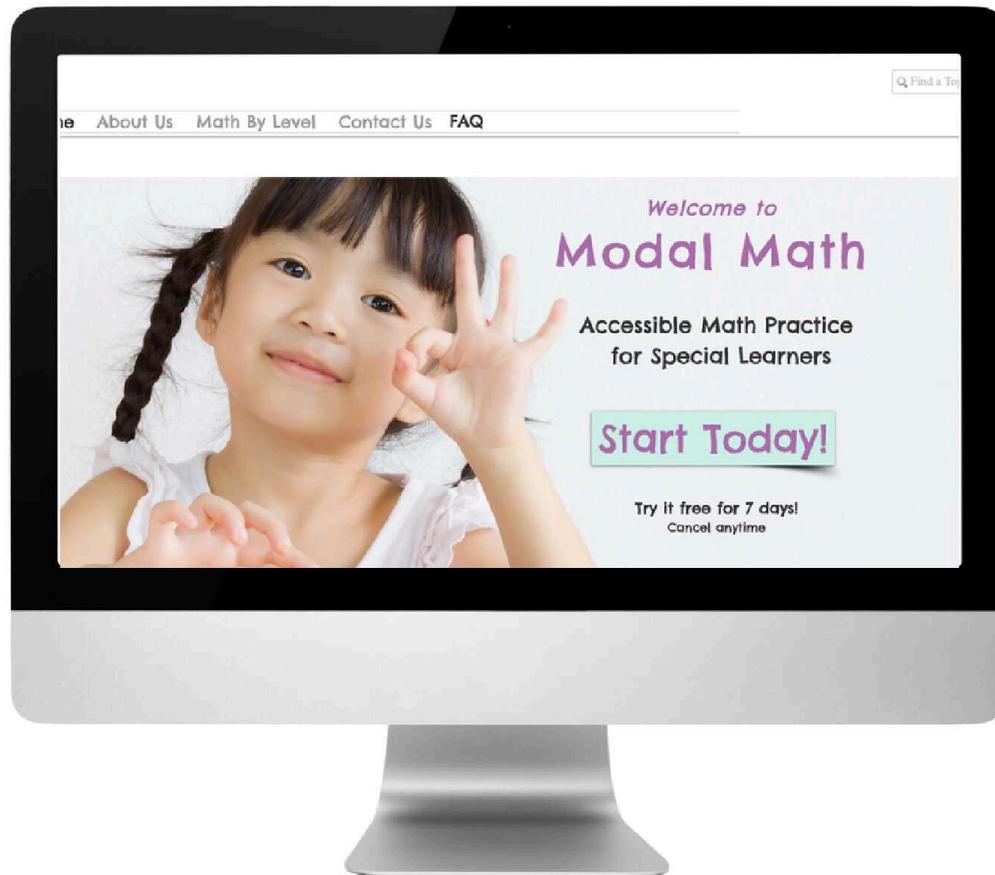


# Modal Math

Math practice in sign language



# The Problem

Deaf/HH high school graduates test, on average, at a 5th grade math level (Traxler, 2000).

**Teachers** struggle due to lack of resources.

**Parents** struggle to support their Deaf/HH children academically due to communication barriers. About 90% of Deaf/HH children are born to hearing parents, most of whom don't sign.

**Deaf/HH Individuals** face poorer employment outcomes compared to the general public.

# The Solution

**A website that provides math lessons and tests with American Sign Language, visuals, voice over and simplified text.**



## **Students**

learn and practice  
math skills  
anywhere,  
any time



## **Teachers**

pick and choose  
lessons from a menu  
of hundreds of topics  
and thousands of  
questions



## **Parents**

track progress  
as students work  
through math  
skills

# The Product

- Levels prekindergarten to fifth grade, common core aligned
- Hundreds of topics at each level
- Thousands of questions for assessment

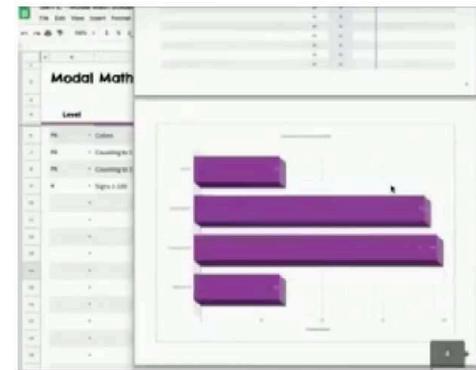
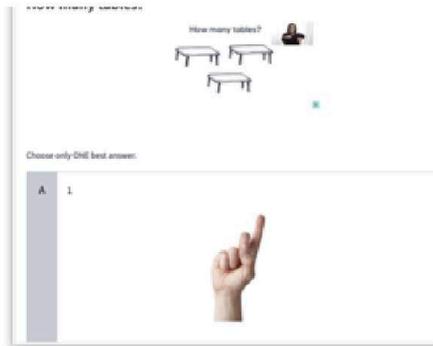
Watch the Videos



