

Iowa-Nebraska Articulation Norms - 1996

TABLE 7. Recommended ages of acquisition for phonemes and clusters, based generally on 90% levels of acquisition.

Phoneme	Recommended age of acquisition (years:month/s)		Source
	Females	Males	
/m/	3:0	3:0	Table 4
/n/	3:6	3:0	Table 4
/ŋ/	7:0-9:0	7:0-9:0	Figure 4 ^a
/ŋ-/	3:0	3:0	Table 4
/w-/	3:0	3:0	Table 4
/j-/	4:0	5:0	Figure 6
/p/	3:0	3:0	Table 4
/b/	3:0	3:0	Table 4
/t/	4:0	3:6	Table 4
/d/	3:0	3:6	Table 4
/k/	3:6	3:6	Table 4
/g/	3:6	4:0	Table 4
/t/ /t-/	3:6	3:6	Figure 5
/t-/	5:6	5:6	Figure 7
/v/	5:6	5:6	Figure 8
/θ/	6:0	8:0	Figure 9
/ð-/	4:6	7:0	Figure 11
/s/	7:0-9:0	7:0-9:0	Figure 10 ^b
/z/	7:0-9:0	7:0-9:0	Figure 12 ^b
/ʃ/	6:0	7:0	Figure 14
/tʃ/	6:0	7:0	Figure 13
/dʒ/	6:0	7:0	Figure 15
/l/ /l-/	5:0	6:0	Figure 16
/l-/	6:0	7:0	Figure 18
/r/ /r-/	8:0	8:0	Figure 17
/r-/	8:0	8:0	Figure 19
Word-initial clusters			
/tw kw/	4:0	5:6	Figure 20
/sp st sk/	7:0-9:0	7:0-9:0	Figure 21 ^b
/sm sn/	7:0-9:0	7:0-9:0	Figure 22 ^b
/sw/	7:0-9:0	7:0-9:0	Figure 23 ^b
/sl/	7:0-9:0	7:0-9:0	Figure 24 ^b
/pl bl kl gl fl/	5:6	6:0	Figure 26
/pr br tr dr kr gr fr/	8:0	8:0	Figure 25
/θr/	9:0	9:0	Figure 27
/skw/	7:0-9:0	7:0-9:0	Figure 28 ^b
/spl/	7:0-9:0	7:0-9:0	Figure 29 ^b
/spr str skr/	7:0-9:0	7:0-9:0	Figure 30 ^b

Note: These recommended ages are for phonetic acquisition only: If a child's error on phoneme or cluster is reflected in a phonological process affecting other, similar sounds, that process should be treated at an age appropriate for that process. Sources of supporting information are indicated in the last column.

^aDiscussion in text.

^bAssess/remediate nondevelopmental errors before age 7:0; discussion in text.

Source: Smit, A. et al., "The Iowa Articulation Norms Project and Its Nebraska Replication" *Journal of Speech and Hearing Disorders* (1996) 55, p. 795. © American Speech-Language-Hearing Association. Reprinted by permission.