PHBern
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Does Promoting Permeability Decreases Social Inequality in VET?

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Overview

- The Swiss Education System
- Relevance
- Theoretical Framework
- State of Research
- Research Question
- Data and Methods
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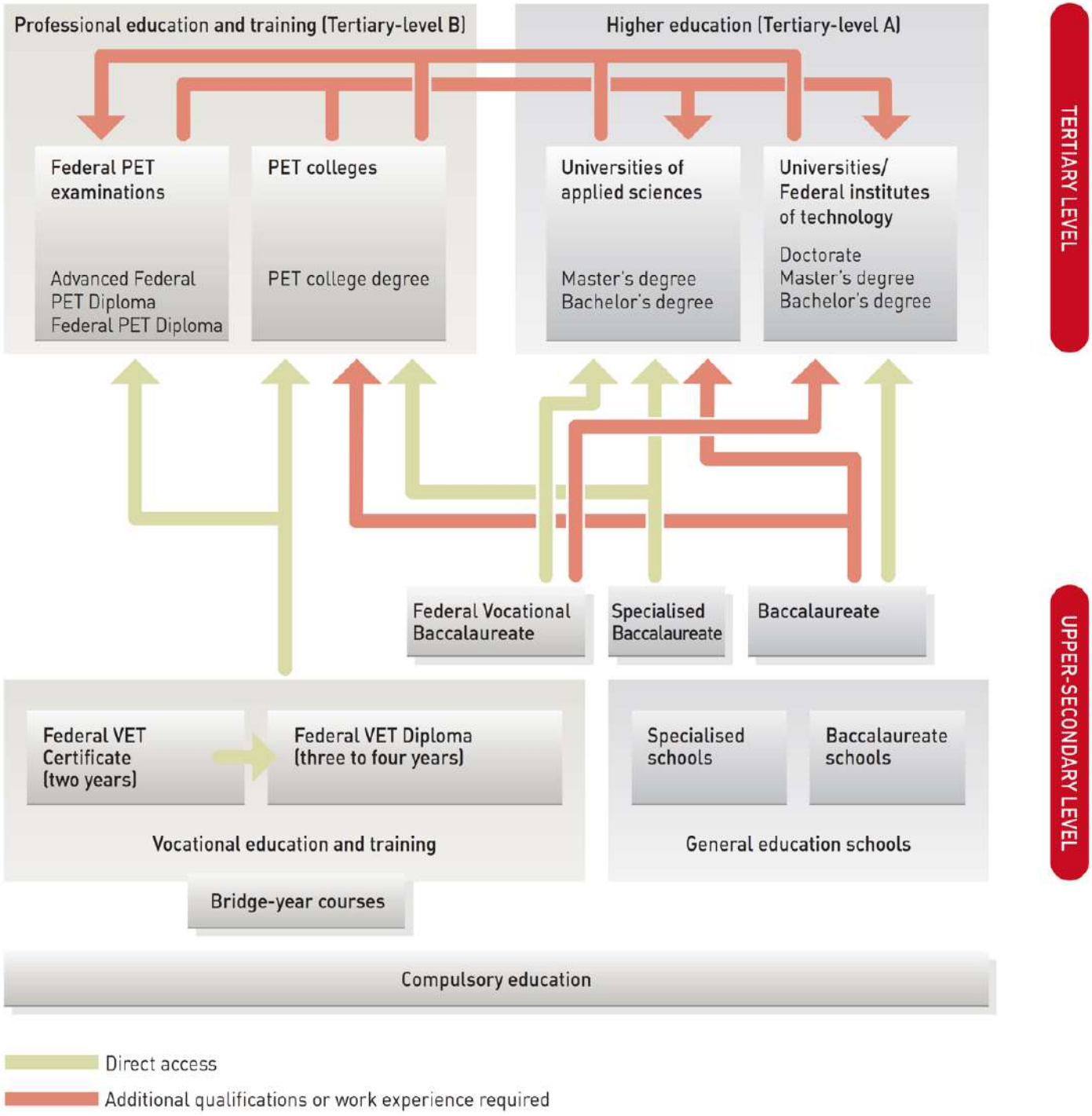
- Conclusions


Professional education and training (Tertiary-level B)
Higher education (Tertiary-level A)
TERTIARY LEVEL
Federal PET examinations
Advanced Federal PET Diploma
Federal PET Diploma
PET colleges
PET college degree
Universities of applied sciences
Master's degree
Bachelor's degree
Universities/ Federal institutes of technology
Doctorate
Master's degree
Bachelor's degree
Federal Vocational Baccalaureate
Specialised Baccalaureate
Baccalaureate
UPPER-SECONDARY LEVEL
Federal VET Certificate (two years)
Federal VET Diploma (three to four years)
Vocational education and training
Specialised schools
Baccalaureate schools
General education schools
Bridge-year courses
Compulsory education
Direct access
Additional qualifications or work experience required

