Targeting the acquisition of L2 production categories with explicit articulatory instruction

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New adult learners of a second language often have difficulty constructing a representation of articulatory targets for novel phonemes, particularly when their acoustic representations of the target categories are not well-developed. One intervention for early learners that may be beneficial is instruction, which explicitly teaches the vocal tract configurations for novel target sounds. However, explicit instruction on articulatory targets is not always a component of classroom second-language instruction (Lord, 2005; Saito, 2012; Saito & Lyster, 2012). There is some research that learners may benefit from learning about articulatory features while acquiring perceptual targets (e.g. Catford & Pisoni, 1970), suggesting that this type of metalinguistic knowledge may play a role in developing fledgling categorical representations more generally. However, the generalizability of this type of training for production targets is not well-established, and merits further research. This study investigates the efficacy of a training paradigm, which gives learners explicit information about place of articulation, manner of articulation, and voicing as a means to teach novel sounds. Of primary interest was whether learners would learn more about target categories from this training than from perceptual training alone, and whether improved articulation would be maintained after training cues were no longer present. Native English speakers learning Hindi coronal stop consonants (including a four-way voicing contrast, and a dental/retroflex place of articulation contrast) received explicit visual cues and detailed descriptions of articulation targets, in addition to perceptual training. Participants' production of both place and voicing targets showed improvement with articulatory training, but only some voicing cues were maintained once cues were no longer present. To contextualize these results, I discuss benefits and drawbacks of the particular training methodology employed in this study, and also consider accounts for the individual differences observed across participants' performance.

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