

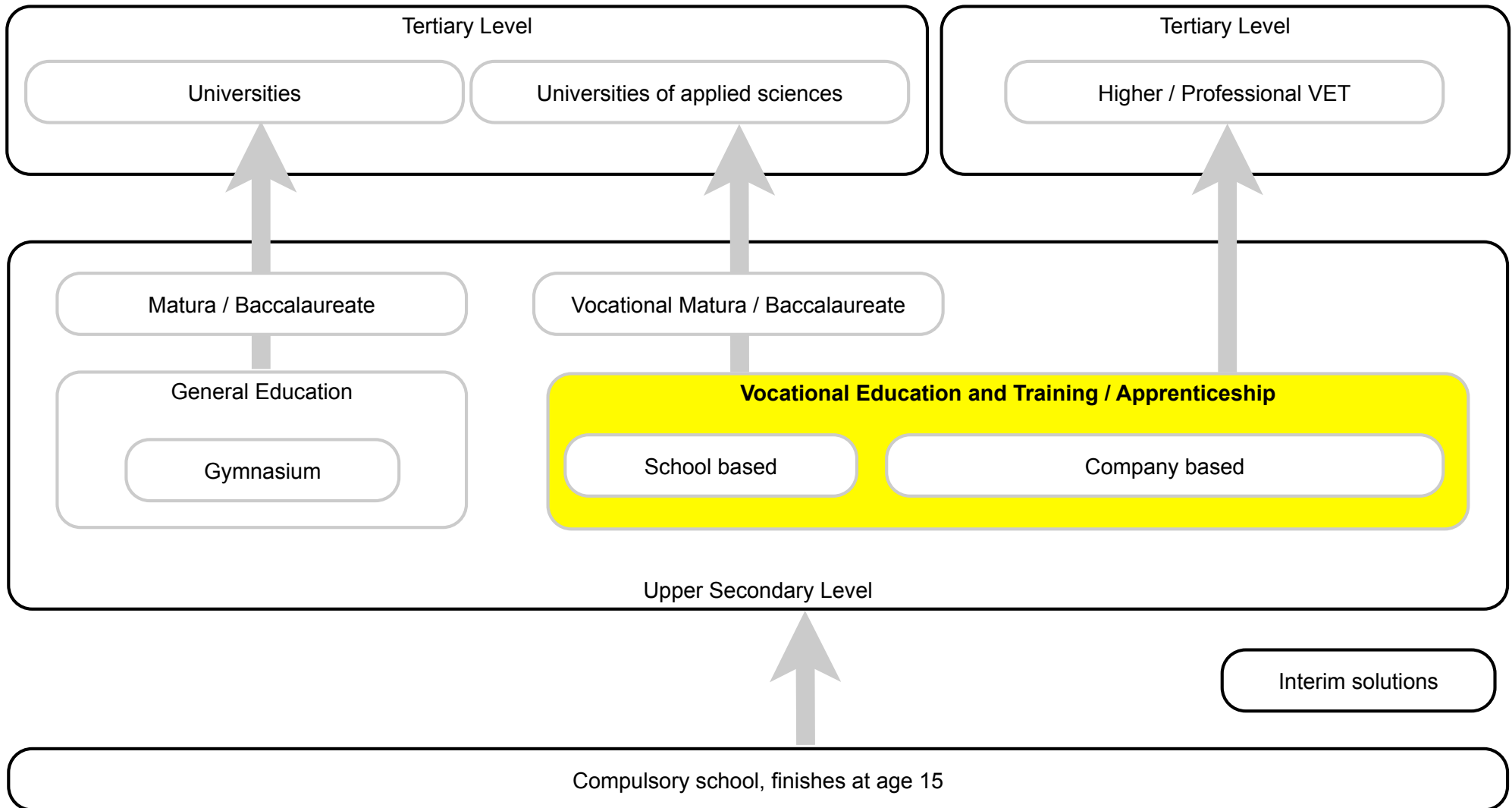
Workplace as a learning place: Correlates and predictors of the apprentices' perception of the workplace as a learning place. An analysis of the first three years in apprenticeship

Educational Pathways on the upper secondary level in Switzerland.

