

DEBATE COMPASS

Voice AI That Argues Back

\$80M

debate-focused TAM

22.8:1

LTV : CAC ratio

193K

competitive debaters



START-UP BUSINESS PLAN

Loomis Chaffee

4 Batchelder Road, Windsor, CT 06095

Tanish Pillai & Ethan Liu

April 2026

Table of Contents

I. Overview	4
II. Problem	5
III. Customer Segments	6
IV. Unique Value Proposition	7
V. Solutions	8-9
VI. Channels	10
VII. Revenue Streams	11-12
VIII. Cost Structure	13
IX. Key Metrics	14
X. Competitive Advantage	15
XI. Conclusion	16
XII. Bibliography	17
XIII. Appendix	18-20

I. OVERVIEW

AI Debate Coach for the 91% Without One

96% demand communication;
41.6% say grads have it

Opponent

Voice AI that argues back

\$80M
TAM

\$55M
SAM

\$5.2M
SOM Y5

91% of schools have no debate;
coaching costs \$40-\$200/hr

Coach

\$9.99/mo unlimited practice

\$182
LTV/yr

\$8
CAC

22.8:1
LTV:CAC

Post-tournament feedback:
2-3 generic sentences

Judge

Rubric-scored RFD

67.8%
Margin Y1

\$250K
The Ask

10.4x
Return

Sources: NACE 2025 / NSDA 2024 / NCES / debate-compass-financial-model.xlsx

II. PROBLEM

193,000 Debaters. No Partner at Midnight.

THE SKILLS CRISIS

96%

demand communication

41.6%

say grads have it

54-pt

gap

NACE 2025

THE ACCESS GAP

91%

of schools: no debate

3,730

of ~40,500 schools

0

partners at midnight

NSDA 2024 / NCES

THE OUTCOMES PROOF

+52

SAT Math (N=35,788)

+70%

graduation likelihood

34%

AP Seminar YoY growth

Mezuk 2021 / College Board

The #1 skill. The most proven method. Almost no one has access.

III. CUSTOMER SEGMENTS

From 193K Debaters to an \$80M Market

US Competitive Debaters | 193,000 | Now

Mock Trial + AP Seminar | 177,000 | Y2-3

International English | 65,000+ |
Y2-3

All US Grades 6-12 | ~28M
| Y3-5

\$80M
TAM (debate-focused)

\$55M
SAM (English-speaking)

\$5.5M
SOM Y5 | 9.9% of SAM | 34,400 paying

4,710 coaches

Near-absolute tool adoption autonomy. 1 coach = 10-30 students.

Sources: NSDA 2024 / NCFL / NAUDL / AMTA / College Board / Excel TAM-SAM-SOM

IV. UNIQUE VALUE PROPOSITION

Four Gaps. No One Fills Them All.

*Voice-first AI for full debate rounds, rubric scoring, and cross-ex drill --
\$9.99/month instead of \$40-\$200/hour.*

1

Voice-First

Real-time across
LD, PF, Policy

2

Delivery + Content

Both coached in
one session

3

Cross-Ex Sim

AI that pushes
back on weak points

4

Rubric Scoring

Content / Style /
Strategy per NSDA

\$9.99/mo vs ~~\$40-\$200/hr~~

The cost of 6 minutes with a human coach.

V. SOLUTIONS

One Platform. Three Practice Modes.

OPPONENT

Voice AI argues back in real time. Cross-examines. Challenges weak warrants. LD, PF, Policy, oral defense.

Solves: Can't practice alone

JUDGE

RFD referencing your actual arguments. Content / Style / Strategy scoring per NSDA rubric.

Solves: Ballots don't teach

COACH

2-3 targeted drills per session. Tracks progress across sessions. Adapts to skill level.

Solves: \$200/hr isn't enough

Not a ChatGPT wrapper. Adversarial AI that argues AGAINST you.

V. SOLUTIONS (CONTINUED)

Built. Not Theoretical.



Working Prototype

LD simulation. Real-time speech timers.
AI feedback. Built at Loomis Chaffee
by two competitive debaters.

