

ACADEMIC PODCASTING FOR PROSODY EDUCATION

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Abstract

This study addresses the challenge of teaching theoretical prosody concepts (i.e., studies about stress, rhythm, intonation, voice quality, and other suprasegmental aspects of human pattern of pronunciation) in undergraduate courses. Our main aim was to develop a didactic approach to promote active and reflective learning about prosody and its suprasegmental characteristics. We hypothesize that creating an academic podcast can serve as an effective scholarly research tool for community development and fostering an inclusive educational environment in phonetics and phonology. For Methodology, a set of didactic activities was designed to guide students in recording podcast episodes. The theoretical framework employed was the Collaborative Online International Learning (COIL) methodological approach. A total of 58 undergraduate students from Phonetics and Phonology courses at the State University of Paraíba (UEPB) and São Paulo State University (UNESP) were grouped. Nine student groups performed seven weeks of academic exchange activities. They collaboratively addressed topics on the phonetic-phonological characteristics of Brazilian Portuguese regional varieties (Paraíba and São Paulo inland) and their potential effects on foreign language production/perception. Insights were summarized into a script, and two students from each cross-university group recorded an episode, which was subsequently edited and published. Acoustic processing was based on the podcast samples produced by the students from both Paraíba and São Paulo. It involved forced-alignment via Munich Automatic Segmentation (MAUS), manual correction, re-alignment into prosodic-level units, and automatic feature extraction using a Praat script. Statistical analysis was carried out through Mann-Whitney U test to compare the independent effect of each dialectical group on the prosodic-acoustic features. Results revealed that features of speech, such as pause duration, f0 centrality, variability and dynamics, as well as long-term spectral intensity showed significant differences between these dialects. This academic podcasting experience enabled us to teach the relevance of studying prosody, and this was positively evaluated by the participating students. The project also enabled students to identify with their own linguistic diversity, including regional accents expressed through prosodic features, by hearing their own and others' voices. The findings support that the academic podcast project can be successfully implemented as a scholarly research tool.

Keywords: Prosody. Academic podcasting. Acoustic phonetics. Brazilian regional dialects. Virtual exchange.