
AWS
re:Invent
NOV. 28 – DEC. 2, 2022 | LAS VEGAS, NV

WPS101

Pioneering the future of learning

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WWPS Director Sales Europe
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Sr. Global Account Manager
AWS

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Education is Changing…





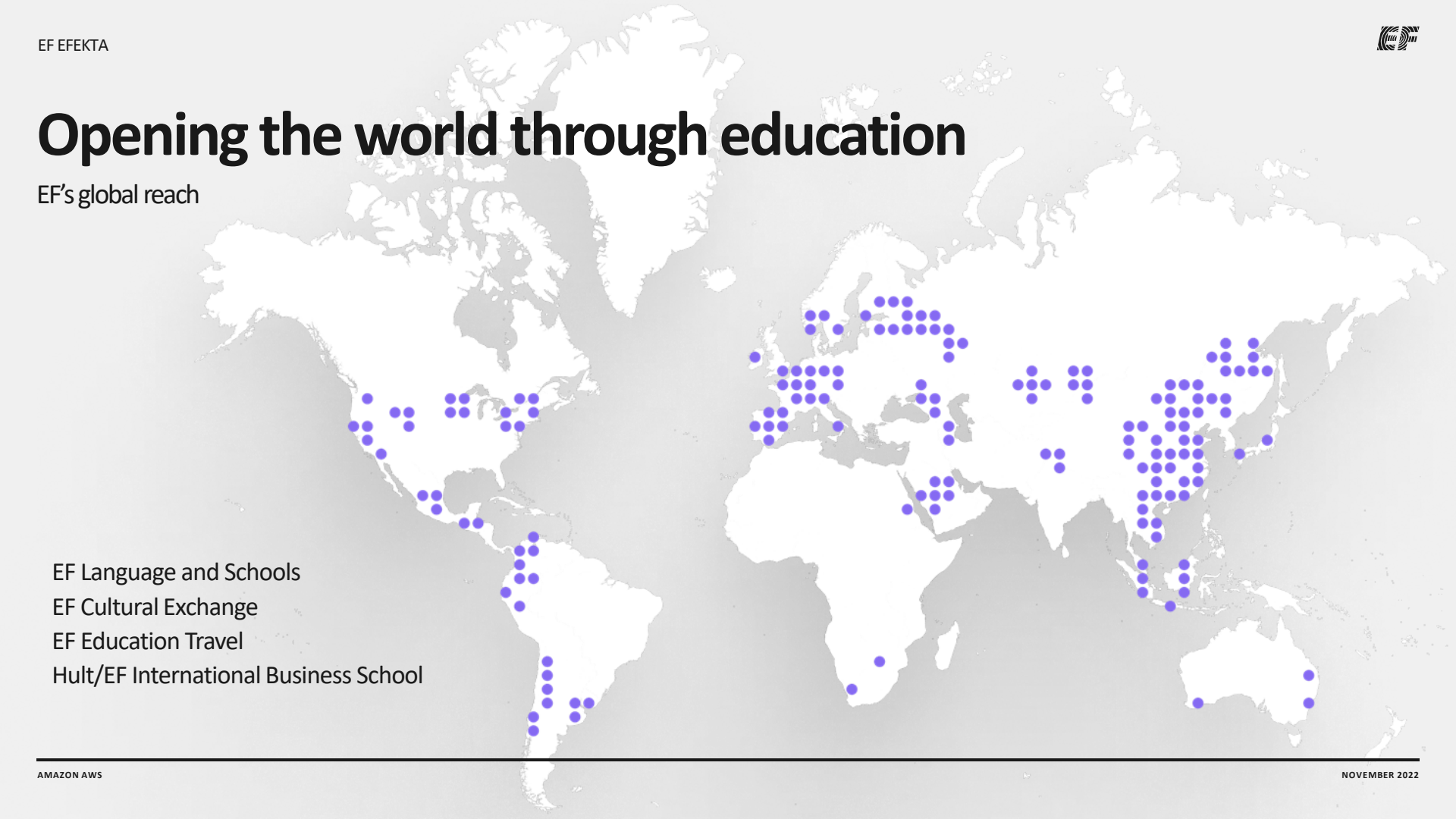
Pioneering the future of learning

EF is the world's largest private education company.


120 countries
600+ schools & offices
51,500 employees

Opening the world through education

EF's global reach



EF Language and Schools
EF Cultural Exchange
EF Education Travel
Hult/EF International Business School

45+ million
Online lesson minutes per quarter.

But the rewards came with a tax...