Take the Quiz



Track Progress



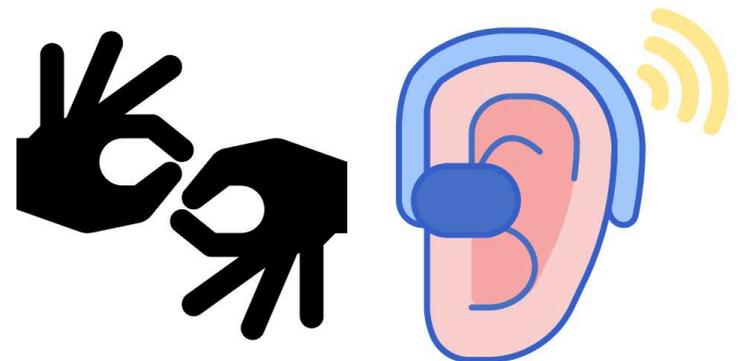
# Target Market

**Educational Programs for students who are Deaf/Hard of Hearing**

**Teachers of the Deaf and Hard of Hearing**

**Parents of Students who are Deaf/Hard of Hearing**

Estimated 37.4k-57.9 thousand students who are Deaf/HH enrolled in educational programs In the United States and Canada.



\*Projections are not guaranteed.

\*\*Detailed information In Appendix

# Market Validation

Over 40 paying subscribers in the first 6 months and over 120 email list subscribers, without any product advertising or formal marketing. 220 total accounts enrolled in 6 months (including students, teachers and parents).

## Retention Rate for Individual Monthly Subscribers

Subscriber retention by cohort ⓘ

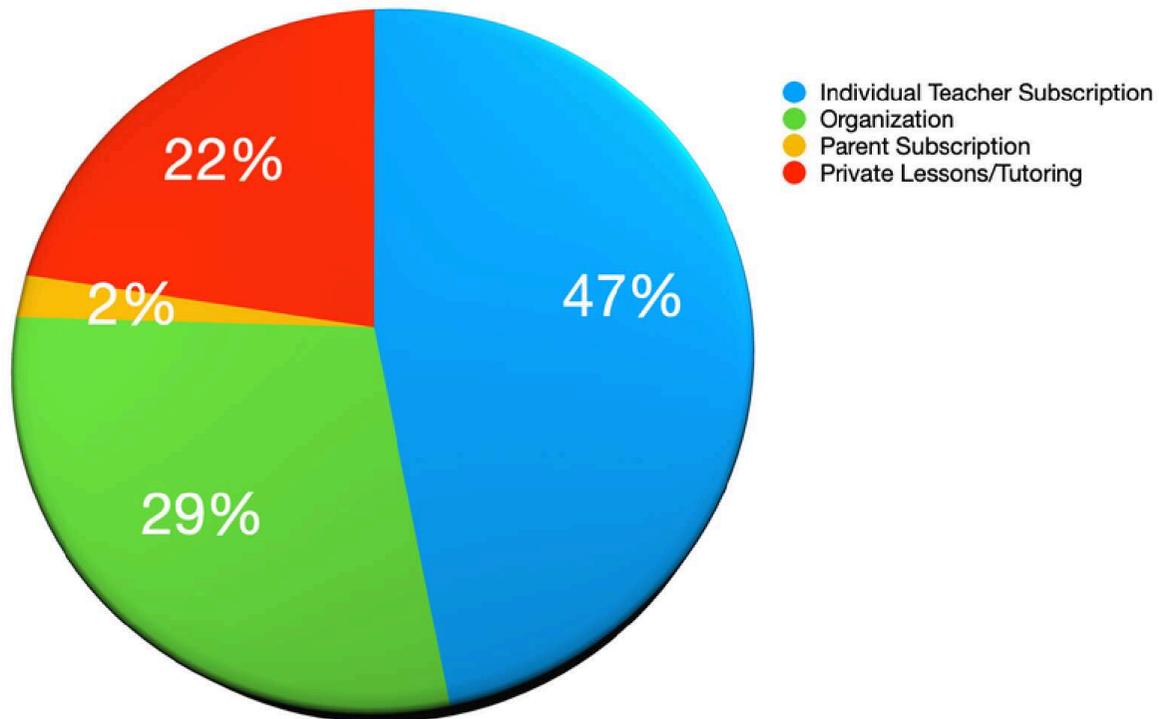
Subscribed	Start value	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6
All	26	88%	88%	81%	81%	77%	77%
Dec 2019 *	1	100%	100%	100%	100%	100%	100%
Jan 2020	5	100%	100%	100%	100%	80%	
Feb 2020 *	2	50%	50%	50%	50%		
Mar 2020	6	83%	83%	50%			
Apr 2020	4	100%	100%				
May 2020	8	88%					

