Project Overview
• The transfer project T1 links fundamental research in computational linguistics of A4 to a real-life educational setting, in collaboration with the publisher Diesterweg.
• Goal: Turn a current workbook for 7th grade English in Gymnasium into an online workbook offering
  – immediate, interactive feedback to learners
  – automatic assessment of content and form in context

Phase 1: Data Collection
• Developed online version of CamdenTown 3 workbook
  – FeedBook: 55 short answer & fill-in-the-blank tasks
• First version is designed to collect learner answers & manual, summative teacher feedback
  – Data collection will start mid-October in four school classes throughout Germany
  – Empirical basis for NLP development in Phase 2

The FeedBook (http://purl.org/icall/feedbook)
• Multi-layer web application developed in Java using the Google Web Toolkit (GWT)
• FeedBook currently provides:
  – Lobby for exercises selection → Figures 1, 2
  – Student interface providing fully functional online version of all exercises → Figure 3
  – Teacher interface supporting grading and feedback (annotations, comments, star rating) → Figure 4
  – Result interface allowing students and teachers to inspect feedback → Figure 5

Phase 2: Supporting interactive learning
• Extend FeedBook to provide immediate individual feedback scaffolding the learning process of the student
• Analysis should take into account learner answer and
  – learner model: individual interaction history, global learner characteristics (L1, level)
  – instruction model: task-characteristics, pedagogical goal, developmental sequences
• To support incremental solving of exercises we need
  – detection, classification, and prioritization of errors
  – generation of feedback in line with learner and instruction model
• support synergy with A4 to improve
  – CoMiC analysis and generalizability
  – FeedBook system using A4 diagnostic information

Phase 3: Evaluation and Outlook
• Real-life evaluation in eight classes (200-240 students) to empirically test impact of online workbook
• evaluate learning outcomes comparing online workbook with/-out immediate feedback (within-class randomization)
• Provides valuable real-life evaluation for
  – computational linguistic research: content and form assessment, domain adaptation, robustness
  – instructed SLA: impact of immediate focus-on-form and scaffolding in written language context
• First project integrating NLP analysis into real-life education in schools in Germany