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Design principles for work-based learning in HE

Prof. dr. Loek FM Nieuwenhuis.

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Educating Professions & Vocations

HAN, Expertise Centre Quality of Learning
Professional and vocational education:

- professional communities
- professional education
- communities of practice
- lifelong learning & development

Open University

- research on VET teachers and teacher development
- learning & working of vocational/professional teachers

The Dutch way in VET and professional HE

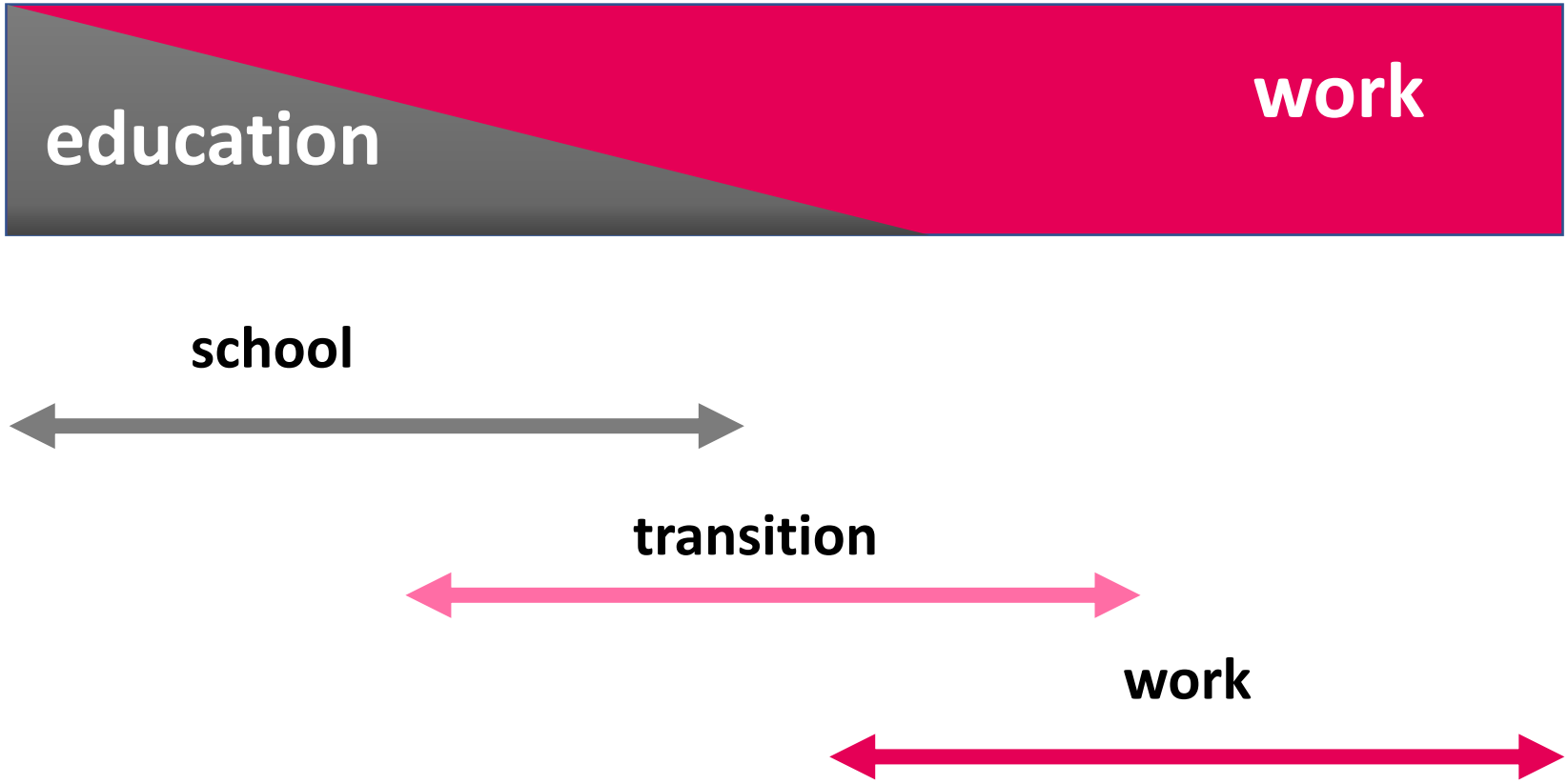
Inclusive VET:

- 50% of youngsters finish their educational career in VET
- occupational labour market
- ¾ school based, ¼ dual trajectories
- ISCED levels 1-4 (5)

Binary HE:

- polytechnics (UAS; 30%) + traditional universities (10%)
- ISCED levels 5, 6 (7): UAS-focus on bachelor-level
- UAS: oriented on professions
- 4/5 school based, 1/5 dual trajectories

Skilling trajectories



A roadmap to responsive HE

Seven steps (Kompetenz Werkst@tt):

1. Lifelong learning model
2. **Knowing the occupation**
3. Spheres of work: occupational differentiation
4. Cartography of work processes
5. Developing authentic learning tasks and environments
6. Developing course content
7. Portfolio for LLL

Exploring possible pathways for Step 2:

- work process knowledge (Fischer & Boreham, 2002)
- professional roles (Van Alten & Grotendorst, 2017)
- entrusted professional activities (ten Cate, Nuts and Bolts, 2013)

