## Improving Novice Learners' L2 Pronunciation in Online and Face-to-Face Learning Environments

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## **ABSTRACT**

Communication in the target language is the main goal in many second language classrooms. Even though there is considerable evidence that pronunciation plays a crucial role in effective communication (Celce-Murcia et al., 2010), pronunciation training is frequently neglected in the foreign language classroom for reasons such as lack of classroom time or lack of instructor preparedness to teach pronunciation (Derwing, 2013; Grim & Sturm, 2016; Foote et al., 2011). The present dissertation addresses this discrepancy by investigating the effectiveness of a homework-based method of pronunciation instruction for beginner learners that does not require teacher feedback or in-class time and thus allows for pronunciation training to be included in any second language (L2) curriculum. Through this method, called *innovative Cued Pronunciation Readings* (iCPRs; Martin, 2015, 2017, see also Tanner & Landon, 2009), students receive pronunciation training in the form of Microsoft PowerPoint units that every learner can access from a home or library computer. Thus, this type of pronunciation training can be assigned as homework and students work on it alone. This allows for an implementation of pronunciation training in the curriculum without taking up valuable in-class time or requiring special skills from the instructor.

Since pronunciation training via iCPRs can be delivered online, the method lends itself not only to use in face-to-face but also in distance (i.e. online) learning environments. The emergence of online and hybrid courses over the past two decades has presented new challenges as well as opportunities for language instruction. In particular, the development of learners' oral proficiency in an online learning environment has shown to be problematic (Deutschmann et al., 2009). In light of these developments, it is important to consider language instruction not only in traditional face-to-face environments but also in distance learning environments.

The present dissertation assessed the effectiveness of the iCPR method in on-campus and online learning environments by measuring novice German learners' improvement in perception and production skills over the course of one semester. Data collection was conducted with 90 first-semester learners of German. In the face-to-face environment, each of the six sections of first semester German classes was pseudo-randomly assigned the status of treatment, comparison, or control group. Students in the treatment group received ten weeks of pronunciation training delivered through homework-based iCPR units, whereas students in the comparison group received ten weeks of ten minutes in-class pronunciation training delivered by their instructors. Finally, students in the control group followed the same standardized first-semester German lesson plans as the other two groups, but did not receive targeted pronunciation training. Since there is no in-class instruction in the online learning environment, there was no comparison group in this condition. Instead, four sections of online first-semester German classes were divided into two sections that served as a treatment group (i.e., a group that received instruction through iCPR units) and two sections that served as a control group.

The study employed a pretest / posttest design: participants' pronunciation was recorded in the 2<sup>nd</sup> and 14<sup>th</sup> week of the semester. The assessment included a binary-choice perception task and participants' oral productions at the word and sentence level. Following standard procedure in pronunciation training research, these speech productions were rated by native German speakers for ease of comprehensibility and strength of accent. The ratings from each group were compared in order to assess the effectiveness of the different types of pronunciation training.

For the face-to-face learning environment, results show that the learners in the treatment group, who received homework-based iCPR pronunciation training, significantly outperformed learners in the control group on measures of phonological perception skills, comprehensibility in productions of individual words, and accentedness in productions of individual words. Moreover, results reveal no significant difference between the learners who received homework-based pronunciation training and learners who received in-class pronunciation training. Together, these results suggest that learners benefit from iCPR pronunciation training and that homework-based pronunciation training is as effective in improving learners' German perception and production skills as in-class pronunciation training.

For the online learning environment, results show that the learners in the treatment group, who received iCPR pronunciation training as part of their online curriculum, significantly outperformed learners in the control group on all measures, that is, in phonological perception skills, in ease of comprehensibility in productions on the word- and paragraph-level, and in a diminished accent in productions on the word-and paragraph-level. These findings suggest that learners in an online environment benefit from iCPR pronunciation training.

Taken together, this dissertation shows that effective pronunciation training can be provided outside the classroom via iCPRs, which saves valuable in-class time and opens up possibilities for learners to receive pronunciation instruction even in distance learning environment or if their instructor lacks the preparation to teach this topic. As such, this dissertation suggests a method of pronunciation instruction that addresses the problems that all too often lead to the neglect of pronunciation training in traditional classrooms and in online learning environments.