

# Programming Solutions for Speech Therapy

**Ben Lambright** 



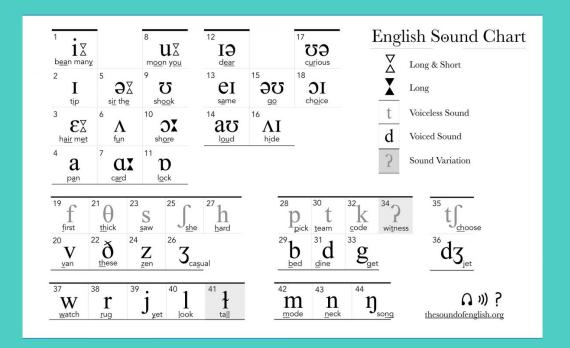


# Definitions and Research



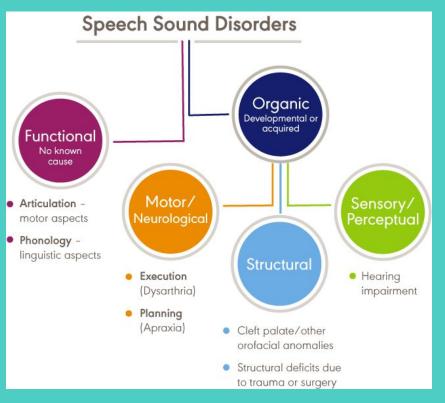
# Speech Sound Disorders

The inability to say a speech sound

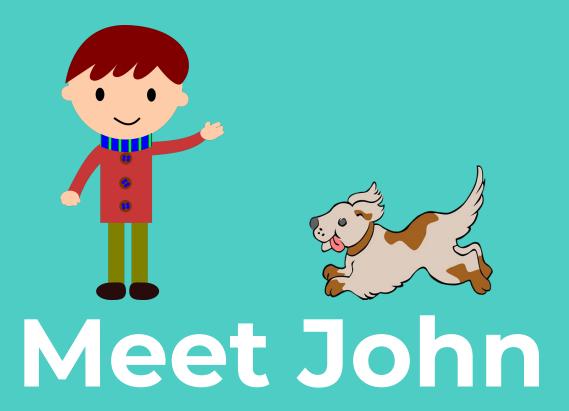


# Speech Sounds

The basic sounds that make up language



"phonological disorders focus on predictable rule-based errors [in pronunciation]"





# Helping John



2.

## My Prototype

#### Words similar to "dog"

#### Requirements:

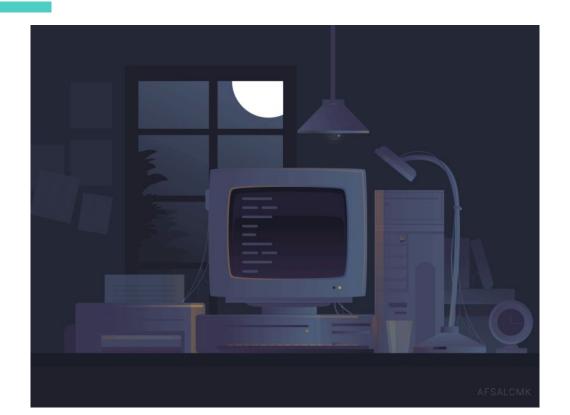
- Fit for the age group
- Have a sound like /d/

"doll," "dad", "sit", "tell", "Ben"





### **My Prototype**



#### A List of Appropriate Words: "Klist"

- 445 words
- Majority from the Dolch and Fry sight word lists
- The remaining are names and characters from children's ty shows

Printables @ atosteacherstuff.com	Primer Dolch Sight	Words		First Hundred	d Sight Words	(Fry)
all	into	that	can	her	many	see
am	like	there	come	here	me	she
are	must	they	day	him	much	SO
at	new	this	did	his	my	some

#### **Searching for the Right Sounds**

PVM Chart: English			PLACE								
No. of the Control of				LABIAL		CORONAL				DORSAL	
	M/	ANNER	VOICING	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Palatal	Velar	Glottal
OBSTRUENTS	Stop		Voiceless	p			t			k	?
			Voiced	b			d	37		g	
	Fricative		Voiceless		f	θ	S	S			h
			Voiced		v	ð	Z	3		6	
	Affricate		Voiceless					tſ			
			Voiced					d <sub>3</sub>		6.0	
SONORANTS	Nasal		Voiced	m			n			ŋ	
		Lateral	Voiced				1				
	LIQUID	Rhotic	Voiced				21	1			
	Glide		Voiced	w	20		e e	3	j	w	

#### **My Phonological Processes**

- Backing
- Fronting
- Gliding
- Stopping
- Vowelization
- Affrication

- Deaffrication
- Alveolarization
- Depalatalization
- Labialization
- Denasalization

#### Without Further Ado...



# 3.

## **Final Thoughts**

## 8-9%

Percentage of young children in the US with speech sound disorders

## 67.6%

Percentage of children with these disorders who have received treatment

### 48:1

Median caseload size of students per speech language pathologist 🛛 16

#### Acknowledgements

- Ardith Kirchberger, Amy Lister, and SNHH
- Stack overflow
- Tim Bilick
- Dan Lambright

#### Sources

(in the speaker notes)