Engagement Engine

- Daily streaks (3.6x retention -- Duolingo S-1)
- Elo-style rating system
- Tournament prep countdowns
- Leaderboards: school vs school

VI. CHANNELS

One Coach Brings 30 Students.



Channel	Y1 Target	Budget
Coach-first	100 coaches	\$0
Tournaments	20 events	\$10K
Digital organic	TikTok, Reddit	\$5K
School pilots	5 schools	\$5K
Partnerships	NSDA, Tabroom	\$5K
Total		\$25K

4,710 coaches. 1 coach = 10-30 students.
Distribution moat.

VII. REVENUE STREAMS

\$182 LTV. \$8 CAC. Day One.

Free	\$0	3 debates/week
Standard	\$9.99/mo	\$79.99/yr
Pro	\$39.99/mo	\$199.99/yr
School	\$39.99/student	Institutional
Tournament	\$50	Seasonal add-on

67.8%
Gross Margin Y1

82.2%
Margin Y5

\$182/yr
Blended LTV

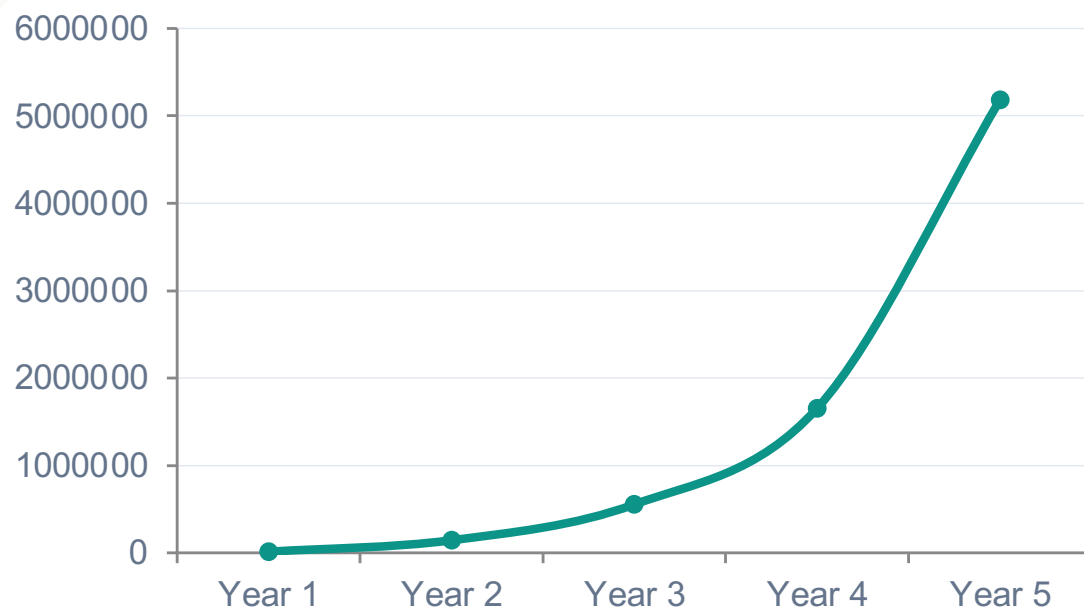
22.8:1
LTV:CAC

<1 month
CAC payback | \$8 CAC vs \$9.99+ first month

Source: debate-compass-financial-model.xlsx (Assumptions + P&L)

VII. REVENUE STREAMS (CONTINUED)

\$13K Year 1 to \$5.2M Year 5.



