

EVALUATING INTONATION TEACHING

Evaluating the Effectiveness of Teaching Intonation to Learners in an Intensive English Program

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Abstract

This study is investigating the effectiveness of using a computer program to help English as a second language (ESL) learners improve their ability to use English intonation in communication. Two groups of ESL learners participated in the study: one treatment group ($n = 16$), and one comparison group ($n = 14$). All the ESL learners were Brazilian Portuguese speakers who were studying in an intensive English program in the US. The treatment ESL group received four-week perception training of English intonation. A pretest/posttest quasi-experimental design was used to investigate the change of the ESL learners' intonation production. It is expected that a significant group difference of intonation production after perception training will be found. The study will also compare the acoustic features of the ESL learners' intonation production to eight native speakers' production. It is hypothesized that after training the treatment group will produce more native-like intonation patterns, namely the total number of prominence, allocation of prominence, total number of rising/falling/level tones, and the overall pitch range. The study aims to provide support that ESL learners can develop intonation production through explicit perception training; it will also provide implications for English teachers to better understand and teach suprasegmental features of English.

Keywords: intonation, perception training, teaching pronunciation, acoustic features, communicative functions

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Background

Recent research suggests that intonation and other suprasegmental features of pronunciation may have significant effects on oral proficiency and comprehensibility (e.g., Derwing & Munro, 1997, 1998; Kang, 2010, 2013). However, studies on the effectiveness of teaching suprasegmentals have not reached consensus on how intonation teaching can be effectively taught (e.g., Anderson-Hsieh, 1992; Hardison, 2005; Levis & Pickering, 2004; Taniguchi & Abberton, 1999). In addition, most of these studies have relied on listeners' judgment rather than objectively-measured acoustic intonational analysis.

Teaching English suprasegmentals, such as intonation, is important for communicative purpose. In reality, teachers often do not have enough systematic direction to teach intonation (Celce-Murcia, Brinton, Goodwin & Griner, 2010). Some teachers, mistakenly, do not realize the necessity or value of teaching suprasegmentals. As a result, many advanced ESL learners may still have major difficulties in using intonation appropriately. Very often the learners do not recognize the importance of intonation.

To address these problems, this study aims to answer the following research questions.

Research Questions

1. Is there a difference in intonation production (i.e., prominence and tone) between a group that gets explicit perception training and a group that does not?
2. Is there a difference in using intonation to achieve communicative functions between a group that gets explicit perception training and a group that does not?
3. Are there differences in acoustic patterns of intonation between a group that gets explicit perception training and a group that does not?

4. After receiving perception training, do the learners produce the acoustic patterns of intonation in a more native-like way?

Methods

The participants in the study included (a) 14 Brazilian students from Levels 4, 5, and 6 in the PIE as the comparison group, and (b) 16 Brazilian students enrolled in a special program in the PIE as the treatment group. All the participants signed the informed consent form. In the PIE lab, the treatment group received four-week perception training of the acoustic patterns and the communicative functions of English intonation. The training mainly used Praat to visualize the intonation features and patterns. The comparison group did not receive such training. Both groups took an audio-recorded pretest and an audio-recorded posttest of intonation production, five weeks apart. All the recordings will be scored and acoustically coded followed by data analyses to answer the research questions.

Results

Up to the present moment, the researcher is collecting the posttest recordings of the comparison group, and will start test scoring and acoustic coding soon. Results are expected early August, 2014.

Relevance to PIE and Second Language Learning

This study has great pedagogical implications to the individual PIE students and the entire field of English pronunciation instruction. PIE students will develop their capability to effectively use intonation in communicative; they will also increase their awareness of utilizing intonation and other suprasegmental features in communication. Learners' confidence to communicate is going to develop too, and such changes will have long-term benefits for learners' overall oral proficiency development.

For the field of second language learning, two benefits are anticipated. First, this study is expected to confirm the effectiveness of perception instruction of intonation. Being trained through listening practice only, ESL learners should develop their systematic abilities to produce intonation patterns appropriately for the communicative purpose. In other words, if there is limited time in the curriculum to teach intonation, ESL teachers could focus on intonation perception training only, and students will still improve their ability of using intonation in conversation. Second, detailed examination on the acoustic features of intonation should help teachers and researchers better understand to what extent the explicit intonation instruction affects learners' outcomes.

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