When are speech sounds mastered?

Parents sometimes ask for information regarding when speech sounds are mastered by children. Speech develops along a continuum just as motor skills do. Sounds that are physiologically easier to produce are mastered earlier. Sounds that are more difficult to produce are mastered later. While children are reaching mastery of the difficult sounds, they use the sound substitutions that most listeners recognize. These typical substitution patterns do not generally interfere with speech intelligibility. Below are some typical substitution patterns.

Adult Sound	Child's Substitution	Example
S	TH	thun/sun
L	W	wook/look
R	W	wun/run
TH	D	dis/this

Age at Which 90% of Children Master Various Speech Sounds

(From: Smit, et. Al, 1990)

Speech Sounds	Males	Females
P, M, H, W, B	3 years	3 years
N	3 years	3 1/2 years
K	3 1/2 years	3 1/2 years
G	4 years	3 1/2 years
D	3 1/2 years	3 years
Т	3 1/2 years	4 years
F	3 1/2 years	3 1/2 years
Y	5 years	4 years
R	8 years	8 years
L	6 years	5 years
S	8-9 years	8-9 years
CH	7 years	6 years
SH	7 years	6 years
Z	8-9 years	8-9 years
J	7 years	6 years
V	5 1/2 years	5 1/2 years
TH unvoiced (thumb)	8 years	6 years
TH voiced (that)	7 years	4 1/2 years
ING	7-9 years	7-9 years
Sound Blends		
Tw. kw	5 1/2 years	4 years
Sp, st, sk, sm, sn, sw, sl	7 years	7 years
Pl, bl, kl, gl, fl	6 years	5 1/2 years
Pr, br, tr, dr, ke, gr, fr	8 years	8 years
Thr	9 years	9 years
Skw, spl	7 years	7 years
Spr, str, skr	9 years	9 years

Smit, Hand, Freilinger, Bernthal & Bird (1990). The Iowa Articulation Norms Project and It's Nebraska Replication. JSHD 55, 779-798.

Handout developed by Vivian Weber-Pagel of Stevens Point Schools specialed.madison.k12.wi.us