Transition from Education to Employment: TREE-panel study.

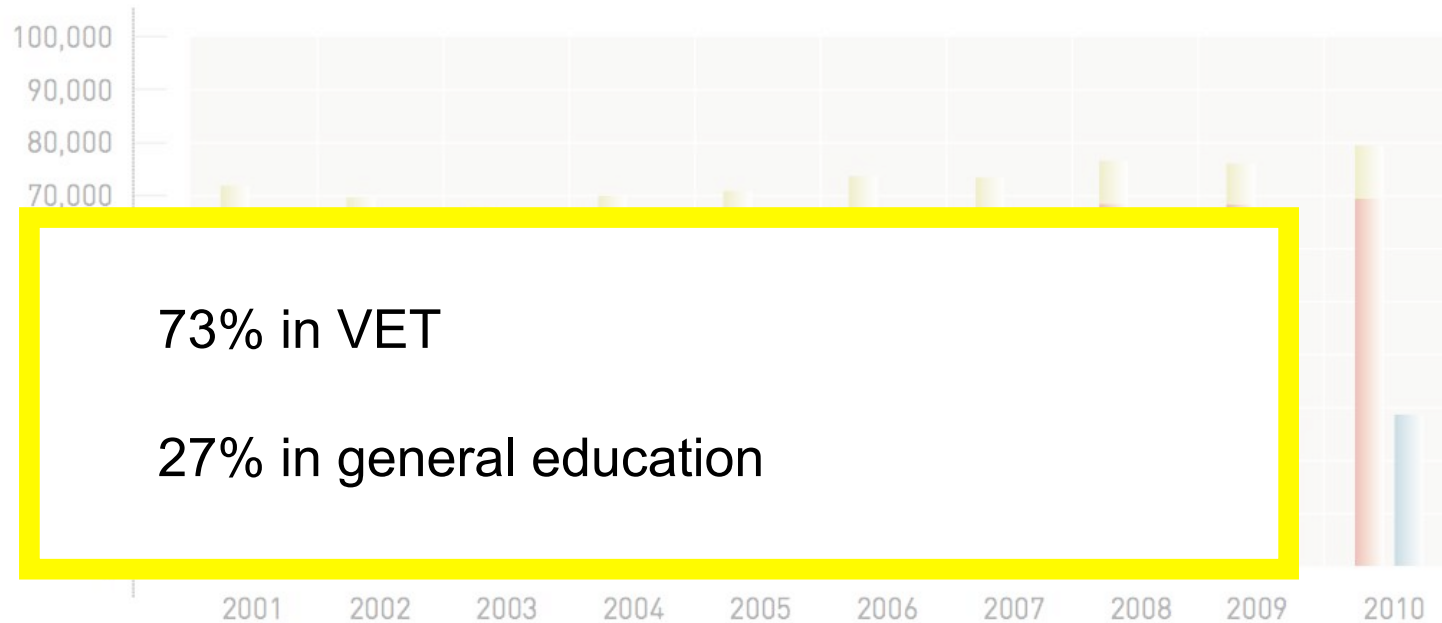
Correlates and predictors of the workplace as learning place.

Dr. Christof Nägele



Stalder, B. E., & Nägele, C. (2011). Vocational education and training in Switzerland: Organisation, development and challenges for the future. *Bergman, MM; S. Hupka-Brunner; A. Keller*, 18-39

