Purpose: The present study addresses reliability, practicality, and validity issues that prevail in the use of an MLU index of language development. In MLU measures, fundamental problems arise from the mismatch between utterances and assumptions of grammatical units. Utterances as universal breath-delimited units of speech and vocalization antecede the rise of syntax and can follow the growth of breathing structures. Thus, even though MLU indexes aspects of morpho-syntactic and lexical development implying additions of elements, this development may conform to changes in breathing capacities up to adulthood.

Method: Sample monologues and measures of vital capacity (VC) were obtained from 50 speakers representing five age groups (5 to 27 yrs). Measures of MLU and lexical-diversity were performed. Since MLU in morphemes correlates with syllable counts ($MLU_S$) at $r \geq .90$, the latter is used as a universally applicable index, with gains in reliability and practicality over morpheme counts.

Results: $MLU_S$ correlates strongly with age-related changes in VC, and with lexical diversity mainly because increasing $MLU_S$ affords a greater use of long multisyllabic expressions.

Conclusions: Much as normative evaluation of the rise of babble refers to growth of vocal structures, universal norms of MLU may be devised and referenced to the growth of breathing structures.

Key words: utterance length, MLU, speech, spoken language, breathing capacities, prosody, language universals, developmental norms, lexical diversity, speech production, child language