Note: Data is from Stripe account and only includes monthly individual subscriptions (parents and teachers). Does not include organization subscriptions or individuals that purchased annual subscriptions.

\* Outliers due to small number of new subscribers

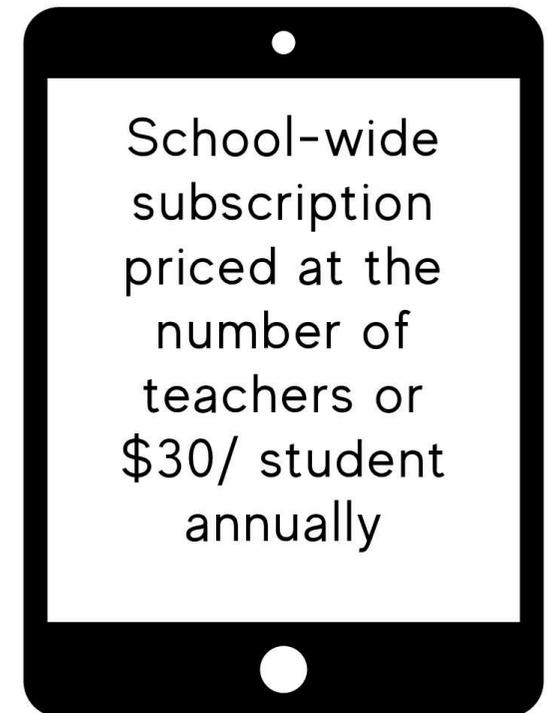
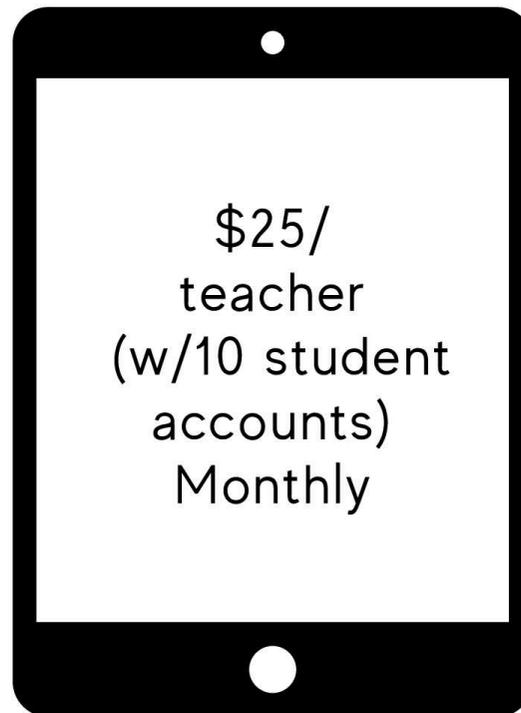
# Revenue Breakdown

% Revenue by Income Type



# Business Model

Monthly or Annual Subscription



# Market Adoption

## Partnerships



Nonprofit  
purchases memberships  
and donates them

## Schools

Programs for  
Deaf/HH students

Special Education  
Cooperatives

Districts with  
Teachers of the  
Deaf

## Networks

Teacher training  
programs

Parent  
Networks

# Competitive Landscape

					
<b>American Sign Language</b>					
<b>Adapted Language for Struggling Readers</b>					
<b>Curriculum Alignment</b>					
<b>Made for students with Hearing Loss</b>					
<b>Cross Categorical Learning</b>					

# Value Proposition

## First to Market

First comprehensive mathematics curricular tool of its kind created just for Deaf/HH kids

## Ease of Use

Web-based - ideal for distance learning  
1-1 technology - compatible with iPads, iPhones, Chrome books, etc.  
Students automatically go to next lesson