Enrollment in upper secondary level



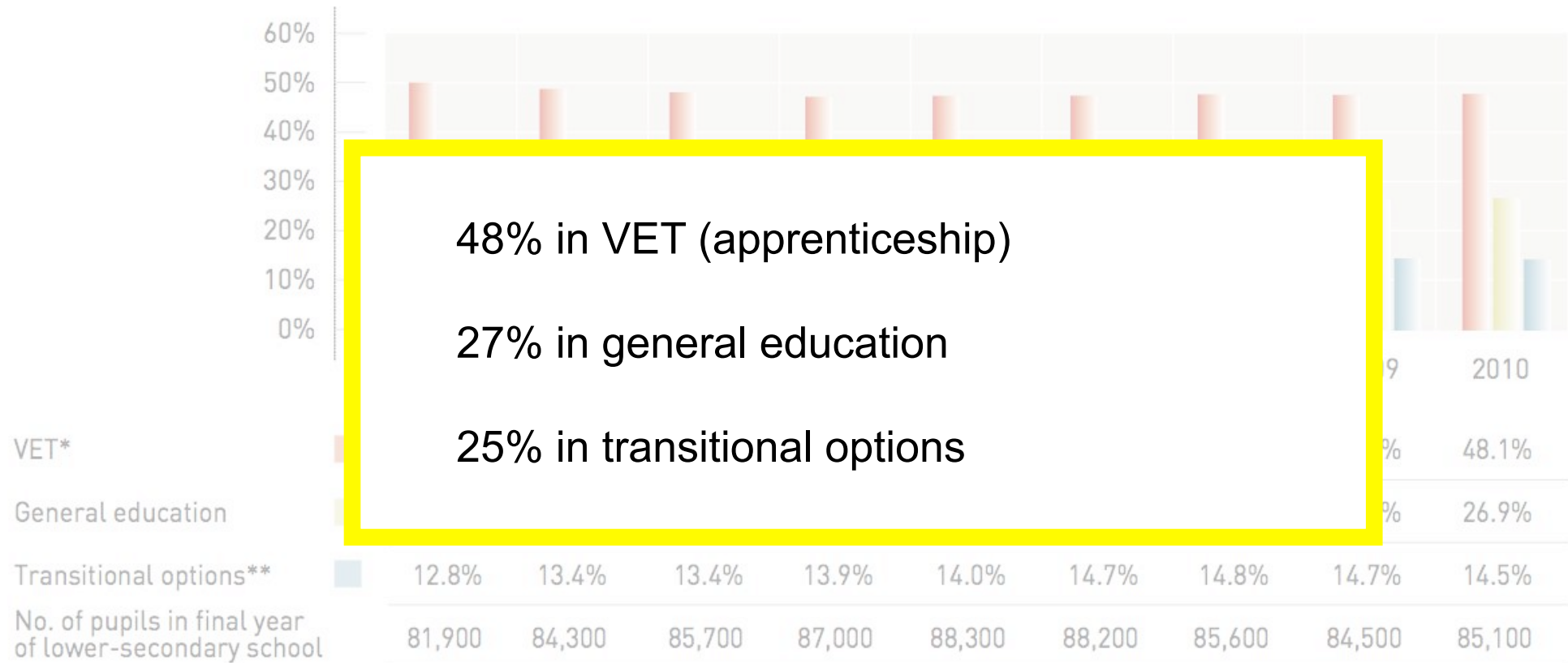
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
VET	71,900	69,700	69,700	70,100	70,900	73,700	73,400	76,600	76,100	79,500
Of which:										
Dual-track VET *	62,600	60,100	59,800	61,300	61,700	65,600	65,500	68,400	68,300	69,400
Entirely school-based VET **	9,200	9,600	9,900	8,900	9,200	8,100	7,900	8,200	7,800	10,200
General education	23,600	24,200	25,500	27,500	28,400	29,000	28,700	28,300	28,300	28,600

* excl. informal two-year apprenticeships

** incl. commercial and IT schools

State Secretariat for Education, Research and Innovation. (2013). Facts and figures. Vocational and professional education and training in Switzerland. Bern, CH.
<http://www.sbfi.admin.ch/dokumentation/00335/00400/index.html>

