Chamber of Skilled Crafts
Ostwestfalen-Lippe zu Bielefeld

Work-based learning systems for resilient and responsive TVET

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Chamber of Skilled Crafts Ostwestfalen Lippe zu Bielefeld

- 23,000 Companies
- 215,000 employees
- 11,000 trainees
- 28 billion Euros in sale

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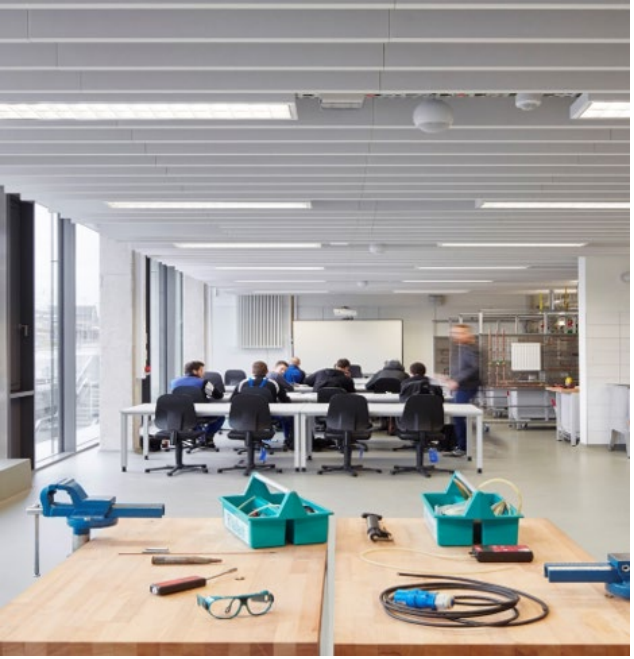
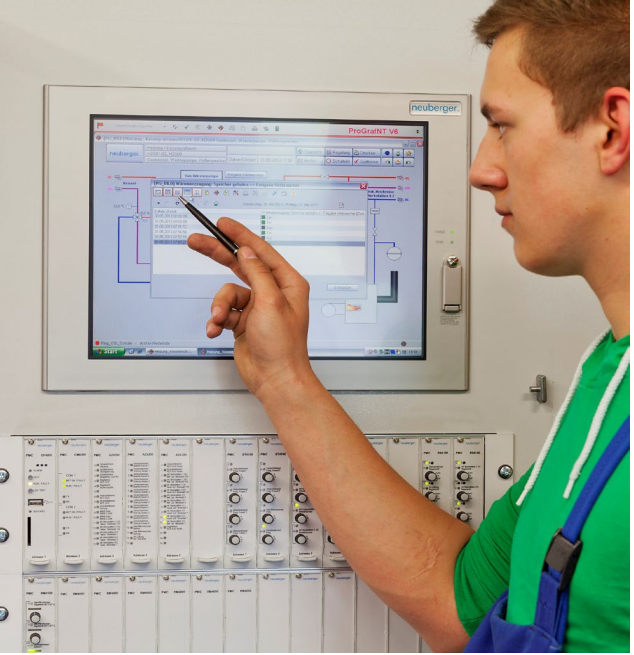


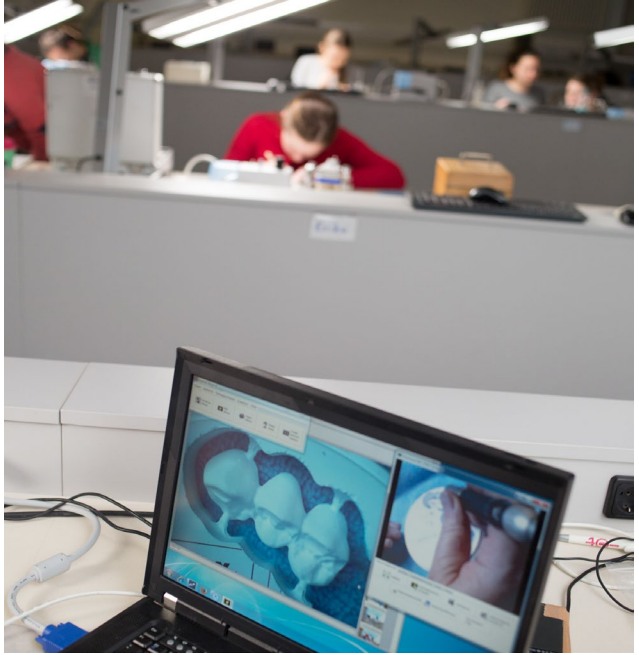
Dual Vocational Training

- Learning in the Work Process
- At two coordinated learning venues (“dual”) within one training programme
- 70% in the companies, 30% in vocational schools
- The Vocational Training Centres are part of the company training

