Several metrics that reflect the variability of vocalic and consonantal intervals in speech have been shown to successfully discriminate between the rhythm of first and second language (L2) speakers producing short sentences of a given language. Here we elicited running read speech from native speakers of English, German and Italian speaking English. We hypothesized that the scores of German L2 speakers would be closer to the scores of native English speakers, since both English and German are stress-timed, and that the scores of Italian L2 speakers would exhibit greater differences from native English scores, since Italian is stress-timed. Our results show instead that the scores of some German speakers are less close to those of the native English speakers than the scores of some Italian speakers, a difference that cannot be attributed to fluency, proficiency level, or length of exposure to English. It is possible that these results reflect over-compensation of some sort by some L2 speakers, though a more likely explanation is that the popular metrics used to quantify speech rhythm may be unreliable or at least not sufficiently robust to be used with L2 data. Reasons why this may be so for L2 speech in particular are discussed.