Standards in Teacher Education and in Transition to Profession: Analysis of Achievement Levels in Teaching Competency

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Pre-project 2002/03,, IBH-Project 2004 - 2006;
SNSF-Project 2006-2008
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Partner in Projects 2004-2006 and 2006-2008
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Partner in Projects 2004-2006 and 2006-2008
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2004-2006 Internationale Bodensee Hochschule (IBH)
2006-2008 Swiss National Science Foundation (SNSF)

Problems

- Little knowledge about effects of teacher education
- Little knowledge about learning of teacher students
- Question: Can professional competencies really be ‚learned‘?
- Teacher Training at newly established educational universities in Switzerland based on standards
- Little empirical evidence about the efficiency of standards in teacher education

Research Questions

1. How does the development of competencies for planning and implementation of tuition in pre-service teacher training proceed?

2. From which level of competence do teacher students start? Which level of competence do they achieve at the end of pre-service teacher training?

3. Are there any differences between the three involved educational universities concerning the development of teaching competencies?

Definitions

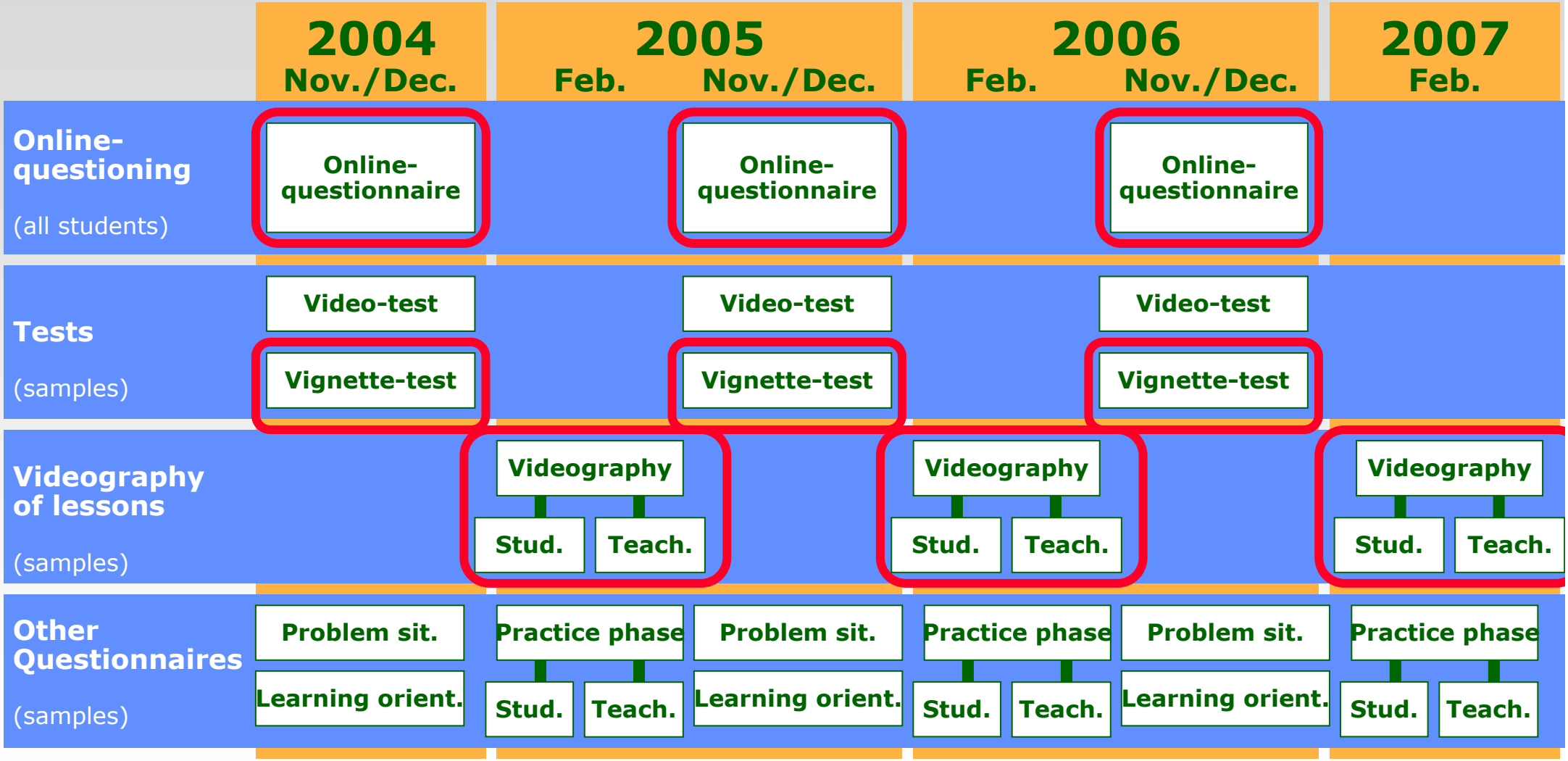
Teaching competence

- Knowledge and expertise to be applied in the context of a school.

Standard

- Standards are complex, professional competencies, which lead to theory-directed action in teaching. They relate to scientific research and form a precondition for an analytic and thereby critically reflected practice.

