Studies of phonological acquisition overwhelmingly use phonetic transcription to determine when children acquire sounds, and what types of errors they make when they produce sounds incorrectly. As argued by Kent (1994), Ladd (2011) and Munson, Edwards, Schellinger, Beckman, and Meyer (2010), phonetic transcription is ill-equipped to capture the full range of phonetic detail that is present in any utterance, and is particularly ill-suited to capture the unique characteristics of children's productions. This talk will present the results from a 7+ years of research in our laboratory developing and testing continuous measures of production accuracy in children.

The first part of the talk will discuss the psychometric properties of different rating scales. Here, I will present the results of studies showing that ratings using visual analog scales (VAS) are capture continuous variation within categories for a variety of later-acquired sound contrasts. The second part of the talk will discuss studies showing the extent to which these measures are robust to different manipulations of task difficulty, and how they differ as a function of listener experience. The final part of the talk will examine the extent to which VAS measures of accuracy and a traditional measure of phoneme-production accuracy correlate with other measures of linguistic ability, using productions taken from a large-scale study of phonological and lexical development in children.