

## Psycholinguistic Aspects of Task-Based Teaching (PLAPZA)

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**Project timeframe:** January 2025. – December 2026.

### **Project goal:**

The main goal of the project is to gain new insights into the effects of gradual task complexity on speaking/writing performance in a foreign language. The goals include the following: 1) establishing generally accepted standard procedures for researching the impact of task complexity on the development of speaking and writing performance, and thus enabling the comparison of results from different studies. Although it is difficult to dispute the impact of gradual task complexity on speaking/writing performance in a foreign language, previous studies of the impact of tasks of varying degrees of complexity on syntactic and lexical complexity, fluency and accuracy have resulted in different and mutually contradictory conclusions. The conflicting results are primarily explained by the fact that previous research used different cognitive and performative factors, different types of tasks and methodological procedures, inconsistent manipulation of selected factors, an extremely large number of different measurement variables, inhomogeneity of respondents in terms of language proficiency, too small samples, failure to conduct an independent assessment of the level of complexity of individual tasks, etc.; 2) examining the superiority of Robinson's (2015) model of task complexity. Two of the most important theoretical frameworks attempt to explain the impact of increasing the complexity of pedagogical tasks on different levels of spoken/written performance – Skehan's prioritization hypothesis and Robinson's cognitive hypothesis. Robinson's basic assumption is that there are limitations in the capacity of working memory, while such limitations do not exist in the capacity of attention. Moreover, attentional capacities can be expanded in order for the language user to meet the demands imposed by the complexity of a particular task. This model, regardless of existing criticisms, is the most elaborate model of gradual task complexity in the field of applied linguistics and is based on the theory of foreign language acquisition and is applicable for pedagogical purposes. Robinson's cognitive hypothesis assumes that a more complex task will result in greater syntactic complexity and grammatical accuracy because the student's attention will be primarily directed towards the functional needs of the task; 3) designing tasks of varying degrees of complexity based on cognitive and performative factors. The main difference between these factors is that manipulation of cognitive factors (+/- cognitive effort, +/- number of elements, etc.) contributes to changes in the interlanguage, while manipulation of performative factors encourages the automation of language structures and a greater degree of control over the interlanguage (Rahimi 2019; Golvarpar and Rashidi 2021; Xu et al. 2023). This thematic area has been neglected in domestic empirical research, although it is, ultimately, of exceptional importance for the design of glottodidactic guidelines in foreign language teaching; 4) examining the manipulation of performative factors (+/- planning, +/- task repetition, etc.) in reading and speaking tasks on various fluency variables (speech speed and articulation, frequency of memorizations, average syllable duration, ratio of phonation time to total speech time, average utterance length) and perceived fluency; 5) examining the perceived complexity of tasks based on retrospective questionnaires and independent assessments of the level of complexity of individual tasks; 6) examining process load based on eye-tracking (Conklin and Pellicer-Sanchez, 2016) and dual task methodology; 7) examining the

impact of task complexity on syntactic complexity, lexical variety and accuracy in writing tasks. This project is aligned with the Faculty's Strategic Research Program 2021-2025 - Strategic Goal 5.2.1. Increase research in the field of humanities and social sciences, promoting and encouraging interdisciplinarity and transdisciplinarity (outcome: Increased number of publications in relevant databases for humanities and social sciences).

### **Members of the project team**

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