

Making Jobs Accessible through AI-supported Easy Language Translation

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Abstract

Access to the primary labor market for people with cognitive impairments is hampered by barriers, notably the lack of workplace information in Easy Language (EL). Producing such texts is time- and cost-intensive and requires specialized translators. Project STARK-LS (Strengthening participation in the primary labor market through AI-generated Easy Language) addresses this gap by using an AI-translation tool to translate workplace materials into EL and integrating the approach into internships for people with cognitive impairments. An interdisciplinary team conducts mixed-methods evaluations by testing the EL translations for applicability, comprehensibility, and acceptance using lab-based eye-tracking and questionnaire studies, qualitative interviews with interns with cognitive impairments and experts for EL, and a quantitative survey with company representatives. The findings will inform best-practice recommendations for companies and rehabilitation agencies. The project advances scientific understanding of the perceived usefulness and potential barriers of EL in organizational contexts, while evaluating AI's influence on the diffusion of high-quality EL texts in companies.

1 Introduction

STARK-LS aims to strengthen participation (and acceptance) of people with cognitive impairments in the primary labor market through workplace internships investigating the role of providing AI-supported and post-edited Easy Language (EL) texts in authentic inclusive employment settings.

Existing projects highlight both the potential and the gaps: iDEM (Saggion et al., 2024) develops AI for accessibility but does not account for German. TOP.KI (2025) uses Plain Language instead of EL. Findings from the LeiSA project (Bock, 2019) show that EL texts often do not adhere to guidelines, have limited practical application, and are rarely used by companies. STARK-LS addresses these gaps.

The project is funded by the German *Federal Ministry of Labour and Social Affairs*.

2 Project Timeline and Partners

The STARK-LS project consists of four phases running from 2025 to 2029. First, internships for people with cognitive impairments are organized by the Institute for Learning and Innovation in Networks (ILIN) at Karlsruhe University of Applied Sciences (HKA) in collaboration with the District Administration of Germersheim, employers, rehabilitation stakeholders, and sheltered workshops. Second, relevant workplace materials are translated into EL using SUMM AI's translation tool and post-edited by the Tra&Co Center at Mainz University to ensure compliance with EL standards and comprehensibility. Third, the internships are accompanied by qualitative and quantitative research conducted by ILIN and Tra&Co investigating the organizational use of EL, the role of AI-supported accessibility, and the readability and comprehensibility of AI-generated and post-edited EL. Finally, the project develops practical guidelines, actionable models, and market analyses to support inclusive workplace

communication and participation in the primary labor market.

3 Project Objectives

STARK-LS pursues a set of objectives aimed at advancing inclusive labor market participation through AI-supported EL.

EL translations will be empirically evaluated for their applicability, comprehensibility, and user acceptance. We thereby seek to assess the potential of AI-powered translation tools to assist inclusion processes. Furthermore, both interns and employers will be accompanied throughout the internship phase to document and analyze their experiences, challenges, and learning outcomes. Based on these findings, we will develop actionable models and practical guidelines for companies, rehabilitation providers, and other stakeholders in the long term. These guidelines aim to support the integration of EL into workplace communication and identify strategies for overcoming organizational acceptance barriers.

4 Planned Methods of Evaluation

To achieve the objectives mentioned above, we are planning several methods of evaluation, such as structured interviews with both the interns and the employers following the completion of the internships. Additionally, a quantitative study involving more employers is planned to identify barriers to disseminating workplace information in EL and evaluate the perceived usefulness of AI-supported EL. An error annotation of the output following the guidelines of the DIN SPEC 33429 (2025) to evaluate the quality of AI-generated vs. post-edited texts is in progress. In terms of the technical effort required to ensure high quality, a study will be conducted using keystroke logging to compare the post-editing of AI-generated EL with human translations.

Furthermore, studies will be conducted investigating the usability of EL texts in workplace scenarios involving participants with cognitive impairments. Adopting a mixed methods approach, data collection includes technologies such as eye-tracking and augmented reality applications, alongside interviews, comprehension tasks, and questionnaires. The studies address readability, comprehensibility, usability, and user

experience, as well as the acceptability of AI-generated compared to postedited EL texts.

Results are pending, as the internships are still ongoing, and some are yet to be planned and organized.

References

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