Enrollment immediately after compulsory education

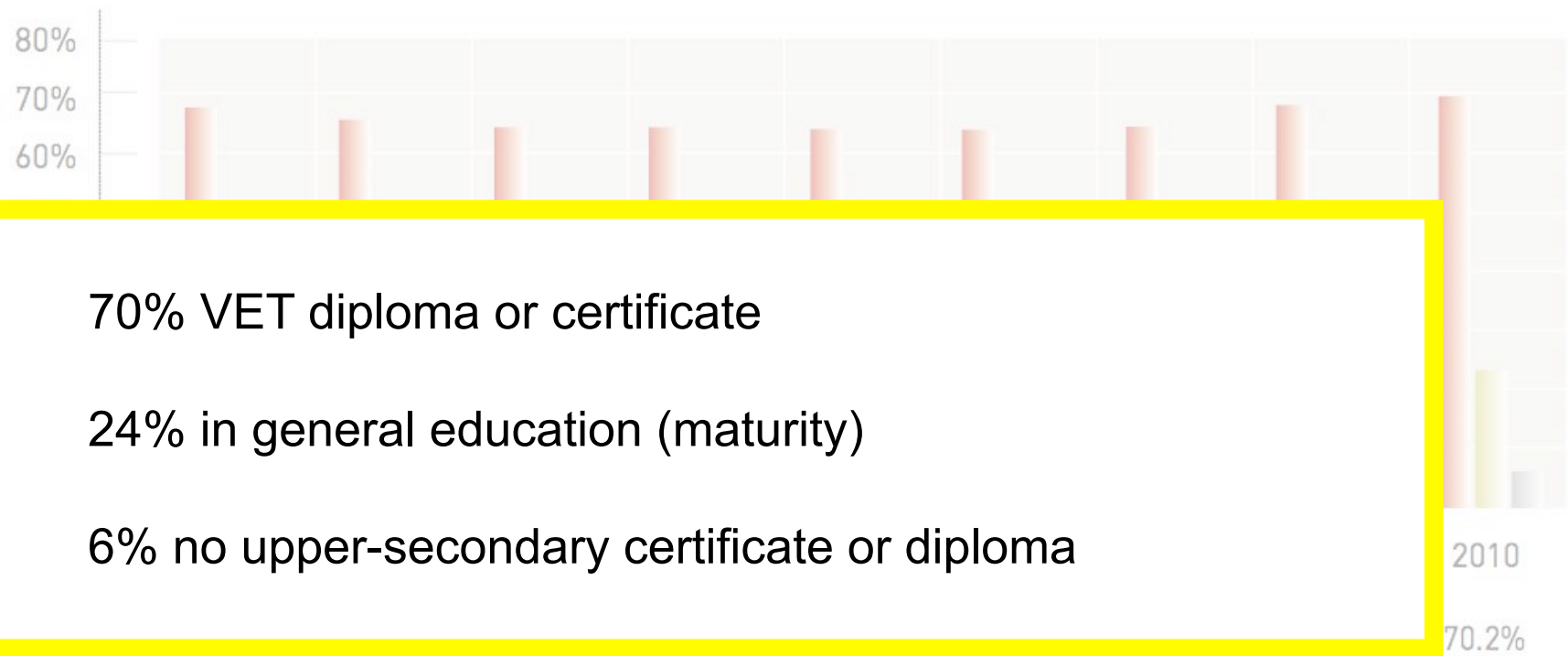


* incl. informal two-year apprenticeships

** Transitional options include 10th school year [i.e. bridge-year courses], pre-apprenticeships and preparatory courses

State Secretariat for Education, Research and Innovation. (2013). Facts and figures. Vocational and professional education and training in Switzerland. Bern, CH.
<http://www.sbfi.admin.ch/dokumentation/00335/00400/index.html>

Upper-secondary level diplomas, all young people



VET

General education

No upper-secondary level qualifications

22.5%	22.1%	21.7%	22.2%	23.2%	23.0%	23.4%	23.0%	23.5%
9.2%	11.7%	13.4%	13.0%	12.2%	12.4%	11.7%	8.3%	6.3%