Relevance I

- **Intensive research on transitions from compulsory school to vocational training and from vocational training to working life (for Switzerland, e.g.: Bergmann, et al, 2011; for Germany, e.g. Köck & Stein, 2010; for the USA & Sweden, e.g. Breen & Jonsson, 2000).**

- **School- and Trainingssuccess is highly social selective**

- **(Swiss) Educational Policymakers start to promote permeability in the school- and VET-System.**

Relevance II

- **The question „who benefits from a permeable system?“ is unexplored (Bellenberg et al 2004; Archan & Schlögel, 2007).**

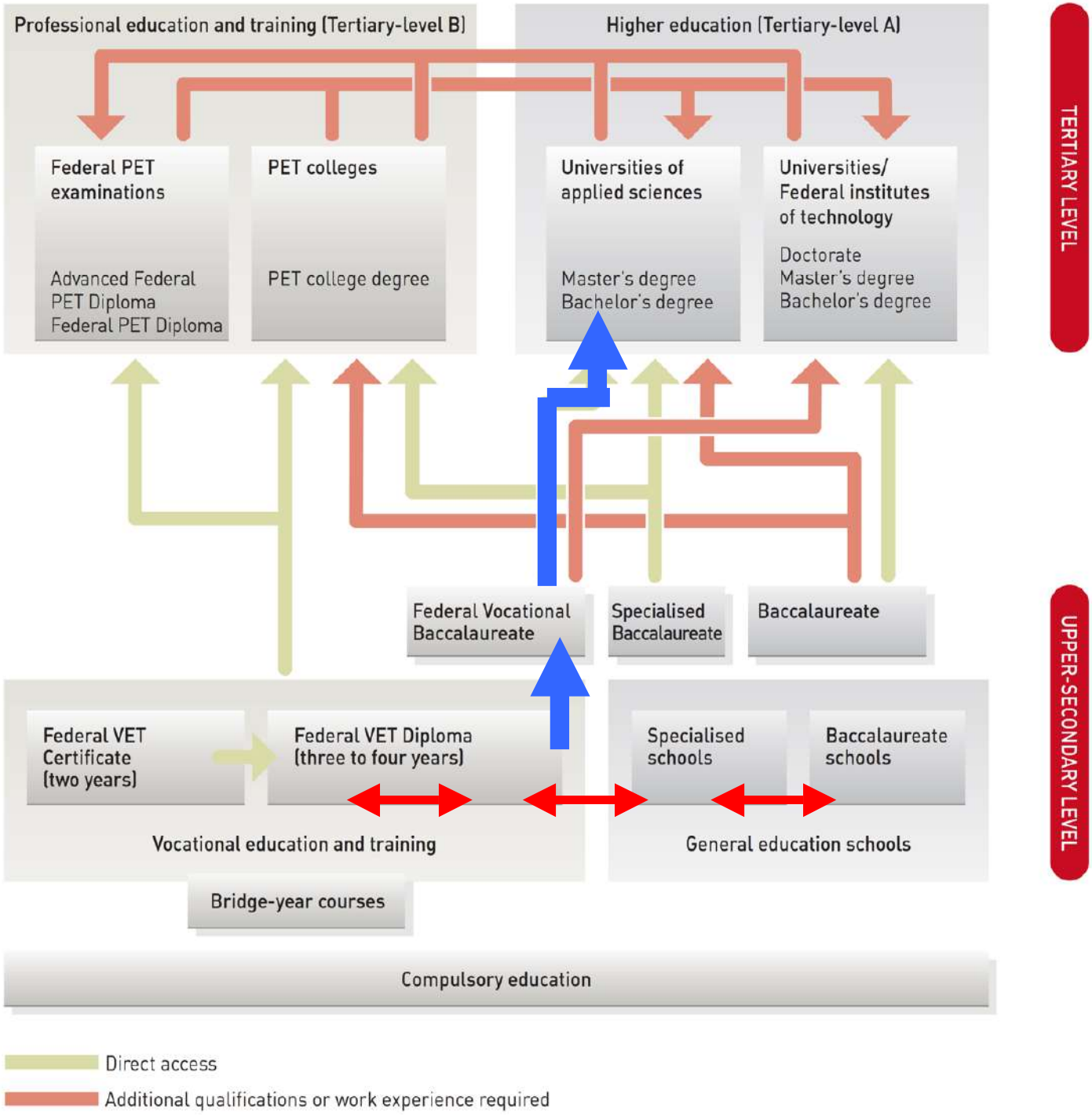
Permeability

Horizontal Permeability

- **switching school types or training occupations within the same school level**

Vertical Permeability

- **switching educational paths between school levels (e.g. entering a university after finishing a vocational training on the Sec II level)**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Theoretical framework

