

FUTURE OF EDUCATION CONFERENCE · Florence 18 JUNE 2026

Workplace-Oriented German Training for **Engineers**

A Needs-Based Practice Report from a Multinational Company

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02 The Context

A transnational engineering environment under shared management

STATIKS IKE

THESSALONIKI · GREECE

Structural analysis and design for German construction projects

Eurocodes, German DIN norms, and technical documentation in German.

RADIN Planungsgesellschaft mbH

LIPPSTADT · GERMANY

Structural design, sustainability, building physics, and energy planning
three managing directors across both sites.

THE PROGRAM IN NUMBERS

4

years of teaching practice

Sep 2022 – Jun 2026

19 → 9

participants over four years

reflecting professional mobility

A1–C2

CEFR proficiency range

two level groups + two C2 engineers

03 The Central Challenge

The gap between receptive understanding and active communication

Engineers could read complex technical documentation fluently but struggled to explain the same content independently in German.

– A recurring observation across all proficiency levels

WHERE THE GAP APPEARED

Technical discussions in meetings

Spontaneous problem-solving

Explaining processes to colleagues

Writing professional emails and reports

WHAT IT REQUIRED

Moving beyond grammar-focused instruction

Output-oriented task design

Authentic professional materials

Continuous methodological adaptation

04 Theoretical Framework

An interdisciplinary foundation for workplace language education

01

LSP

Languages for Specific Purposes

Calibrating language learning to specific professional communicative demands.

02

TBLT

Task-Based Language Teaching

Learning through meaningful, goal-oriented professional tasks.

03

Needs Analysis

Continuous, weekly

Workplace needs cannot be analysed once and treated as fixed.

04

Scaffolding

Vygotsky / ZPD

Structured support calibrated above current capacity, gradually reduced.

05

Translanguaging

Strategic L1 use

The first language as cognitive resource, not interference.

05 Methodology

An adaptive, needs-driven framework not a fixed curriculum

DIFFERENTIATION BY PROFICIENCY

Foundation
A1 — B2
LINGUISTIC STABILITY

Vocabulary development & grammatical consolidation
Scaffolding strategies, progressively reduced
Strategic translanguaging (Greek as cognitive bridge)
Adapted authentic materials

Advanced
B2 — C2
DISCOURSE COMPETENCE

Sustained technical explanation under pressure
Structured professional argumentation
Case-based learning & podcast-style recordings
Spontaneous workplace interaction

CORE METHODOLOGIES ACROSS LEVELS

Task-Based Activities

Case-Based Learning

Writing-to-Learn

Intercultural Reflection

06 Authentic Materials

The engineering workplace as the primary curriculum

Real professional documents not textbook approximations formed the pedagogical core, adapted in complexity for each level group.

Bewehrungsplan

Bewehrungspläne

Reinforcement plans

Real structural drawings analysed for technical vocabulary, register, and communicative precision.

Bodengutachten

Bodengutachten

Soil reports

Authentic geotechnical documentation used for genre analysis and explanation tasks.

Pergamon Museum

Pergamon Museum

Cultural case study

Structural restoration in Berlin connecting technical vocabulary to engineering heritage.

Bridge project

Bridge Engineering

Project-based learning

Real construction projects framing materials, calculations, and stakeholder communication.

07 Case-Based Learning

The most demanding and the most effective methodology

SCENARIO

"A 6.8-magnitude earthquake has struck the region. Several buildings may have suffered structural damage."

Engineers worked through this entirely in German integrating language, technical judgement, and professional ethics.

FOUR INTEGRATED COMPETENCES

1 Identify

- Assess structural damage
- Analyse risks
- Evaluate building safety

2 Assess

- Determine priorities
- Evaluate responsibilities
- Consider public safety

3 Formulate

- Develop emergency measures
- Propose technical solutions
- Plan inspection procedures

4 Communicate

- Inform
- Coordinate with colleagues
- Explain decisions

08 AI for Tasks

Critical analysis not prohibition

By 2023, several participants were routinely using AI tools for translation and drafting. The results ranged from useful to professionally damaging.

RECURRING AI FAILURE MODES

Wrong register

German often correct, but inappropriate for the professional context.

Hallucinated technical terms

Convincing terms that German engineers would not actually use.

Lost intercultural nuance

Meaning preserved, but communicative intention often lost.

THE PEDAGOGICAL RESPONSE

Critical AI Literacy

AI-generated texts became material for critical analysis. Participants compared them with authentic workplace communication, identified failures, and discussed what a human writer would have done differently.

"The objective was not AI prohibition, but the development of critical AI literacy."

09 Communicative Development

From passive understanding to active professional communication

Engineers who had once avoided speaking German preferring to write carefully rather than risk spontaneous interaction gradually became willing, and eventually comfortable, communicating in real-time professional situations.

KEY OBSERVATIONS

Non-linear progress

Periods of visible growth, plateaus, occasional regression under workload, and unexpected breakthroughs.

Redemittel as anchor

Functional expressions and recurring patterns gave engineers reliable linguistic tools for professional interaction.

Confidence through authenticity

Speaking confidence grew most noticeably during real workplace tasks and case-based simulations.

10 Intercultural Awareness & Honest Limits

Slower than linguistic progress. More consequential.

INTERCULTURAL DEVELOPMENT

BEYOND GRAMMAR AND VOCABULARY

Differences between German and Greek professional communication cultures
directness, structure, professional tone shaped how technical communication was
perceived.

The goal was not imitation but understanding well enough to navigate workplace
situations confidently and appropriately.

This required time, continuous exposure, and explicit reflection over years, not
months.

HONEST LIMITATIONS

WHAT ALSO HAS TO BE SAID

Progress was not uniform across participants

Motivation fluctuated over the four-year period

Workload affected concentration and participation

No formal outcome measurement was conducted

Sustained engagement remained challenging

Teaching professional language requires engaging with the profession

"I do not come from an engineering background. Yet over four years I read about bridge construction, worked with real Bewehrungspläne, and tried to understand the Eurocodes well enough to recognise why they matter to the people I teach."

WHAT THIS MEANS FOR LANGUAGE TEACHER EDUCATION

01

Subject-matter engagement is not optional it transforms a generic language course into relevant professional training.

02

The teacher becomes a learner alongside the profession and that vulnerability is pedagogically productive.

03

DaF teacher training does not prepare educators for this interdisciplinary work.

12 Conclusions & Future Perspectives

Toward an interdisciplinary, adaptive model of professional language education

What this program suggests

Workplace language training is professional development that happens to use language
Authenticity is not a strategy it is a condition of relevance
Continuous adaptation outperforms fixed curricula

The evolving teacher role

Educator as mediator between language, professional culture, and AI
Interdisciplinary engagement becomes a defining competence
Long-term collaboration develops the educator as much as the learner

Future directions

Systematic study of long-term workplace language program outcomes
Frameworks for educator preparation in specialised technical domains
Rigorous assessment of AI-integrated professional language training

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Thank you

for your attention questions are warmly welcome.

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