One mission, three partners - steering

Confederation: Strategic management and development

Professional organizations: Curricula and apprenticeships

Cantons: Implementation and supervision

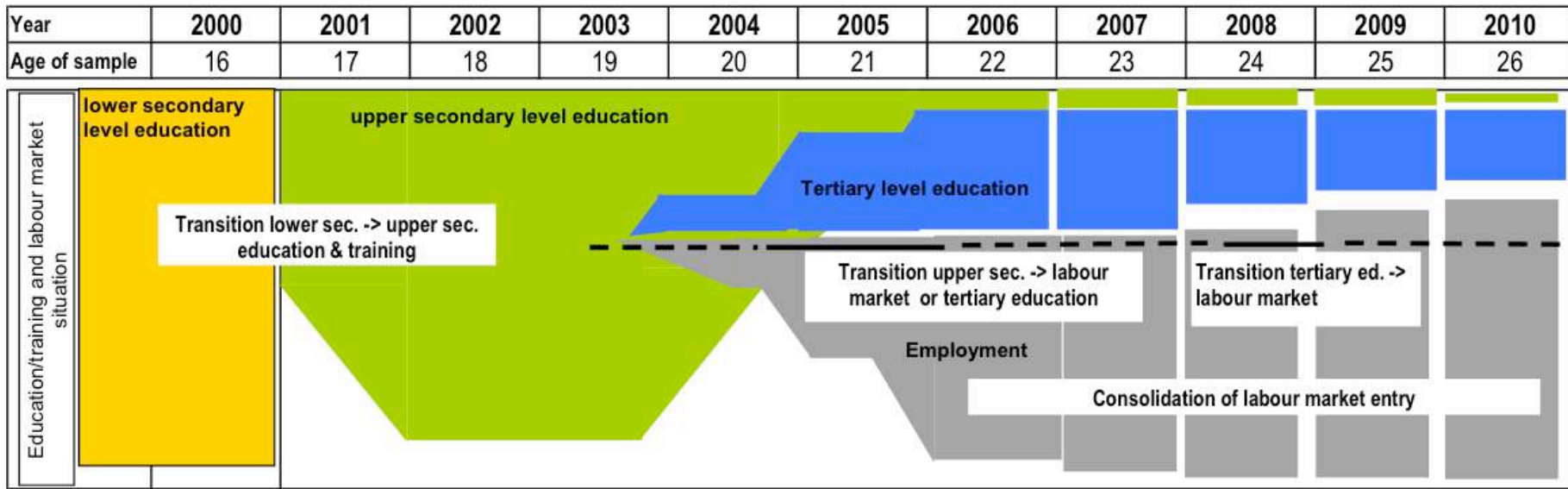
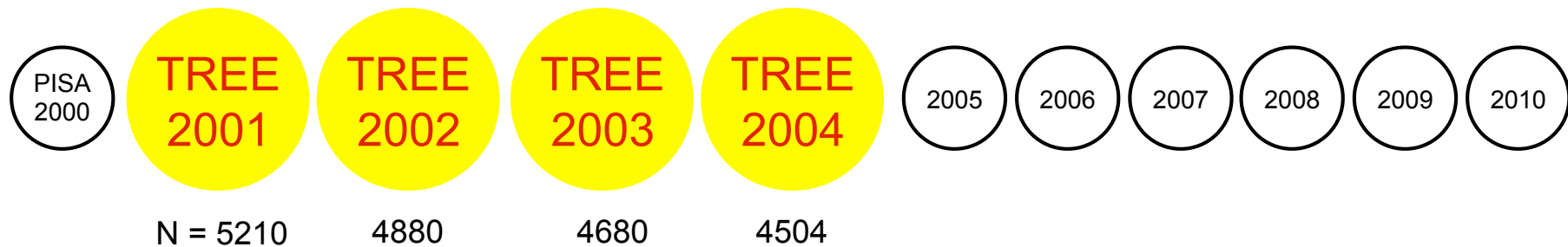
One mission, three training providers / training venues

