Improving the quality of workplace learning
Developing vocational competency, work process knowledge and pedagogic competencies of vocational teachers and workplace instructors

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Challenges for VET

Knowledge economy
New jobs
Employability & entrepreneurship
Unemployment & integration
Lifelong learning
Active Citizenship
Competence and Career Oriented VET

From knowledge and skills to integrated competency and capabilities

From disciplines and instruction to learning environments for the development of competencies

From examination and testing of knowledge to the assessment of competencies in relation to standards

From school to workplace: (Re)discovery of workplace learning
New learning objectives

Vocational competency
change; complexity
knowledge intensive
ICT

Generic skills,
Key skills, core skills, key qualifications, Core competencies

Learning competency
formal (school; course)
digital (Web 2.0)
work based
New learning

Constructivism

Self directed learning
- Cognitive / Metacognitive / Affective
- Subjective learning theories

Situational; learning by experience

Active; Investigative; Developmental
Three ways of learning (Simons et al, 2000)

Guided learning
Instruction; explaining; showing etc.

Experiential learning
Active, cumulative, constructive, goal-directed, diagnostic, reflective, collective

Action learning
Discovery oriented, contextual, problem oriented, case based, social, intrinsically motivated
Students and apprentices as active learners

Involvement; participation in community of practice

Sense making; constructing meaning

Inquiry and discovery learning

Collective and collaborative learning

Critical reflection

Thinking skills
  • General; Discipline-specific

Regulation and self-directedness
  • Learning skills
Growing importance of workplace learning in Dutch VET/HE

**Secondary (general) education**

vmbo (Prep. Voc. Ed.) (five levels/streams):

*new:* learning work trajectories (lower level)

**Secondary vocational education (mbo)**

4 levels; 1 to 4 years

School based (with extended practical learning) or

Apprenticeship (with one/two day school)

**Higher Education**

Higher vocational education and University

Practical period

*new:* Dual courses

Extended training in practice
Workplace learning in VET/HE

From application of school learned knowledge and skills to development of competences

From planning of activities to building on learning events (Reflection and elaboration; learning questions)

From performing tasks to creating a learning environment (Complexity; reflectivity)

From ‘throwing over the fence’ to boundary crossing and cooperation
Workplace learning

Active acquisition of work related competencies

Real work problems as learning object

Real work situation as learning environment
Learning opportunities on the job

Job/Task characteristics
- Completeness/Complexity
- Innovation, 'events'

Problem solving
- Planning; Discretion space

Social Work Environment
- Colleagues; Supervisors; Clients
- Feedback, explications

Information Environment
- Information, database
- Job & Learning aids
- Material clues
Training on the Job

Organizing Learning Opportunities

Participation in Innovation

Structured Training on the Job

Dimensions

Content
Didactic structures and methods
Coaching
Workplace as learning environment

**Realistic content**
- Content; Real work; Problems; Variation
- Organisation
- Co-operation; social insertion

**Developmental quality**
- Broadness; Rules and Patterns
- Core problems and dilemma’s

**Didactic quality**
- Structuring; learning-working assignments
- Guidance; coaching; mentoring
- Reflection; meaning construction
- Collaboration

**Institutional quality**
Guidance in the workplace

Learn to learn (active; experiential)
learning by dialogue, inquiry and discovery

Coaching and mentoring
modeling; scaffolding; fading
connectivity
embedded reflection
focus on choices and dilemma's

Developmental orientation
personal development plans
developing codified, situated and tacit knowledge
Training objectives for workplace trainers

New vocational developments
  connecting codified and situated/episodic knowledge

New qualification requirements

Career orientation

Coaching
  Introduction and making learning opportunities available
  Scaffolding: instruction and explanation
  Modeling
  Fading
  Feedback; promoting reflection

Assessment
Dual learning: the role of the school

Preparation
• Orientation on company and activities
• Connection to school learning

Guidance, feedback and reflection
• Formative assessment

Elaboration, connection and integration
• Learning trajectories
• Career development

Shared responsibility school and company
• Agreement on personal development plan
• Regular contact teacher and workplace
• Networking
Work related didactic competency

Realising powerful learning environments
- Design and Research competences
- Adaptive teaching and guidance

Content expertise
- Updating vocational and work process knowledge
- Relating disciplinary and vocational knowledge
- Connecting codified and situated/episodic knowledge

Motivating, challenging, supporting VET students
- Learning to learn
- Empowerment, independence and autonomy
- Supporting collective learning and peer support
Cooperation (internal, external)

Alignment work activities (didactic, organisational, pedagogical with colleagues)

Good communication and cooperation

- Ability and willingness to discuss successes and problems in one’s way of working
- Responsibility for what we do and how we do
- Accepting criticism

Contribute to learning and development of the school
(and the broader community)
Teacher Training

From vocational expertise to pedagogical training

From discipline (subject) to vocational competency and work process knowledge

Dealing with students (variety; motivation; orientation)

Practice placement as a teacher in VET colleges

‘Teacher training in the school’-movement
Conclusions

New challenges to the way knowledge construction in VET can be enhanced

- Codified-situated/episodic knowledge
- Work process knowledge

Both on the level of content (core problems) and on the level of guidance (reflexive) new connective practices are necessary.

New ways of communication and coordination between VET colleges and workplaces (schools) are in order

- Linking school and work by research activities

Both teachers in VET schools and workplace trainers need to develop new skills