Pedagogical standards for WBL; a review study

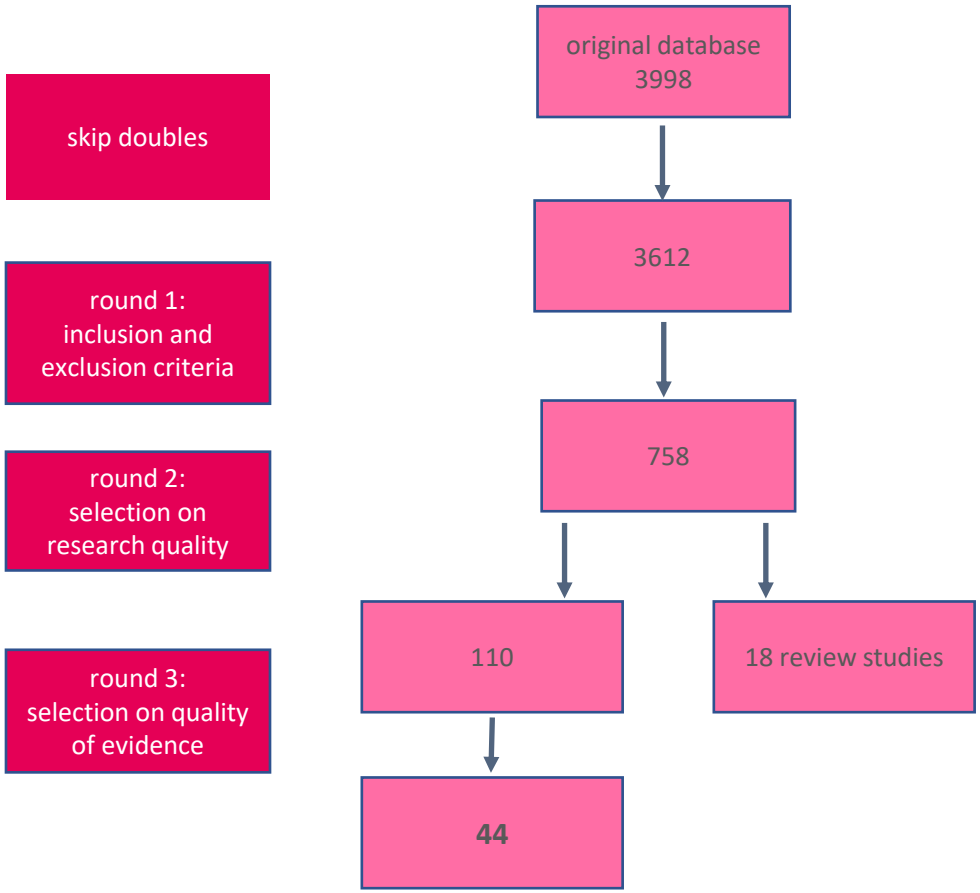
Introduction

- Work-based learning is a significant but problematic aspect of the curriculum. Studies report ambiguous results
- There is no general theory of workplace learning.
- ‘Work’ and ‘learning’ are organized from different logical frames Increase of studies on the organisation of workplace learning

Research design

- Objective: to contribute to the development of an evidence-informed framework for workplace learning components in a professional or vocational curriculum.
- Research question: What are the effective factors of workplace learning in professional and vocational education?
- Method: systematic review study of empirical studies (quantitative and qualitative) from 2005-2015 on work-based learning in TVET and HPE

Search string



44 (110) studies in the analytical framework

Goals / Stages	Orientation	Acquisition	Participation
Preparing		(2)	
Enactment	(4)	**20** (41) **11** (30) **8** (16) **2** (9)	
Evaluation		**1** (4) **2** (4)	

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Results

We only use the ‘enactment stage’ and the ‘evaluation stage’ to present the results

Important elements to reckon upon in the ‘enactment phase’:

- integration of workplace learning into the curriculum
- social & structural elements of the workplace
- learning practices
- student related characteristics

Important element to reckon upon in the ‘evaluation stage’:

- assessment

Conclusions

- Workplace learning research is still underdeveloped
- Three phases in workplace learning (preparation, enactment, and evaluation) do turn out to be significant analytical categories.
- The acquisition goal is dominant in the reviews in combination with elements of the participation objective. The orientation goal is hardly recognizable
- Workplace learning in initial TVET and HPE can only be understood in context (domain specific)
- 11 design standards
- The design standards should be contextualized by educational teams in co-makership with the business partners of the labor market

Design principles for WPL (1-4)

1. Design in co-makership with labour parties:
   workplace learning should be steered by work processes, not by educational rationalities
2. Develop a common language for school and company:
   knowledge from school-books is different from practice-based knowledge; theory-practice is a false dichotomy
3. Prepare students deliberately:
   let students be prepared for learning by stating own learning goals and wishes.
4. Make boundaries between educational context and workplace more ambiguous:
   use models for boundary crossing and boundary objects; educators as boundary crossers

Design principles for WPL (5-8)

5. Provide students guidance in professional growth:
   use models as "novice to expert" for developmental goals; qualification is the start of learning.
6. Provide a variety of working environments:
   different communities use different work-routines; most are valuable: comparison enhances learning
7. Provide space for mistakes and repetition:
   simulations support learning from mistakes
8. Provide space to discover the professional culture:
   3-fold apprenticeships: cognition-practice-ethics

Design principles for WPL (9-11)

9. Support the mentor at the workplace:
   there are formal mentors (preceptors, guidance,…) ánd informal mentors (workplace colleagues); both are important and should be facilitated
10. Organize reflection and feedback:
    the most impactful intervention of the UAS is here: in-depth discussion and reflection on student groups of WPL-experiences
11. Ensure the quality of workplace learning:
    assessment of student growth on the novice-expert dimension;

THANK YOU
for your
ATTENTION

Contact details:
Loek.Nieuwenhuis@han.nl

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