Schedule and Methods



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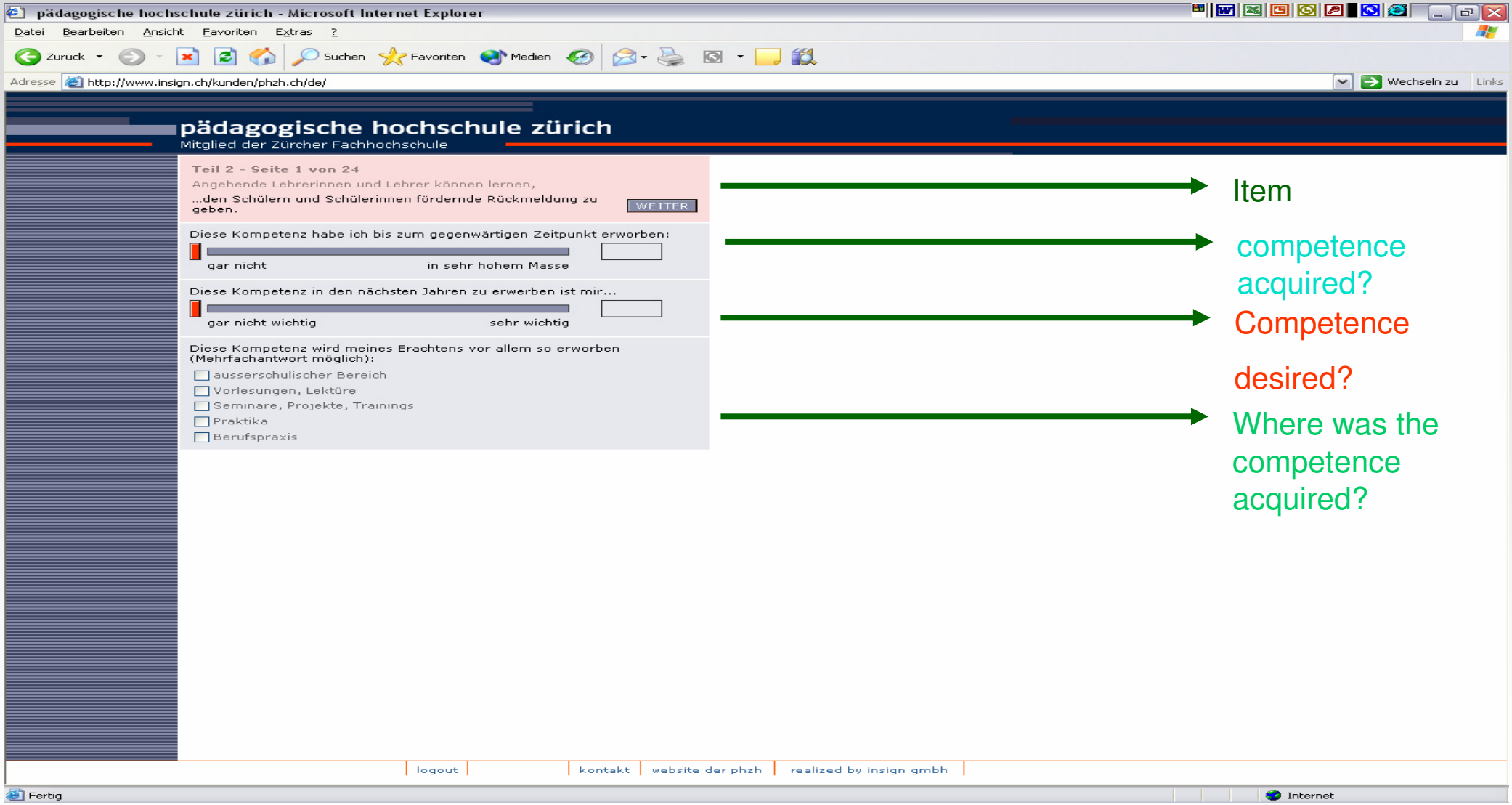
Online-Questionnaire

- Based on a selection from 88 Oser-Standards concerning teacher education (circa 60 standards in 16 thematic scales)
- Sample: All students; participation rate 30 – 60%, depending on location and year
- Realization of Survey: Online

n	1. semester	3. semester	5. Semester
Zürich, 1st Start in 2003	**173**	**91**	**95**
Zürich, 2nd Start in 2004	**146**	**81**	**--**
Rorschach, Start in 2004	**82**	**72**	**--**
Weingarten, Start in 2004	**79**	**73**	**--**

Online-Questionnaire



Item

competence acquired?

Competence desired?

Where was the competence acquired?