EF:~/



Compute

Amazon EC2
AWS Lambda



Database

Amazon Aurora, Amazon RDS, Amazon Managed Streaming for Apache Kafka



Analytics

Amazon Kinesis
AWS Glue



Storage

Amazon Simple Storage Service



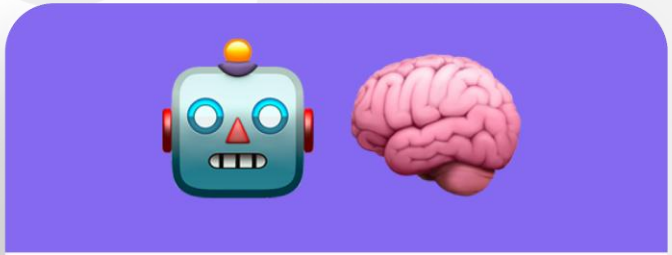
Containers

Amazon Elastic Kubernetes Service



Front-End web & mobile

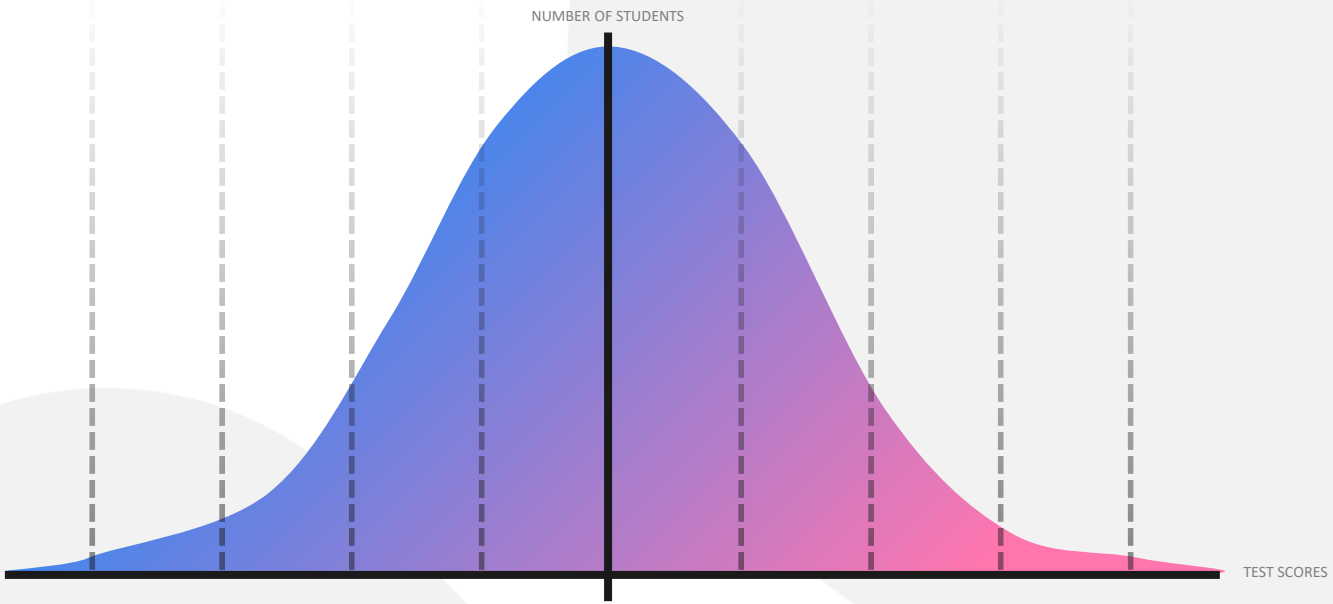
Amazon AppFlow


Machine Learning
Unlocked a huge opportunity.
We'll tell you more about that in a moment!