Growth Trajectory

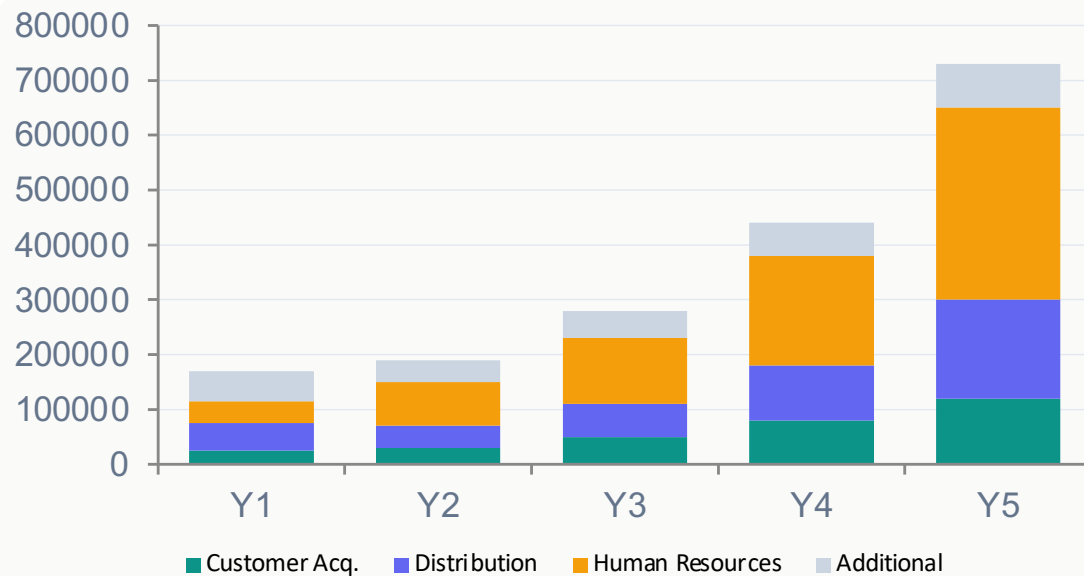
Y1	150 subs	\$13K
Y2	1,000	\$144K
Y3	4,020	\$554K
Y4	10,800	\$1.65M
Y5	44,000	\$5.2M

Profitable Year 3: +\$160K | Y5: \$3.5M operating income

Source: debate-compass-financial-model.xlsx (P&L). All projections.

VIII. COST STRUCTURE

\$170K Year 1. Profitable Year 3.



CAC: \$8

No paid ads. Coach + tournament organic.

Break-even: 140

subscribers to cover fixed costs

Path to Profitability

-\$161K (Y1) → +\$160K (Y3) →
+\$3.5M (Y5)

Source: debate-compass-financial-model.xlsx (P&L)

IX. KEY METRICS

Eight KPIs From Day One.

MRR

**\$5K by
M12**

Revenue trajectory

**Day 30
Retention**

>15%

EdTech avg: 2%

**Freemium
Conv.**

3-5%

Duolingo: 8.8%

CAC Payback

<1 month \$8 / \$9.99+

Sessions/week

3+/week

Habit formation

Coach Adoption

100 Y1

Distribution

School Pilots

15 by Y2

B2B expansion

Monthly Churn

<8%

Seasonal reality

Benchmarks: Duolingo S-1 / EdTech industry / Excel model

X. COMPETITIVE ADVANTAGE

Five Moats That Compound.

	DC	Symbai	PracticeDeb	Vocius	Yoodli
Voice-first	✓	✗	~	✗	✓
Multi-format	✓	~	✓	~	✗
Rubric scoring	✓	~	✗	~	✗
Cross-ex sim	✓	✗	✗	✗	✗

1. Four-gap positioning -- no competitor combines all four
2. Format-specific AI -- NSDA rubric, not generic chat
3. Data flywheel -- 100K sessions = predictive drills
4. COPPA compliance -- voiceprints = biometric; 6-12 mo
5. Coach networks -- 1 coach = 30 students; data locks in

Honest: Symbai has pedigree. PracticeDebate has voice. Yoodli has GV. We're pre-revenue.

XI. CONCLUSION

\$250,000 for 10%. A 10x Return.