Vocational Training Centre

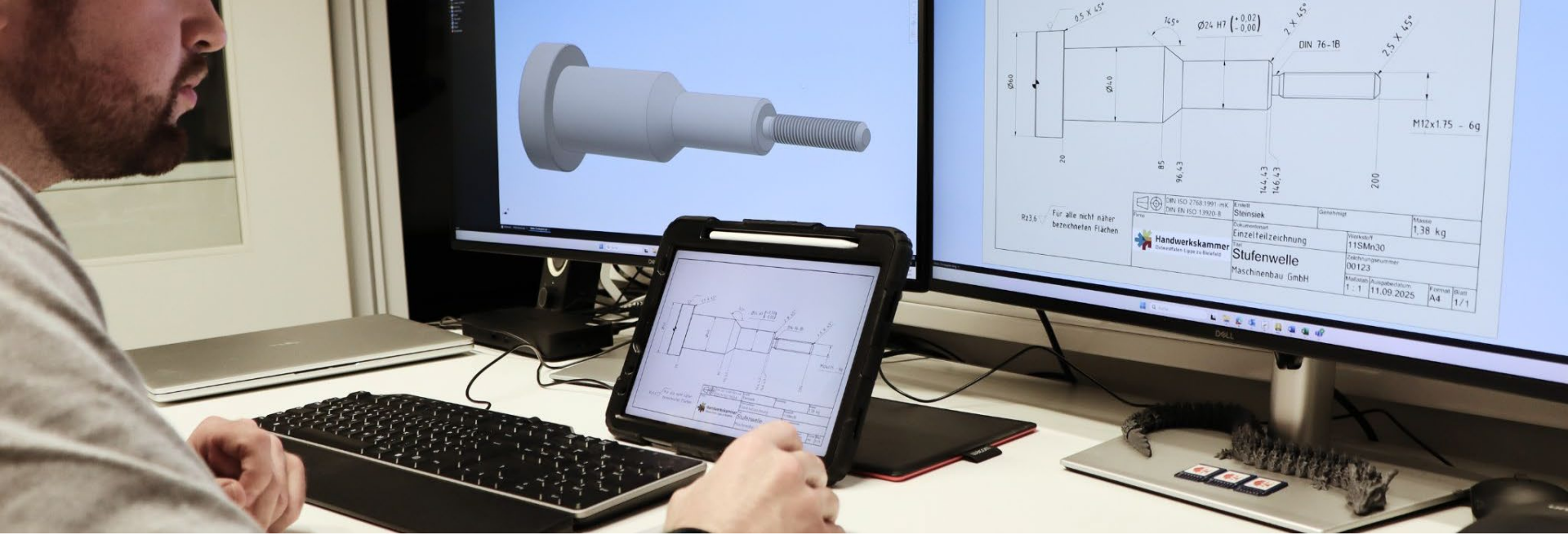
- 10,000 participants per year in 14 different professions
- Competence Center Smart Home/Smart Building
- Focusing on the action-oriented approach, the building is a teaching and learning object





Global Challenges

- Green Transition
- Digital Transformation
- Demographic Shifts



Symbiotic Intelligence: mutual knowledge creation between academia & industry

VTCs as practical nodes:

- Translate research into skills
- Bring industry needs back into education

Bridging Industries and Academia

- VTCs as brokers of symbiotic intelligence between theory and practice
- Bridges matter in times of rapid change
- A bridge only works if there are people walking on both sides – networking
- makes the connection alive

Drivers & Necessity

Industry needs:

- Innovation, agile workforce, solutions for sustainability

Academia needs:

- Practical relevance, testing grounds, employability focus

VTC role:

- Networking platform → turning global challenges into local solutions

Models of Cooperation: Workforce Development

- Dual Training
- VTC as co-designers of curricula with industry and academia

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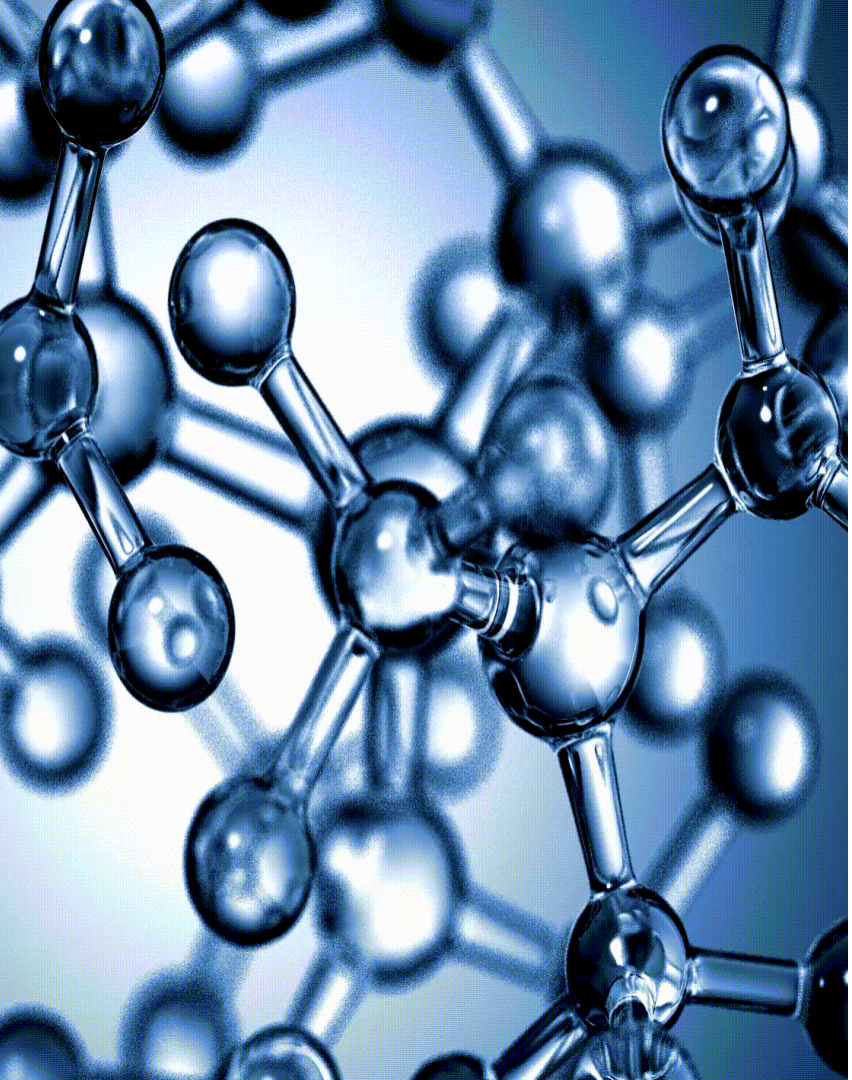
Models of Cooperation: Knowledge Transfer via VTC

- Competence Centres: pilot projects, joint labs, applied R&D



Dynamics & Symbiotic Mechanisms

- Feedback loops
- Networking as a catalyst

Dynamic element: VTCs enable constant dialogue and flexible adaption

Industry Networks

Das Technologie-Netzwerk:
Intelligente Technische Systeme OstWestfalenLippe

it's owl

Green. OWL

SMART LIVING
MADE IN GERMANY

Key Questions

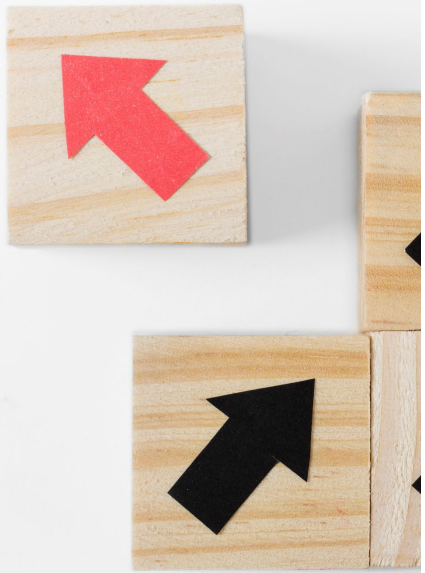
- How do you work?
- What do you need?