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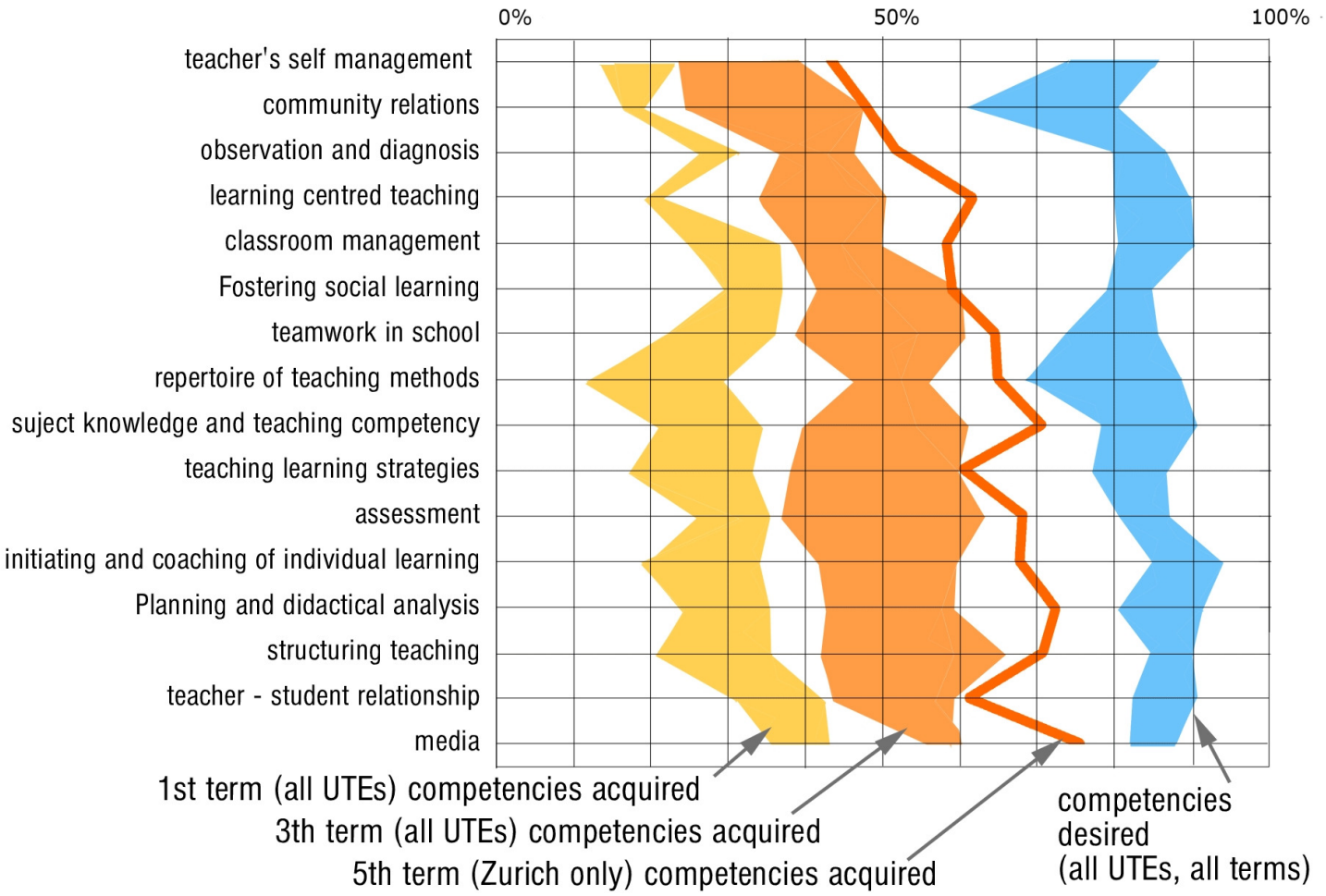
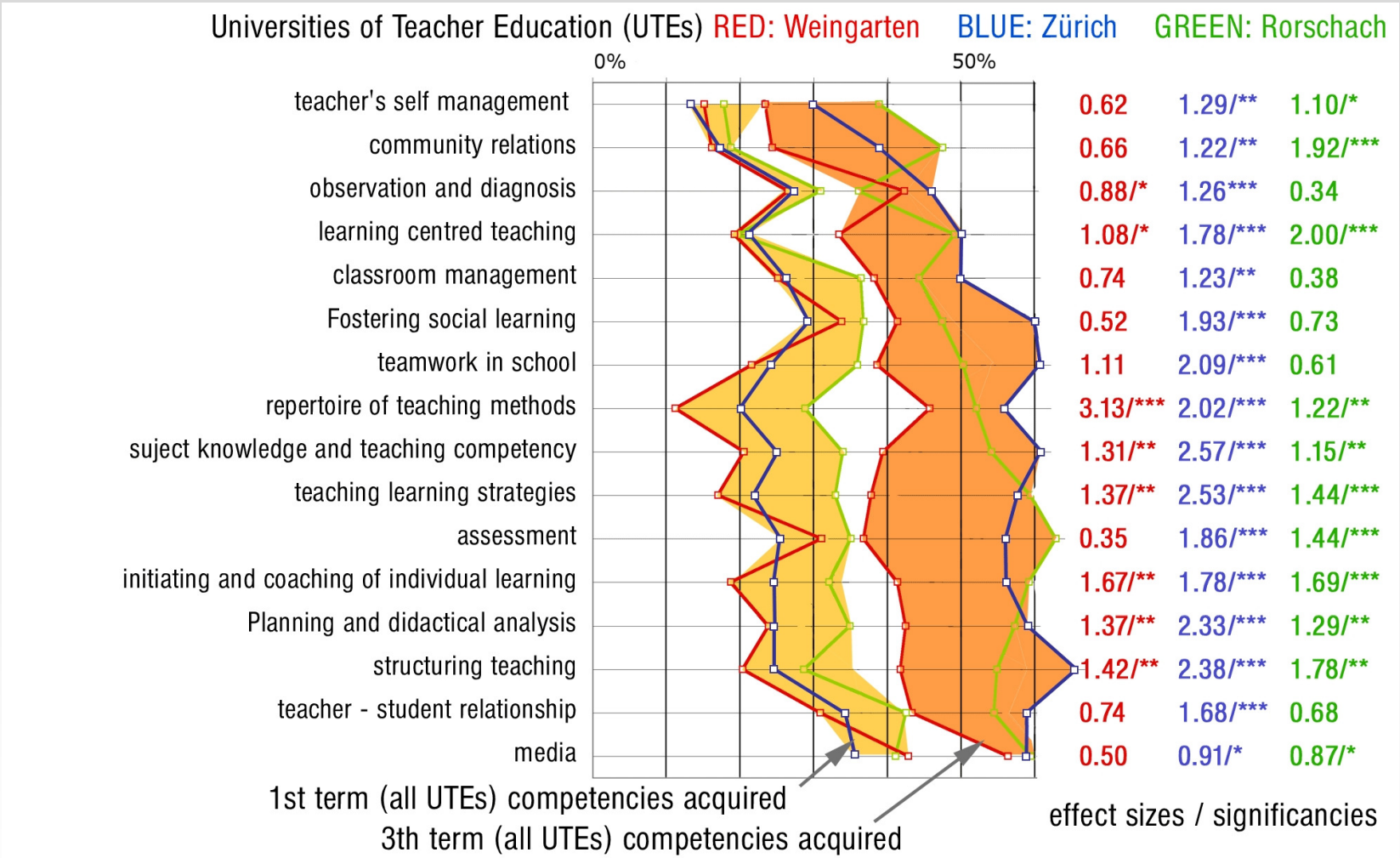
Online-Questionnaire - Competencies Already Acquired / Competencies Still Desired