Companies: Instruction and training at the workplace, authentic work

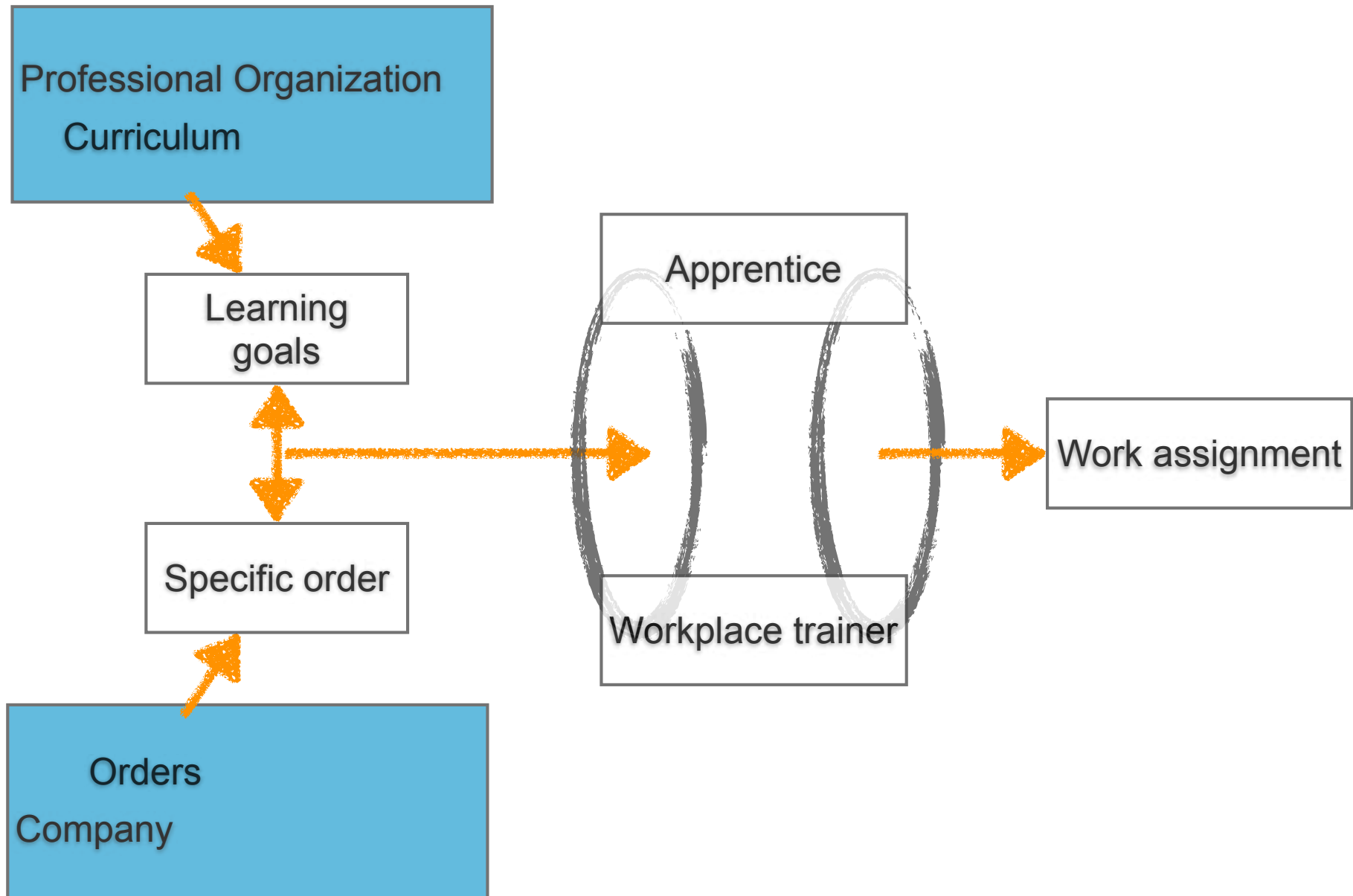
Cross-company courses: Specific, work-related topics

Vocational schools: Classroom instruction

Transition from education to employment (TREE)



Stalder, B. E., Meyer, T., & Hupka-Brunner, S. (2011). TREE project documentation. [Das Projekt TREE: Eine Übersicht] In M. M. Bergmann, A. Keller, & B. E. Stalder (Eds.), *Youth transitions in Switzerland: Results from the TREE panel study* (pp. 66-87). Zürich, CH: Seismo Verlag



Research Questions: Workplace as learning place

What are predictors of the workplace as a high quality learning place?