## Cross Categorical

Focus on building language and vocabulary through simultaneous communication, and conceptual understanding so students can apply their math skills to real-world situations

## Language Integration

Closed Captioning  
American Sign Language

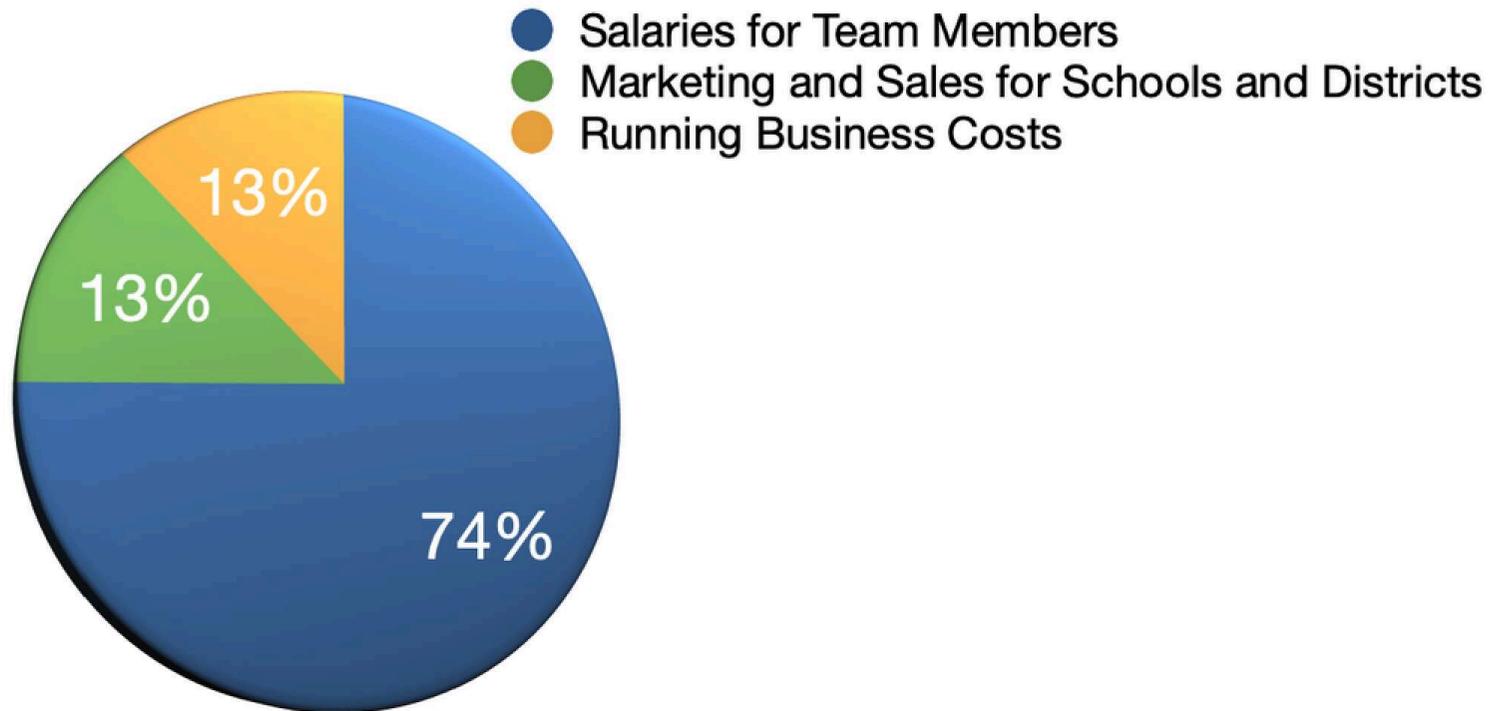
## Curriculum Alignment

Aligned with Common Core Curriculum Sequence of Learning  
Follows K-12 NY common core state standards

## Data Tracking

Teachers and parents can track progress to inform instruction  
This allows for differentiation in the classroom and serves to supplement in the form of additional practice or homework