Online-Questionnaire - Differences between Universities



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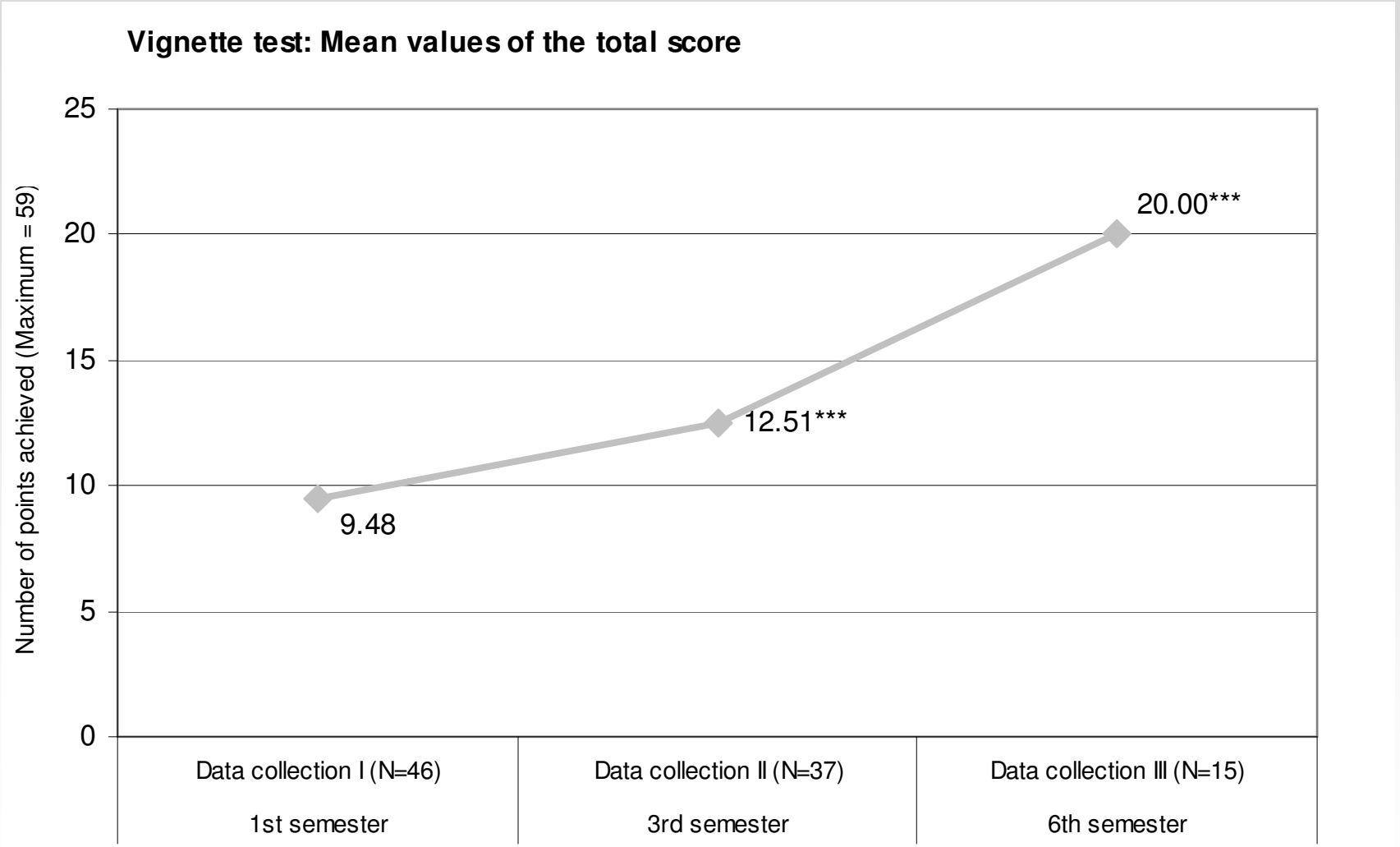
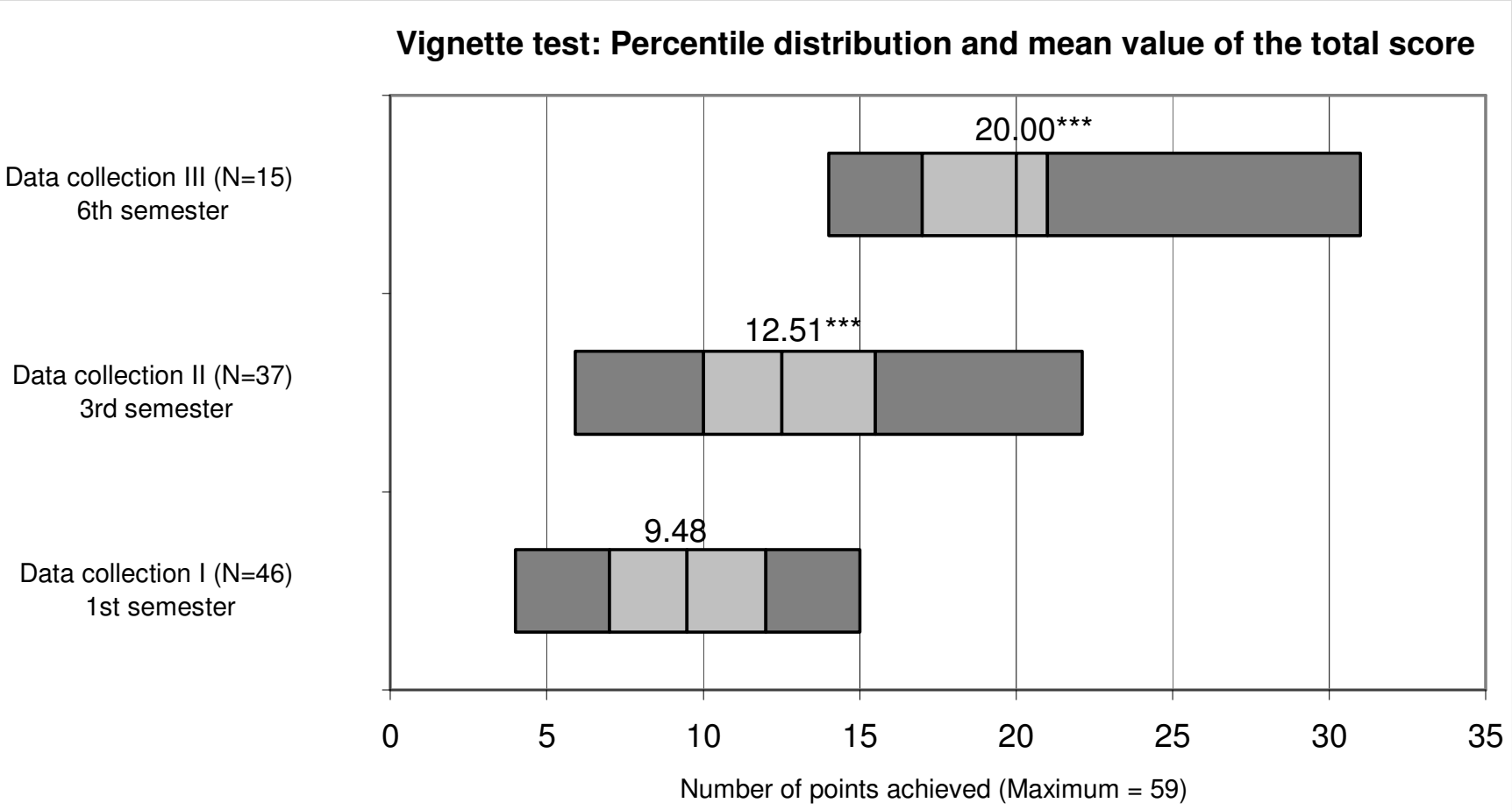
Vignettes

- Two problem situations for lesson planning. Students develop possible solutions and write down their ideas.
- The students results were rated with regards to their quality.

