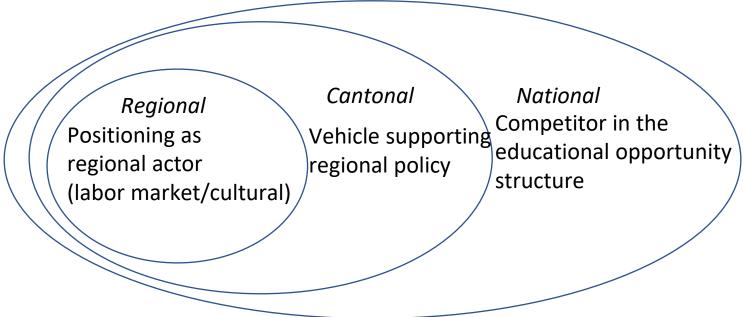
- Using ed. governance instruments to understand the «role of UAS as actors»
  - Focus on funding, regulation and provision (Dale, 2003) and federalistic structure/subsidiarity
  - Finding discoursive patterns on the role of UAS (Kost & Salihovic to be published 2022)
- Data: Reports from UAS, newspaper articles, parliamentary discussions, regulatory framework (UAS-law, by-laws), documents on funding (grants, service contracts) (2018-2022)







## Multilevel Perspective on UAS



#### Examples

N: Competitor: Reports on research funding, Reports on UAS as promoters of VET

C: Labor Market Policy/Economic development: Service contract between canton and university, cantonal initiatives in parliament

R: Cultural: annual reports of certain UAS departments, newspaper articles

R: Labor market: annual reports of universities, instruments of research funding







## Theorizing the role of Colleges/UAS







## My interpretation of Leesa Wheelahan's Suggestions

- Colleges 'mission' as residual «doing what universities and schools don't do»
- Narrow focus on «supply skilled labor for lower status occupation»
- Institutional Theories
  - Sociological and Historical Institutionalism
  - Modes (and ressources) of sociological Organisations shaped by rules, norms and discourses
  - Enable & Constrain agency through providing parameters for action (path dependency)
- Capabilities Approach: Understanding colleges as local powerhouses for sustainabe, socially inclusive, regional, social and economic development







## Why, from a Swiss perspective, the question of the social role of UAS could be odd at first glance

- Switzerland has a (social) market economy that is coordinated at national and regional levels by governments and by their social partners (business and labour organisations). V of C → coordinated market economy (Hall & Soskice, 2001)
- Educational Institutions are highly regulated de facto state monopole
- The "only" thing that really matters are credentials (Voc. Diploma, Bacc., BA, MA, PE Certificates)
- Thus, the main mission of all Institutions is to award credentials.
- Education reporting: measuring efficiency, effectiveness, or inequities in education focuses almost exclusively on credentials (SKBF, 2018).
- Alternatives to decribe the role or function of UAS?







## Application of Fend's (2008) structural functionalist theory: Role of UAS in society

 Main purpose of the education system and its actors: reproduction and innovation

Societal functions	Individual functions
Enculturation	Cultural participation
Qualification	Vocational capability
Allocation	Life planning
Legitimation	Social identity and political participation







## Application of Fend's (2008) structural functionalist theory: Role of UAS in society

Societal functions	Individual functions
Enculturation: value systems, cultural forms of understanding	Cultural participation: Autonomy in thoughts and actions
Qualification as a means of maintaining economic competitiveness	Vocational capability: Knowledge and skills for an independent professional existence and for the development of individual potential for achievements
Allocation of individuals to socially prestigious positions through legitimate means (e.g., exams, diplomas).	Life planning: Taking control of professional status through learning efforts and performance as a life planning tool
Legitimation: Reproduction of norms and values to stabilize political structures	Social identity and political participation: Social ties as the foundation for social responsibility







### Conclusion

- UAS position within the Swiss system
- Programms, students, pathways and tranistion to labor market
- Insights in a small project on discourse on UAS as (multi level) actors (inductive)
- Attempt to apply a theory to this field (deductive)







## Thank you!







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