# Projected Budget Allocation





# Founder



**Nadia Iftexhar**

**Founder, CEO, ASLedu, LLC**

**Certified Teacher of the Deaf K - 21**

**B.S. Speech and Hearing Sciences**

University of Illinois, Urbana Champaign

**M.Ed. in Deaf and Hard of Hearing Education**

**M.A. in Elementary Inclusive Education**

Teachers College,

Columbia University in the City of New York

# Appendix: Detailed Market Map

1 <sup>st</sup> Key Market: Districts/Schools/Programs for Students who are Deaf/HH in the U.S. and Canada			579 programs for Deaf/HH students in U.S. and Canada (April 2019, American Annals for the Deaf, Gallaudet Univ.)				
Market Size	# of students	Cost Calculation over year and 18 months	Market Share Prediction/ 1 year, 2 years and 3 year				
<b>Largest Market Estimate</b>	<b>57,900 DHH Students</b> (Avg of 100 students/program)	x 2.50/month x 12 months = <b>\$30/Year per student</b>  x2.50/month x 24 months = <b>\$60/ 2 years per student</b>  X2.50/month x 36 months = <b>\$90/ 3 years per student</b>	Market Share	# students	X \$30 / year	X \$60 (2 years)	X \$90 (3 years)
			100%	57,900	\$1,737,000	\$3,474,000	\$5,211,000
			80%	46,320	\$1,389,600	\$2,779,200	\$4,168,800
			50%	28,950	\$868,500	\$1,737,000	\$2,605,500
<b>Medium Sized Market Estimate</b>	<b>46,320 DHH Students</b> (Avg of 80 students/program)	x 2.50/month x 12 months = <b>\$30/Year per student</b>  x2.50/month x 24 months = <b>\$60/ 2 years per student</b>  X2.50/month x 36 months = <b>\$90/ 3 years per student per student</b>	Market Share	# students	X \$30 / year	X\$60 (2 years)	X\$90 (3 years)
			100%	46,320	\$1,389,600	\$2,779,200	\$4,168,800
			80%	37,056	\$1,111,680	\$2,223,360	\$3,335,040
			50%	23,160	\$694,800	\$1,389,600	\$2,084,400
<b>Smallest Market Estimate</b>	<b>34,740 DHH Students</b> (Avg of 60 students/program)	x 2.50/month x 12 months = <b>\$30/Year per student</b>  x2.50/month x 24 months = <b>\$60/ 2 years per student</b>  X2.50/month x 36 months = <b>\$90/ 3 years per student per student</b>	Market Share	# students	X \$30 / year	X\$60 (2 years)	X\$90 (3 years)
			100%	34,740	\$1,042,200	\$2,084,400	\$3,126,600
			80%	27,792	\$833,760	\$1,667,520	\$2,501,280
			50%	17,370	\$521,100	\$1,042,200	\$1,563,300
			20%	6,948	\$208,440	\$416,880	\$625,320

\*This estimate assumes selling 12-month memberships to districts/schools/programs, does not include summer drop-offs that can be seen in individual teacher/parent sales

\*Projections are not guaranteed.

# Appendix: CDC Data on Hearing Loss

## Data and Statistics About Hearing Loss in Children

[EHDI Annual Data](#)

### In the United States

- Studies have shown a range of estimates for the number of children with hearing loss, some of which are summarized in the following table.

Prevalence Rate	Source and Year	Age Range	Type/Degree of Hearing Loss	Notes
14.9% of children	CDC's Third National Health and Nutrition Examination Survey (NHANES III), 1988 – 1994 <a href="#">[Read article ↗]</a>	6-19 years of age	Low- or high-frequency hearing loss of at least 16-decibel hearing level in one or both ears.	National population-based, cross-sectional survey with an in-person interview and audiometric testing at 0.5 to 8 kilohertz.
5 per 1,000 children	CDC's National Health Interview Survey, 1997-2005 <a href="#">[Read article ↗]</a>	3-17 years of age	N/A	Parent-reported hearing loss based on the question, "Which statement best describes the child's hearing without a hearing aid: good, a little trouble, a lot of trouble, or deaf?"
1.7 per 1,000 babies screened	CDC's Hearing Screening and Follow-up Survey, 2017 ( <a href="#">Data table</a> )	Babies	N/A	Includes only babies documented as being screened for hearing loss. Does not reflect cases of hearing loss that were identified but never reported to the state or territorial Early Hearing Detection and Intervention (EHDI) program.
1.4 per 1,000 children	CDC's Metropolitan Atlanta Developmental Disabilities Surveillance Program (MADDSP), 1991-2010 <a href="#">[Read article ↗]</a>	8 years of age	Bilateral hearing loss of 40 decibels or more	MADDSP identifies children with moderate to profound hearing loss by reviewing existing records at multiple health and education sources.