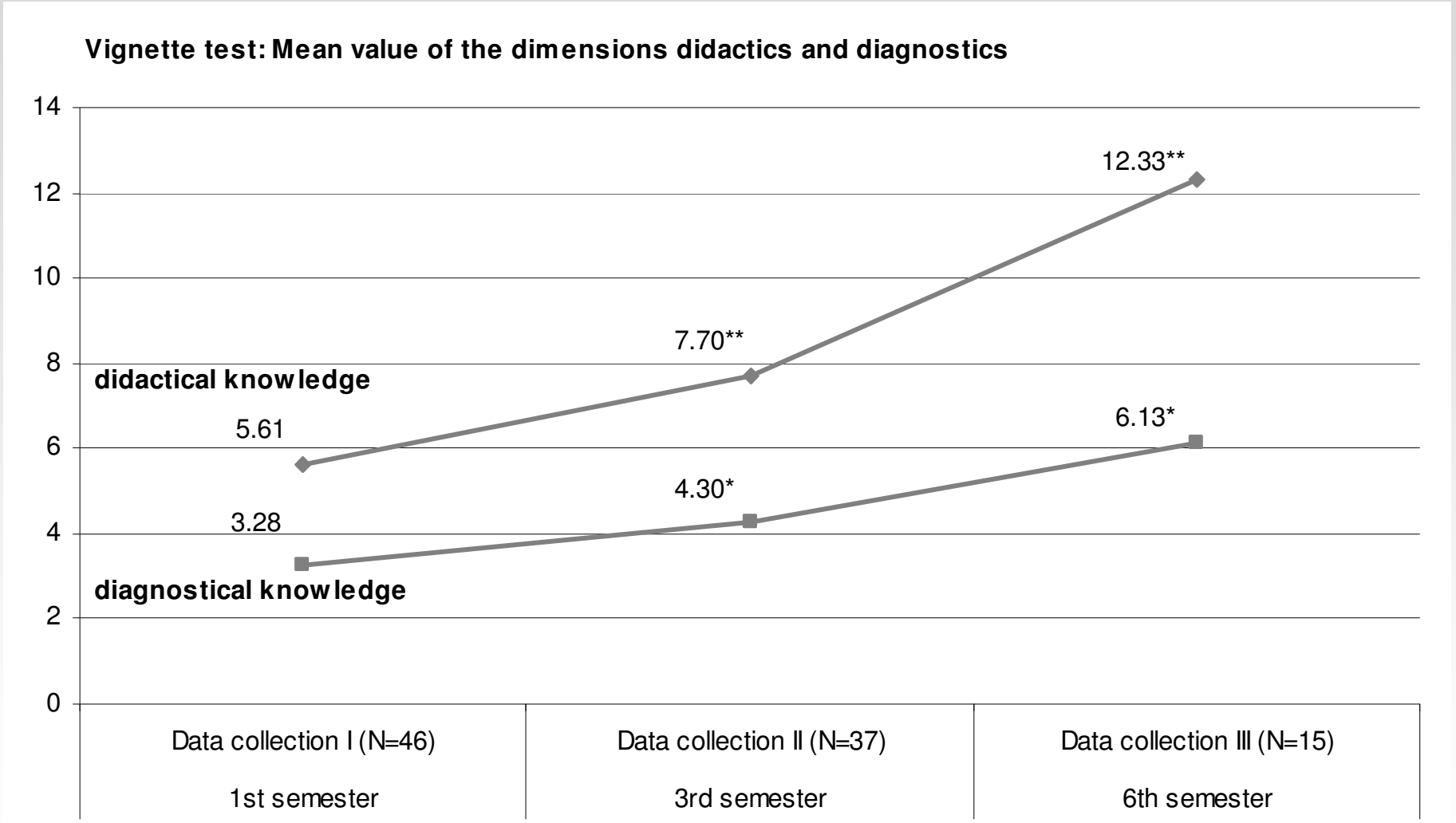
Vignettes


Vignette test: Mean values of the total score
Number of points achieved (Maximum = 59)
25
20
15
10
5
0
9.48
12.51***
20.00***
Data collection I (N=46)
1st semester
Data collection II (N=37)
3rd semester
Data collection III (N=15)
6th semester