\$250,000 for 10% equity

\$2.5M post-money valuation

12-Month Milestones

5,000 MAU

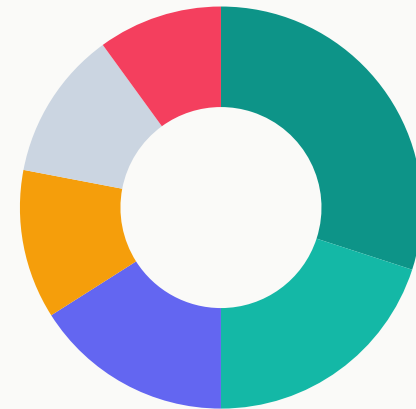
150 paid subs

5 school pilots

COPPA certified

$\$5.2\text{M Y5} \times 5x = \sim \$25.9\text{M} \rightarrow 10\% = \text{\textbf{\$2.6M}} = \textbf{10.4x}$
return

Non-dilutive: SBIR Phase I (\$250K) + LearnLaunch (\$50K+)



■ Product 30% ■ AI Infra 20% ■ Hiring 16%
■ Compliance 12% ■ Buffer 12% ■ GTM 10%

193,000 debaters need this tonight. We built it. Help us scale it.

XIII. BIBLIOGRAPHY

Bibliography

Academic Research

Mezuk & Ko (2021). Houston ISD, N=35,788. | Mezuk (2009). Chicago UDL, N=9,145.
Anderson & Mezuk (2012). N=12,179. | Schueler & Larned (2023). N=3,515.
Bloom (1984). Educational Researcher. | Kestin et al. (2025). Nature Scientific Reports.

Industry & Government

NACE Job Outlook 2025. | NSDA 2024. | NCES fall 2022. | College Board AP Seminar 2024-25.
NCFL. | NAUDL. | AMTA. | Aura Intelligence / HR Dive 2024. | FTC COPPA (Apr 2025).

Benchmarks

Duolingo S-1. | CB Insights. | Deepgram, OpenAI, Cartesia API pricing (2025-26).

XIII. APPENDIX

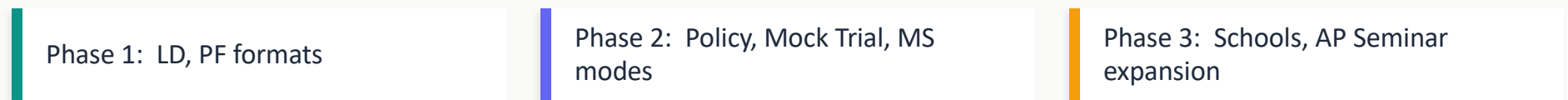
Product & Voice Architecture

Voice Pipeline



= **\$1.35/user-hour** | **\$0.45/session (20 min)**

Roadmap



Why Not ChatGPT?

	ChatGPT	Debate Compass
Style	Cooperative	Adversarial
Voice	Basic TTS	Real-time
Memory	None	Cumulative
Scoring	Generic	NSDA rubric
Timing	None	Format-faithful

XIII. APPENDIX

COPPA/FERPA Compliance Blueprint

	COPPA	FERPA
Applies to	Children under 13	Ed institutions
Key issue	Voiceprints = biometric	Student ed records
Our approach	Verifiable parental consent	School consent exception
Timeline	6 months to certify	6 months to certify
Budget	\$30K allocated	Included in \$30K

Competitive moat: COPPA compliance for voice AI with minors takes 6-12 months. FTC April 2025 classifies voiceprints as biometric identifiers.

XIII. APPENDIX

Financial Detail & Outcomes Research

	Y1	Y2	Y3	Y4	Y5
Revenue	\$12,596	\$143,761	\$553,967	\$1.65M	\$5.18M
COGS	\$4,050	\$26,450	\$114,456	\$284,544	\$920,640
Gross %	67.8%	81.6%	79.3%	82.8%	82.2%
OpEx	\$170K	\$190K	\$280K	\$440K	\$730K
Op. Income	-\$161K	-\$73K	+\$160K	+\$930K	+\$3.5M

Debate Outcomes (Peer-Reviewed)

Outcome	Effect	Source	N
SAT Math	+52.43	Mezuk & Ko 2021	35,788
SAT Reading	+57.05	Mezuk & Ko 2021	35,788
Graduation	70% more likely	Mezuk 2009	9,145
At-risk grad	72% vs 43%	Anderson 2012	12,179

Source: [debate-compass-financial-model.xlsx / back-of-env-math.md](#)