Does this change over time?

Conceptual framework

Opportunities to learn at the workplace depend on...

- a) the location of learning,
- b) the extent of planning that has been invested in delivering the training,
- c) the role of the trainer and others during the learning process,
- d) the work task and working conditions and
- e) the amount cognitive regulation that is needed to do the task.

Optimal workplace learning is embedded in a situation where there is support from the supervisor, an adequate workload, and the opportunity to use the new competences.

(Hacker, 2005; Jacobs & Park, 2009; Russ-Eft, 2002)

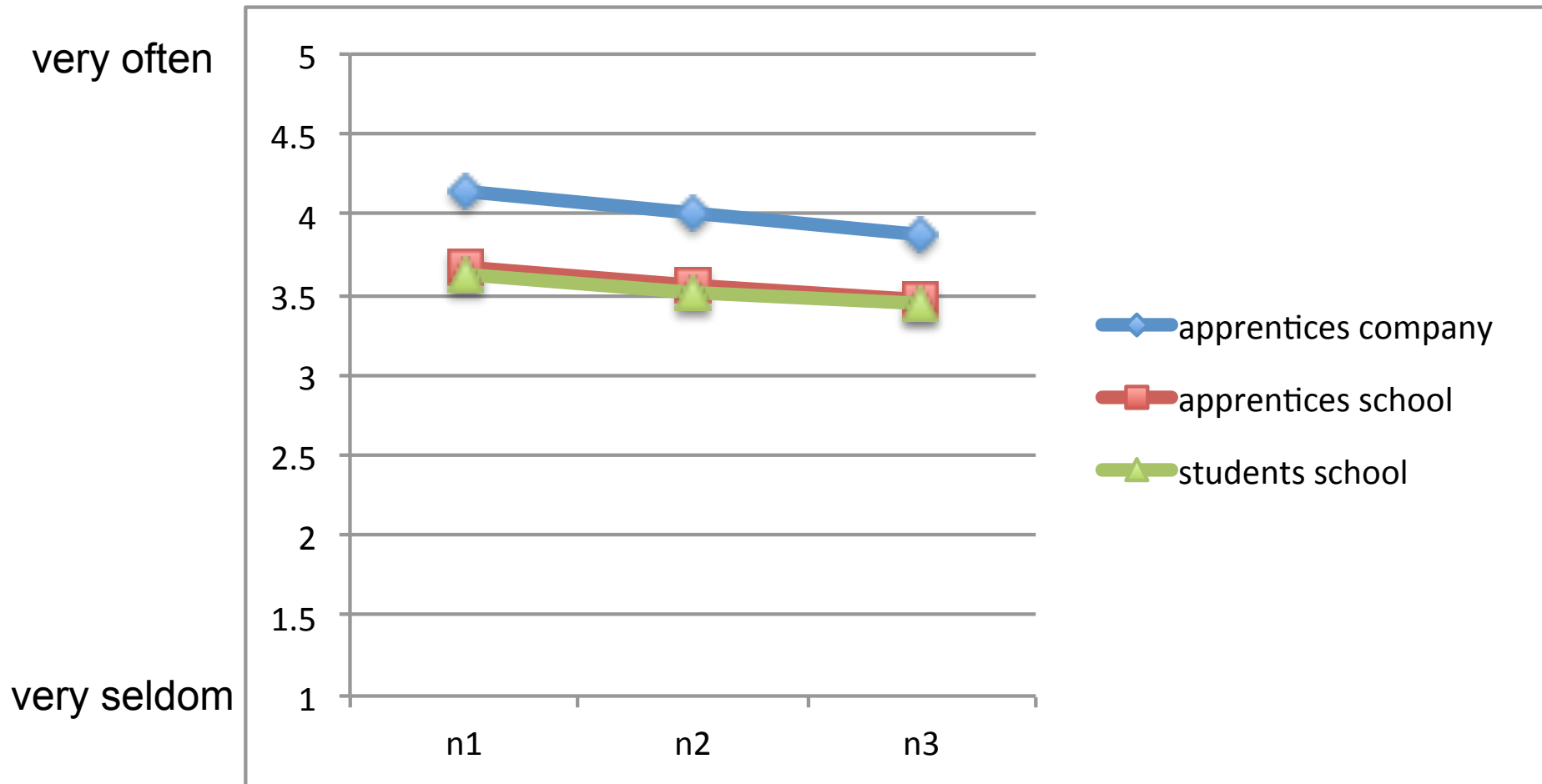
Learning opportunities at the workplace

How much can an apprentices...

- use their knowledge and skills,
- learn and
- develop their knowledge, skill and abilities at their workplace?

Three items, Cronbach's Alpha = .748, scale from 1 "very seldom" to 5 "very often"

Learning opportunities at the workplace



Social Environment	Interest of significant others	To what extent do the following persons take interest in your education?
	Social support	To what extent do you rely on the following persons when difficulties arise at work or school?
Apprentice	Persistency	I complete whatever I start
	Self-Efficacy	I can always manage to solve difficult problems if I try hard enough.
	Self-Esteem	On the whole I am satisfied with myself.
Learning style	Willingness to learn	When I am studying, I do it as diligently as possible.
	Concentration at school	Usually I am fully present at school.
Pedagogical and didactical skills	Workplace trainer	Explaining things, good relation, high skills, ...
	Teacher at the vocational school	Explaining things, good relation, high skills, ...
Job design at the workplace	Scope of action	I have a say in what work I would like to do,
	Stress	Too much to do, too difficult things to do.