Vignettes

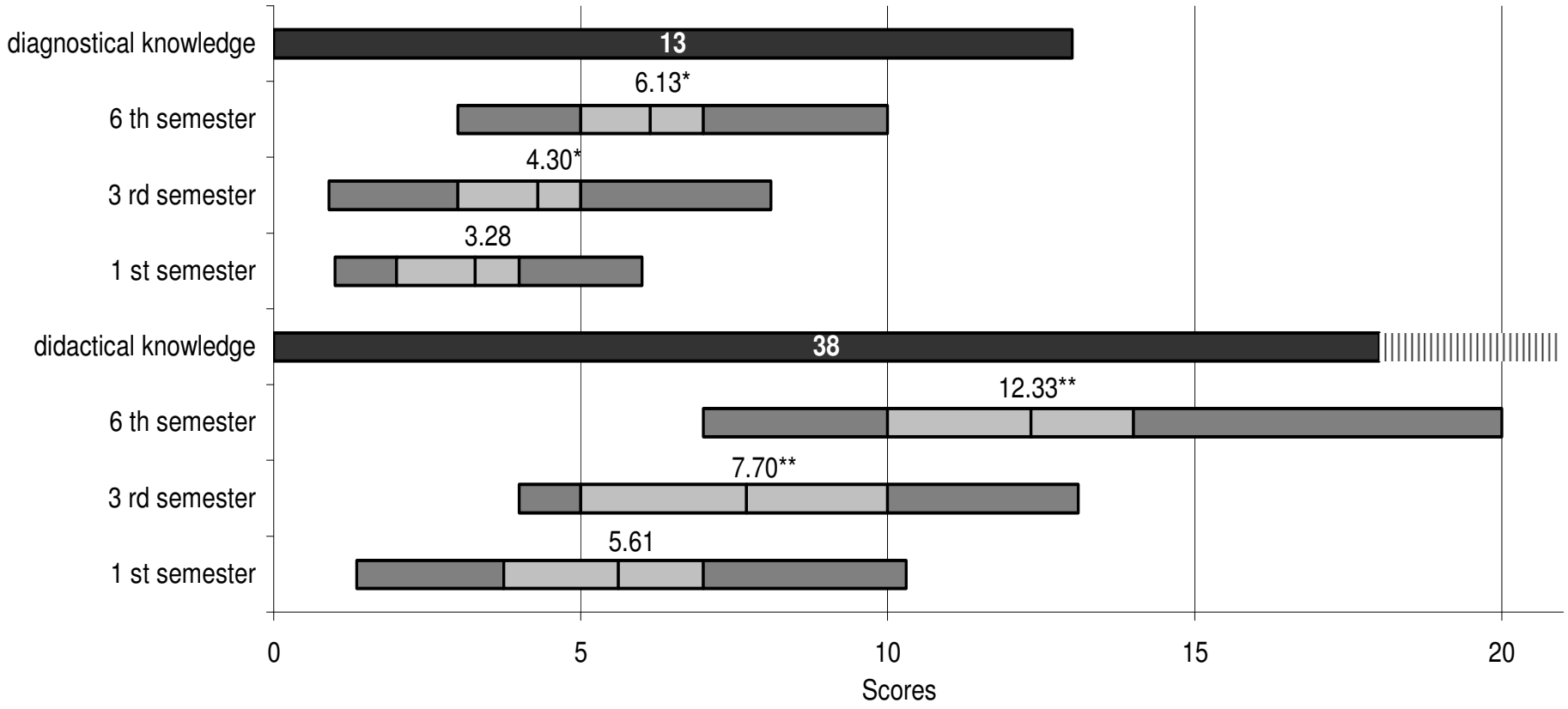

Vignette test: Percentile distribution and mean value of the total score
Data collection III (N=15)
6th semester
Data collection II (N=37)
3rd semester
Data collection I (N=46)
1st semester
20.00***
12.51***
9.48
0
5
10
15
20
25
30
35
Number of points achieved (Maximum = 59)

Vignettes


Vignette test: Mean value of the dimensions didactics and diagnostics
14
12
10
8
6
4
2
0
didactical knowledge
5.61
7.70**
12.33**
diagnostical knowledge
3.28
4.30*
6.13*
Data collection I (N=46)
1st semester
Data collection II (N=37)
3rd semester
Data collection III (N=15)
6th semester

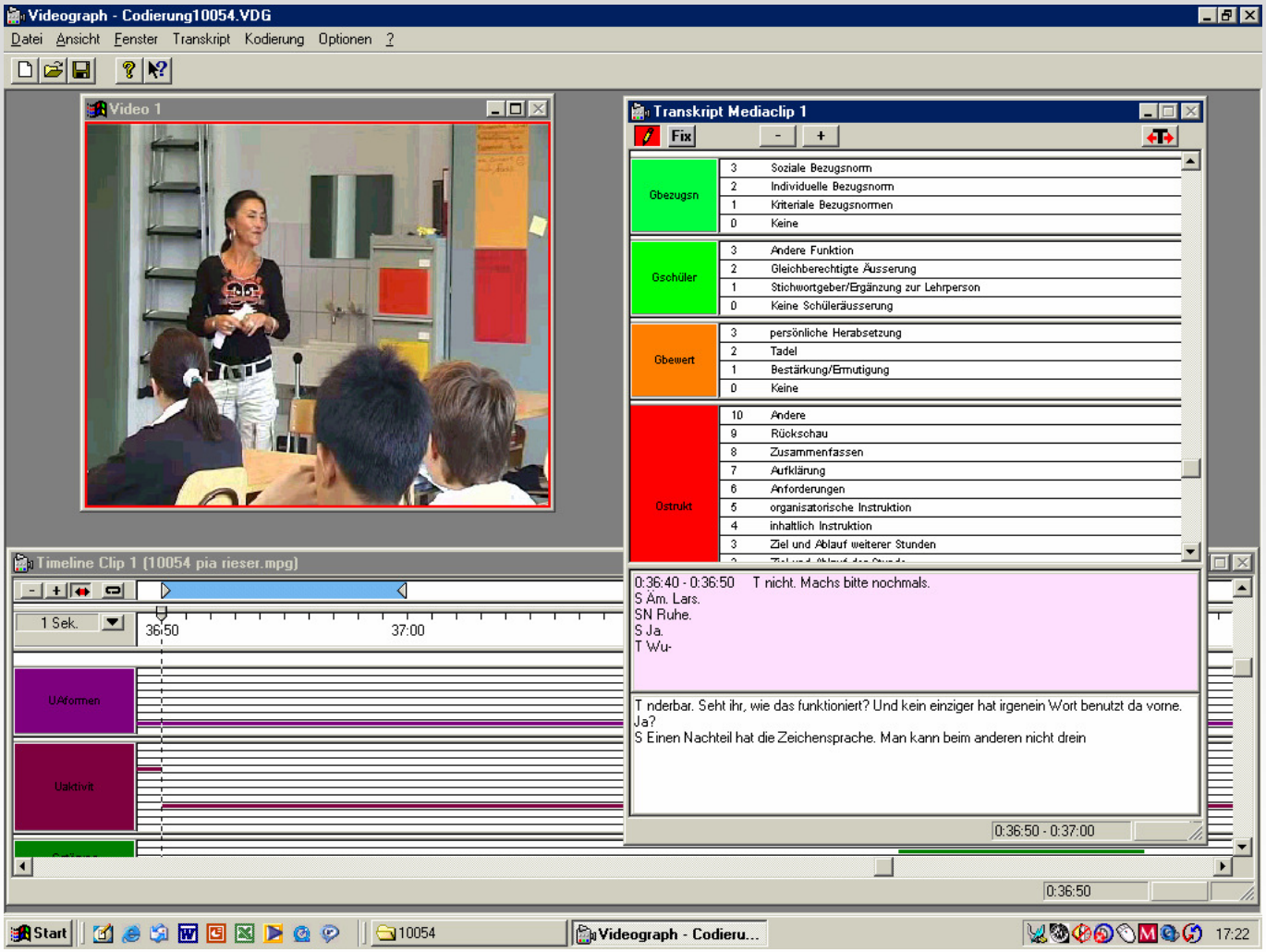
Vignettes

Vignette test: Percentile distribution and mean value of the dimensions didactical and diagnostical knowledge in comparison to the maximal scores