- **Social reproduction theory (e.g. Bourdieu & Passeron, 1971)**
- **Models of rational choice (e.g. Breen & Goldthorpe, 1997)**
- **Models on educational aspirations (e.g. Paulus & Blossfeld, 2007)**

State of Research

Switzerland

- **Predictors for entry and success in VET are: sec I schooltyp, performance (e.g. reading), gender, social status and migration background (cf. Hupka et al., 2011).**

Europe

- **Current studies in VET shows, that gender, family background and socioeconomic status are highly influential predictors for career decisions (e.g. Cedefop 2012), after training.**

Research Questions

- **How can the achievement of a Federal Vocational Baccalaureate (FVB) be predicted, as a first step to realize a permeable path?**
- **How can we predict the entry in a University of Applied Sciences (AUS) after the achievement of an FVB be predicted?**

  (interested in effects of gender, socioeconomic status, educational aspirations, reading skills and the secondary I school type)

Sample

- Data from the swiss federal office of statistics

- Secondary Analysis: Swiss PISA-TREE Panel Data
- Since 2000 annual surveys used either standard questionnaires or CATIs
- Representative for Switzerland (started with N=6343)
- Used Subsample N=2408 Dual-VET Tracks

The Swiss youth panel study TREE (Transitions from Education to Employment; www.tree.unibas.ch) runs since 2000 and has since been funded by the Swiss National Science Foundation, the University of Basel, the Swiss Federal Office of Statistics, the Federal Office of Professional Education and Technology, and the cantons of Berne, Geneva and Ticino.

Findings I

- **Around 13% of the apprentices achieved a Federal Vocational Baccalaureate parallel to their training whereas another 8 % did their FVB after the training (Total 12’250 FVB were granted, 46% women).**
- **Regional differences in the share of women attending an FVB (canton of Zug 25%, canton of Neuchâtel 50%) (FOS 2012).**
- **Only 50% of the graduates entered a university of applied sciences (UAS) two years after graduation.**

Findings II: Logistic Regressions: Model 1: Achievement of a Federal Vocational Baccalaureate (N=2408)

Independent Variables	Odds Ratio
Gender (1=male)	**1.407****
Language at home (1=Testlanguage)	1.083
HISEI – Socioeconomic Status Ref. Lowest Quartile	
HISEI 2nd Quartile	**1.499***
HISEI 3rd Quartile	**1.714****
HISEI Highest Quartile	**2.131*****
SISEI – Socioeconomic Aspirations Ref. Lowest Quartile	
SISEI 2nd Quartile	**1.830****
SISEI 3rd Quartile	**2.070*****
SISEI Highest Quartile	**2.912*****
PISA Reading Level	**1.640*****
Educational Track on Sec I Level Ref. Basic Academic Requirements	
Extended Academic Requirements	**2.271*****
Highest Academic Requirements	**3.174*****
Grade Retention (1=Yes)	**0.611*****
-2 Log likelihood	2499.298
χ2/df	450.384/14
Nagelkerke R^2	.242

Note. Data: Swiss TREE Panel, own calculations, pooled coefficients after Multiple Imputation (using MCMC with SPSS 20) due to missing values; Significance: *p<.05, **p<.01, ***p<.001; Model controlled for Language Region.

Findings III: Logistic Regressions: Model 2: Entry in a University of Applied Sciences (N=611)

Independent Variables	Odds Ratio
Gender (1=male)	**2.832*** **
Language at home (1=Testlanguage)	1.246
HISEI – Socioeconomic Status Ref. Lowest Quartile	
HISEI 2nd Quartile	1.004
HISEI 3rd Quartile	1.208
HISEI Highest Quartile	1.759
SISEI – Socioeconomic Aspirations Ref. Lowest Quartile	
SISEI 2nd Quartile	1.010
SISEI 3rd Quartile	0.980
SISEI Highest Quartile	1.540
PISA Reading Level	**1.358** **
Educational Track on Sec I Level Ref. Basic Academic Requirements	
Extended Academic Requirements	0.998
Highest Academic Requirements	1.172
Grade Retention (1=Yes)	0.870
FVB-Track (1=After Training)	0.973
-2 Log likelihood	748.708
$\chi 2$/df	71.227/15
Nagelkerke R^2	.150

Note. Data: Swiss TREE Panel, own calculations, pooled coefficients after Multiple Imputation (using MCMC with SPSS 20) due to missing values. Significance: *p<.05, **p<.01, ***p<.001; Model controlled for Language Region.

Conclusions I

- **Idea of Federal Vocational Baccalaureate: implementing a “permeable path” from VET to Universites of Applied Sciences.**

- **Aspects of the socioeconomic origin still influencing educational choices, a large share of the social disparities is the product of the first educational choice (attending an FVB or not).**

Conclusions II

- **Doubts about the compensatory effect of permeability.**
- **Gender disparities are very high.**
- **An increase of pathway opportunities = increase of choices = (without support) increase of social disparities**

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