

The main objective of the project is to investigate the synchronicity of the emotional, behavioral, and cognitive dimensions of engagement among learners and between learners and teachers, over various time frames, in language courses conducted both online and in person in two cultural contexts. The aim is to assess to what extent engagement is contagious. The project will be carried out by two research teams, from Austria and from Poland, in a joint effort to explore the phenomenon of engagement and fill several core gaps in the field's knowledge.

Learner engagement, referred to as the 'holy grail of learning,' has gained recognition in educational psychology and applied linguistics due to its correlation with numerous positive outcomes, such as improved academic performance, increased motivation, and well-being. Despite the extensive focus on learner engagement, there is practically no information on teacher engagement. This is a glaring oversight, considering the contagious nature of engagement, as is known from general education research. Therefore, the unique contribution of this project lies in its comprehensive approach to understanding the dynamic nature of learner and teacher engagement, and the interdependence between them.

The innovative character of the project also comes from the diversity of contexts it addresses. First, we intend to explore the contagion of engagement in both online and in-person teaching, which is crucial given the challenges posed by the growing influence of communication technology on learners' attention spans. Research in this area is justified as online teaching, especially at the higher education level and in the private sector, still has numerous proponents, despite many educational systems moving away from online teaching at the primary and secondary levels.

Another distinguishing feature of the project is the examination of engagement trajectories and contagion over different time frames: within individual lessons and throughout a semester. Furthermore, the project situates the study in two educational settings, recognizing that engagement has often been assumed to have a universal character, without cross-cultural research, which is surprising given the expectations of cultural sensitivity. To fill this gap, we will compare Austrian and Polish contexts. Moreover, the project's aim includes the development and validation of questionnaires for language teachers and learners, which will be used in an international study of engagement contagion.

The complex and ambitious goals of the project require the use of innovative methodologies. Therefore, to assess engagement dynamics during individual lessons, we will conduct idiodynamic measurements using sensors that measure skin conductance. Feedback from these sensors, combined with video recordings of the lessons, will be used in interviews to explain participants' behaviors and feelings. These results will also help establish the synchronicity of engagement patterns among learners and between learners and the teacher. The dynamics of engagement during a semester will be assessed using the experience sampling method, which involves using an online application to collect real-time information about learners' and teachers' behaviors, thoughts, feelings, and contextual characteristics. The results will be supplemented with data collected through individual and group interviews, observations, and written journals from learners and oral journals from teachers. The research findings will then be used to develop two questionnaires aimed at estimating and quantifying engagement of teachers and learners. To study engagement contagion, we will perform statistical analyses to determine synchronicity between separate samples. Additionally, we will examine the influence of several teacher-related and learner-characteristic variables on engagement contagion.

The Austrian team will be led by Univ.-Prof. Dr. Sarah Mercer, a distinguished figure in applied linguistics and a leading authority in the psychology of language learning and teaching. With her vast commitment to pioneering research and her impressive career, Prof. Mercer brings invaluable knowledge and a visionary approach to the project. Combining the expertise and experience of the research teams with innovative methodologies will enable us to uncover internal and environmental factors that influence engagement and its contagion, providing crucial insights that can impact current and future language teaching.