Videography of Lessons

- longitudinal
- Expert–Novice comparison
- Softwaretool: „Videograph“



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Videography of Lessons: Codes System & Rater Inventory

Code System

- low-inferent
- observation of sight structures
- unit of analysis: 10 sec. steps
- **quantitative analysis of teaching**,

  e.g. time proportions between teaching the whole class and group work, or analysis of disruptions

Rater-Inventory

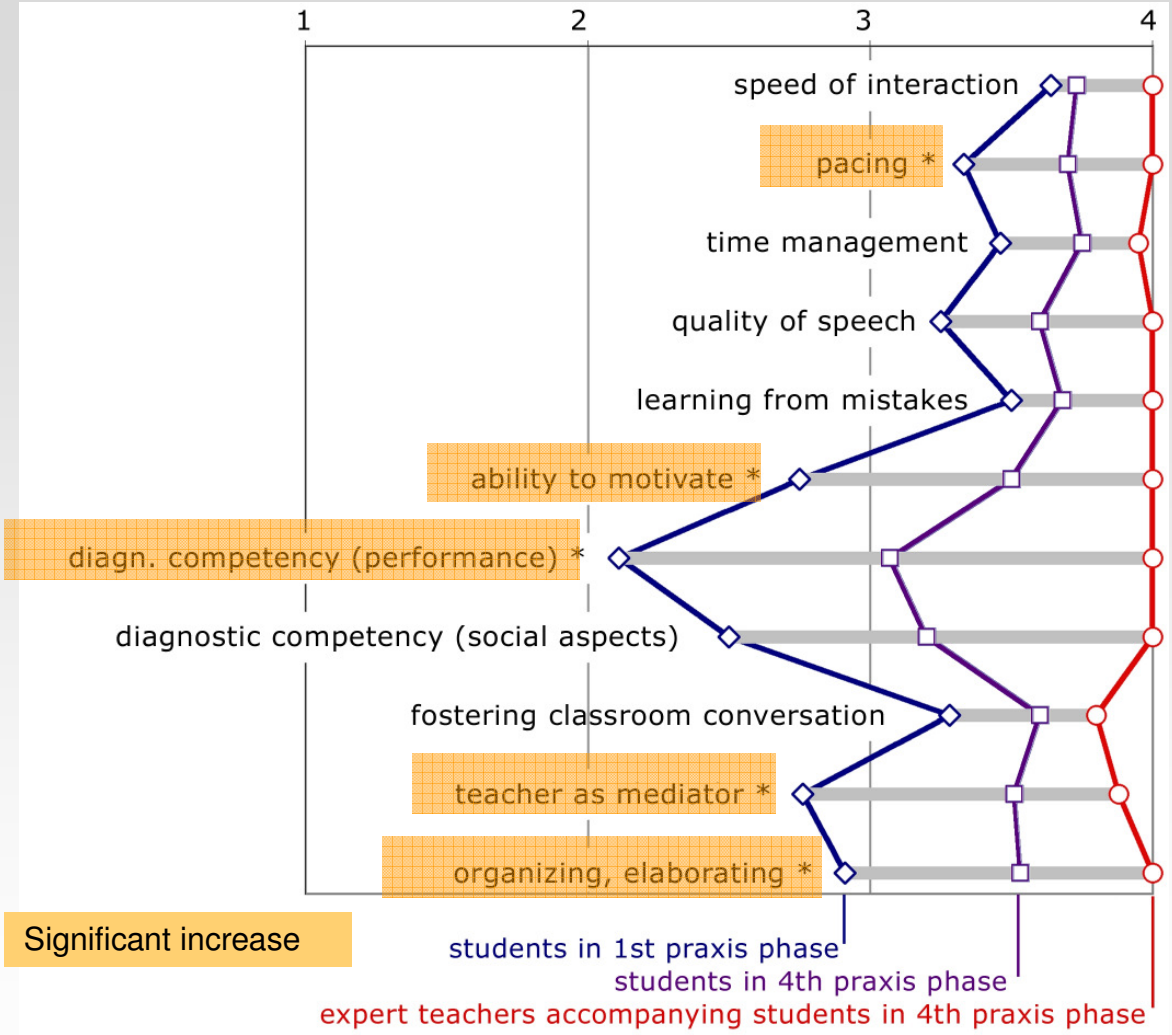
- high-inferent
- measuring teaching quality
- unit of analysis: rating of the whole lesson
- **qualitative rating of teaching**,

  e.g. pacing of instruction, or diagnostic competence, or dealing with students‘ mistakes