Round Table „Qualification“

- Universities
- Universities of Applied Science
- Vocational Training Centres

Key Questions

- What is the optimal padagogy to reach the learning objectives?
- How do we implement AI into the learning process?



Challenges & Tensions

- Keeping networks alive
- Keeping networks purposeful
- Risk of siloed thinking

Future Outlook

- AI & Symbiotic Intelligence: VTCs as learning hubs for educators and SMEs

Key take-aways

- Dynamic starts when networks are theme driven with a real life impact
- Networking as the foundation of successful symbiosis
- Symbiotic Intelligence is key to innovation, employability & sustainability
- „Together we‘re smarter“ – the future lies in shared learning

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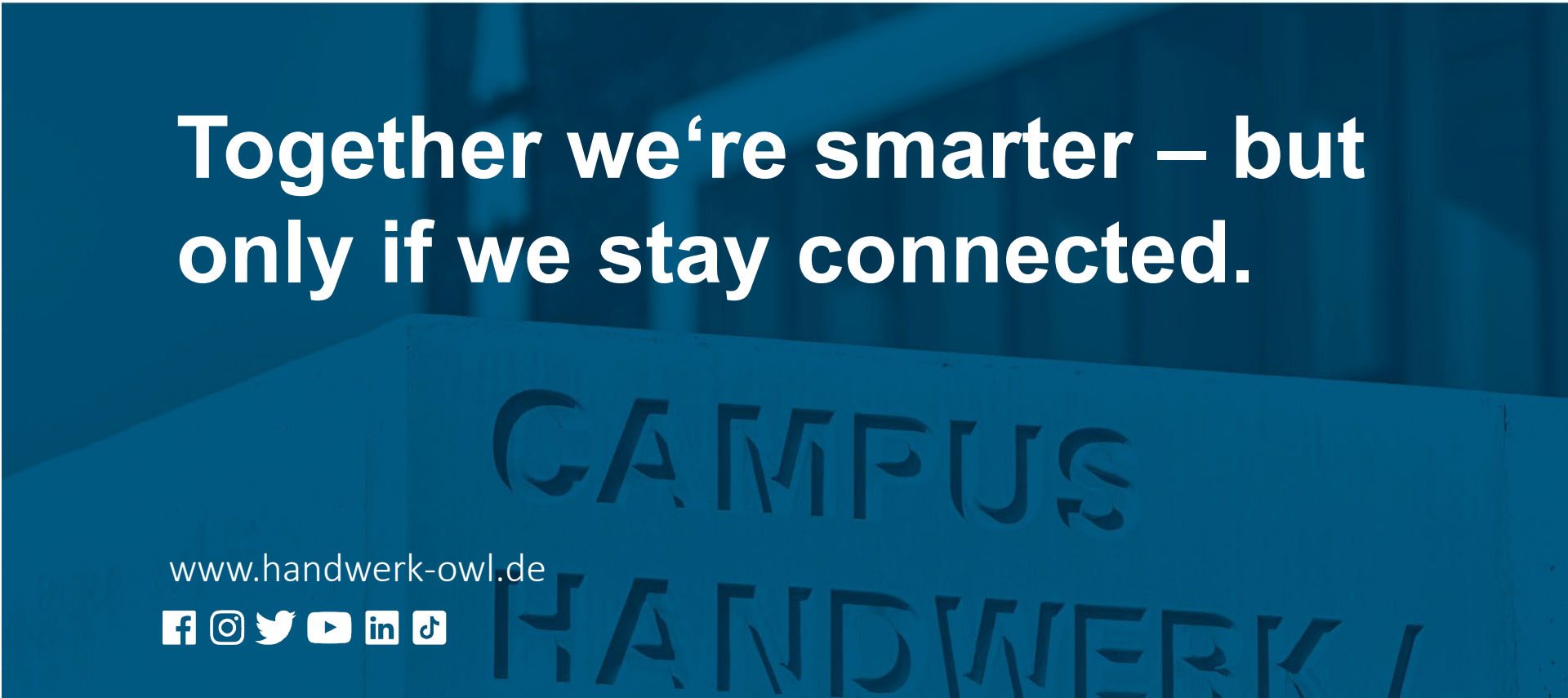
Together we‘re smarter – but only if we stay connected.



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