“Job design” at the vocational school	Scope of action	I can decide myself how I want to solve the tasks given me at school.
	Stress	Too much to do, too difficult things to do.
Vocational school – workplace	Transfer	The things I learn at the vocational school are useful for my work.

Learning opportunities workplace		first year -> first year Beta	first year -> third year Beta
Social Environment	Interest of significant others		
	Social support	0.084 **	
Apprentice	Persistency	0.069 **	0.081 *
	Self-Efficacy		
	Self-Esteem	0.084 **	
Learning style	Willingness to learn	0.056 *	
	Concentration at school	0.067 **	
Pedagogical and didactical skills	Workplace trainer	0.294 **	0.120 **
	Teacher at the vocational school		
Job design at the workplace	Scope of action	0.159 **	
	Stress	0.098 **	0.086 *
“Job design” at the vocational school	Scope of action	-0.050 *	
	Stress		
Vocational school – workplace	Transfer	0.217 **	0.160 **
<i>r</i> ²		.340	.148

Learning opportunities workplace		first year -> second year Beta	first year -> third year Beta
Social Environment	Interest of significant others Social support		
Apprentice	Persistency Self-Efficacy Self-Esteem	0.083 * 0.059 *	0.081 *
Learning style	Willingness to learn Concentration at school	0.072 *	
Pedagogical and didactical skills	Workplace trainer Teacher at the vocational school	0.135 *	0.120 **
Job design at the workplace	Scope of action Stress	0.082 ** 0.058 *	0.086 *
“Job design” at the vocational school	Scope of action Stress		
vocational school – workplace	Transfer	0.156 **	0.160 **
r^2		.180	.148

Conclusions

All in all the evaluation of the apprentices of the learning opportunities at the workplace is very positive.

To further improve workplace learning:

- foster transfer of knowledge skills and abilities between the company and the vocational school
- design jobs such that apprentices have a positive scope of action
- „stress“ the apprentices

A good start is important!