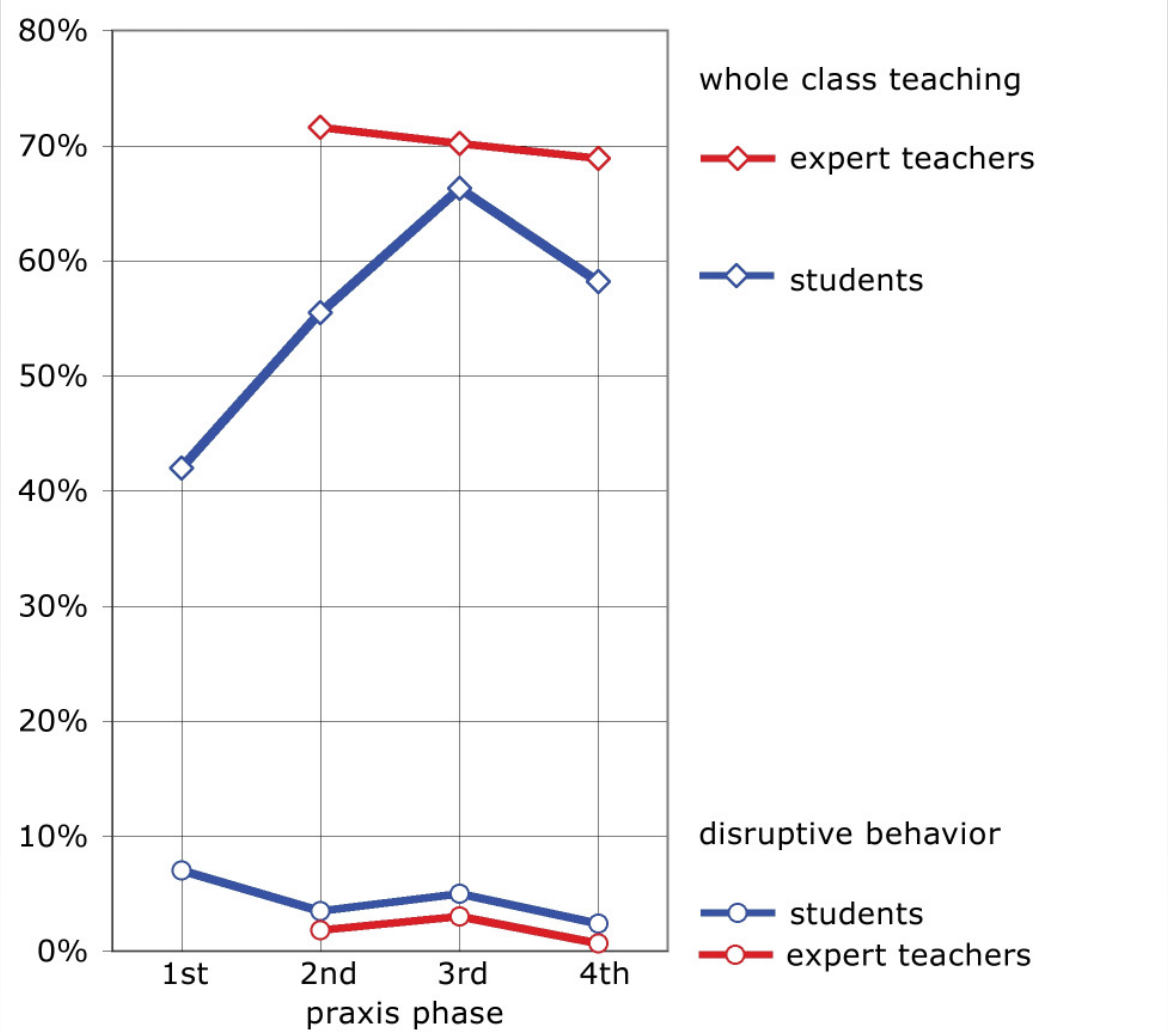
Videography of Lessons - High Inferent Ratings

n = 6

6 students in 4 placements, thereof 3 students with expert-novice comparison (= 42 videos)



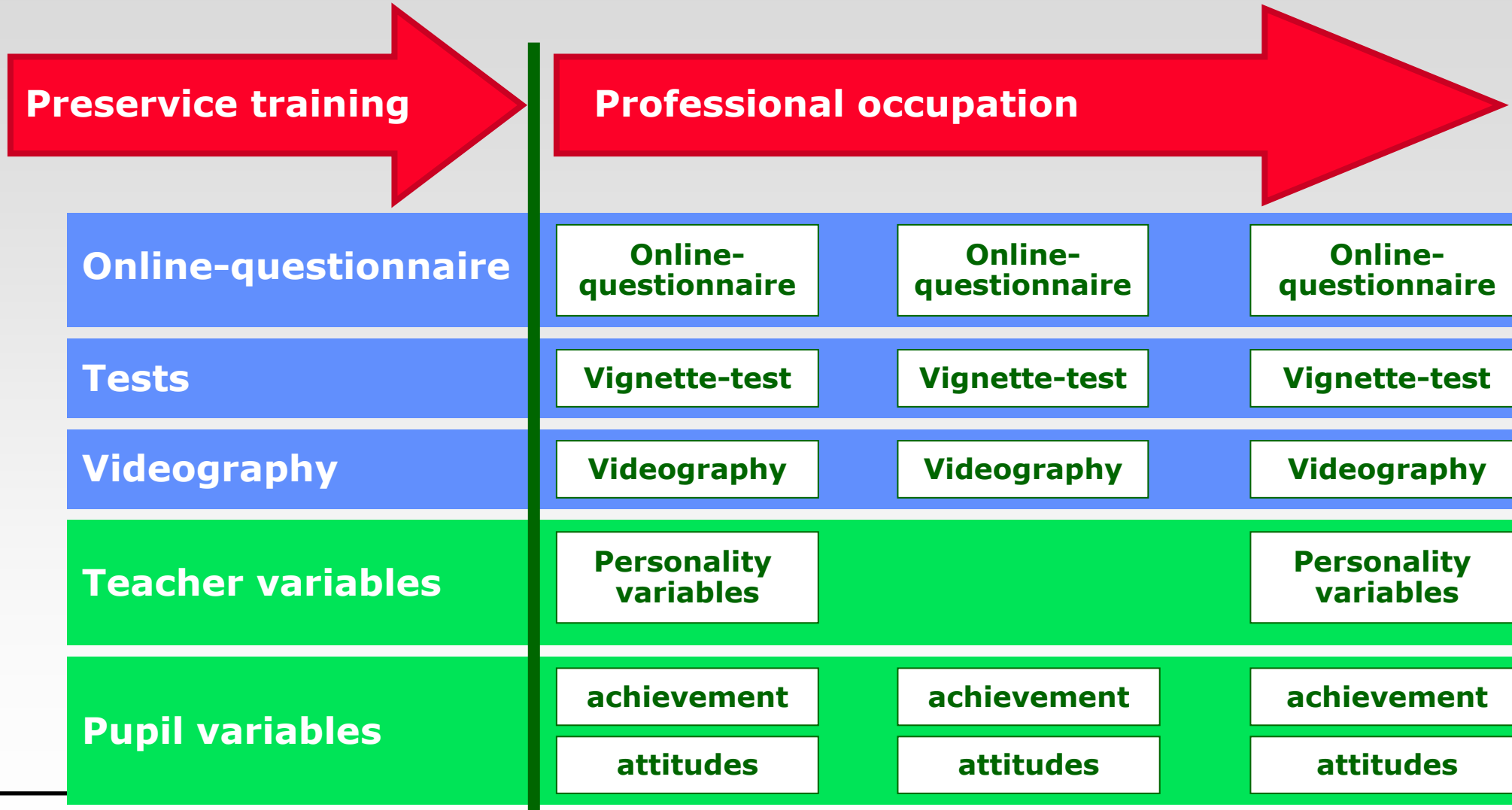
Videography of Lessons – Low Inferent Coding



Summary

- Subjective experience of a continous increase of competence
- Differences between the involved universities
- The wish for acquisition of teaching competence remains high

Extension into 1st year in profession, inclusion of pupils



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Thank you for your attention

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