24,000 teachers

Bloom’s 2 Sigma problem

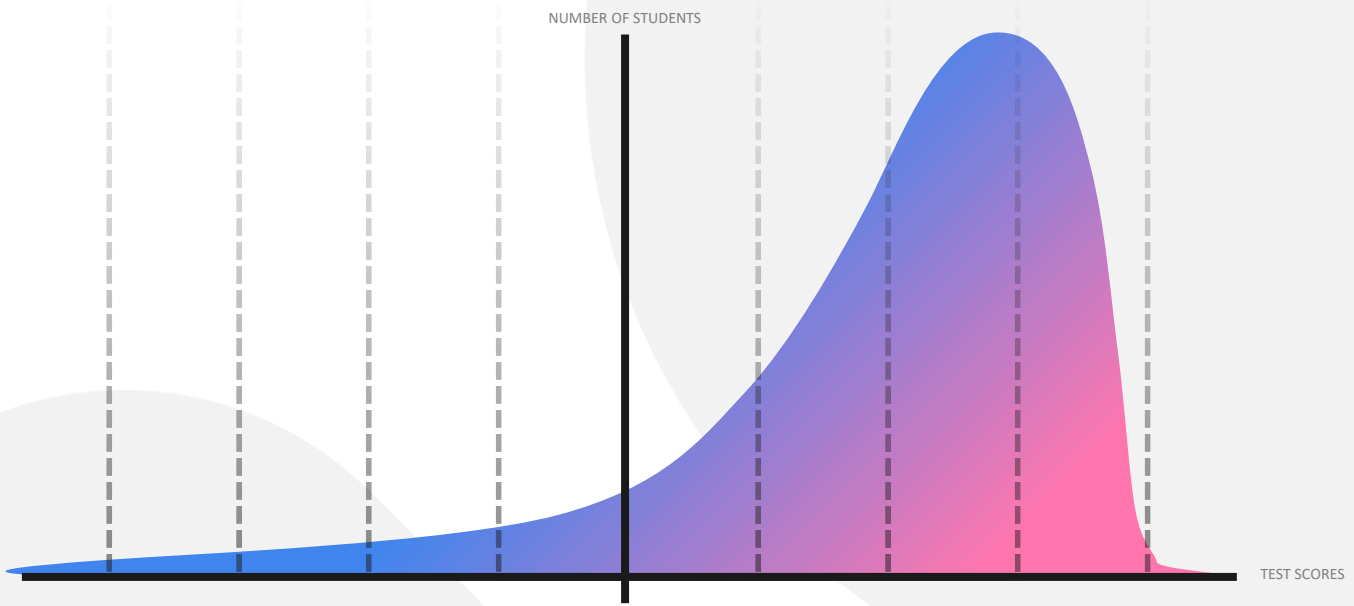
Self-study and group lessons



1. BLOOM BS. The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring. Educational Researcher. 1984;13(6):4-16. doi:10.3102/0013189X013006004

Bloom’s 2 Sigma problem

1:1 tuition



1. BLOOM BS. The 2 Sigma Problem: The Search for Methods of Group Instruction as Effective as One-to-One Tutoring. Educational Researcher. 1984;13(6):4-16. doi:10.3102/0013189X013006004

“There are decades when nothing happens and weeks when decades happen.”

EF English Courses – Learning preferences

China 2019



EF English Courses – Learning preferences

China 2022



20% School

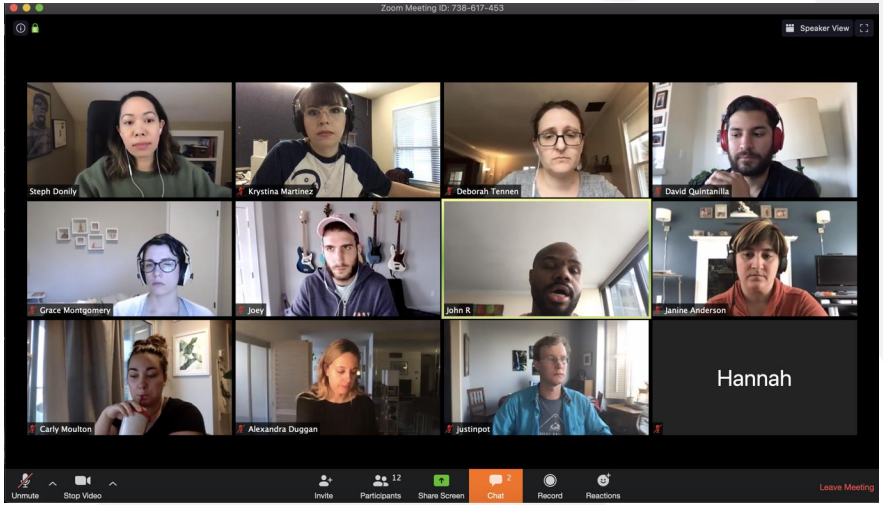


80% Online

The problem education is facing:

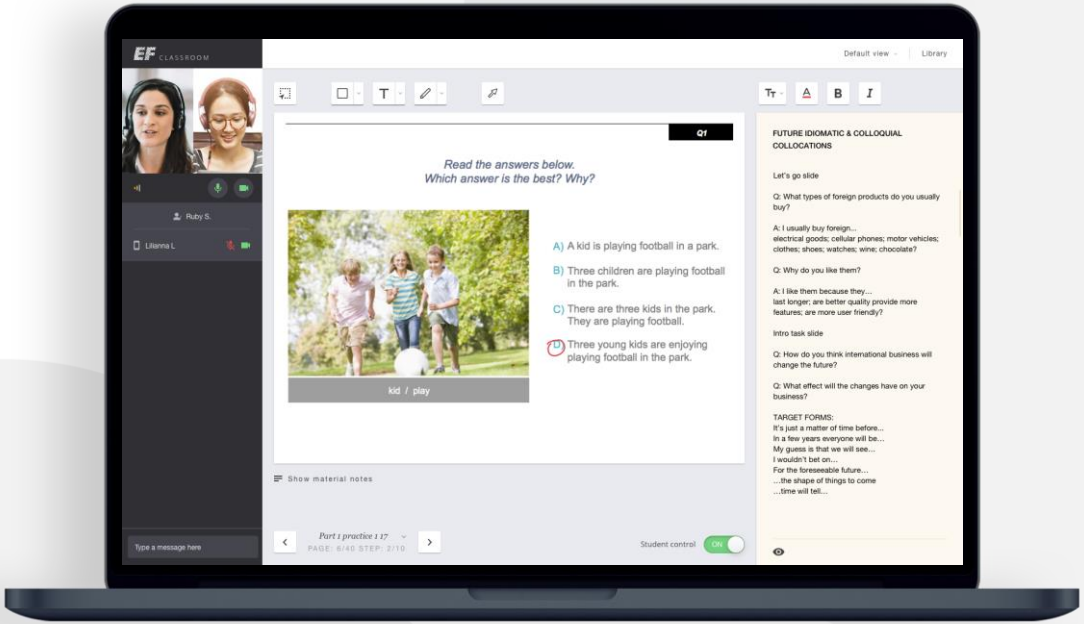
How do we teach online?


Zoom Meeting ID: 738-617-453
Speaker View
Steph Donily
Krystina Martinez
Deborah Tennen
David Quintanilla
Grace Montgomery
Joey
John R
Janine Anderson
Carly Moulton
Alexandra Duggan
justinpot
Hannah
Unmute
Stop Video
Invite
Participants
12
Share Screen
Chat
2
Record
Reactions
Leave Meeting


Zoom Meeting ID: 738-617-453
Speaker View
Steph Donily
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Leave Meeting

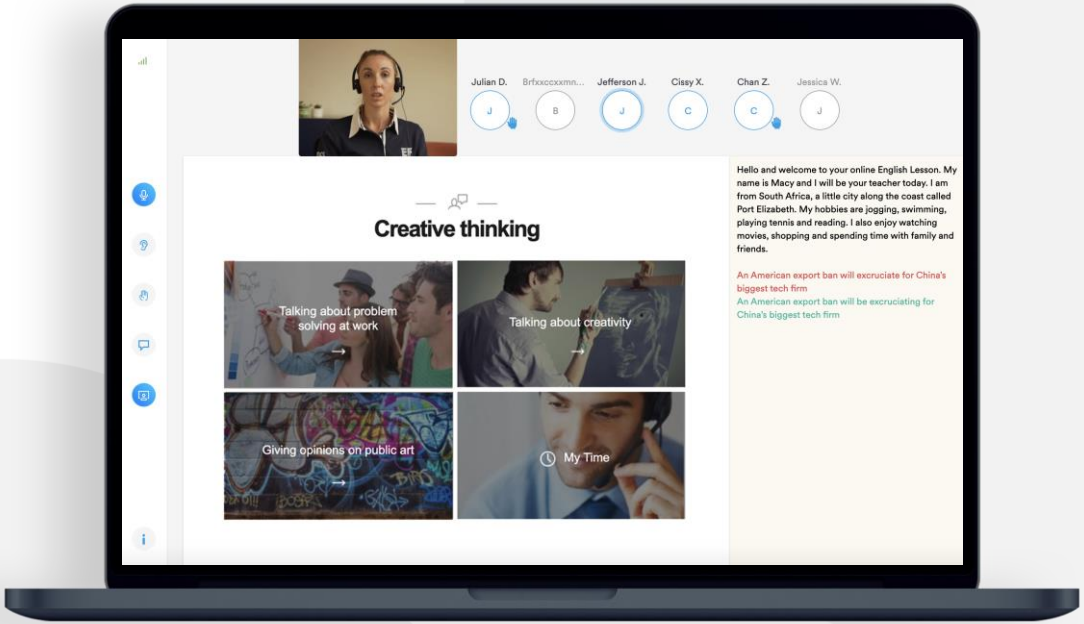


2018
Virtual classroom



2018
Virtual classroom

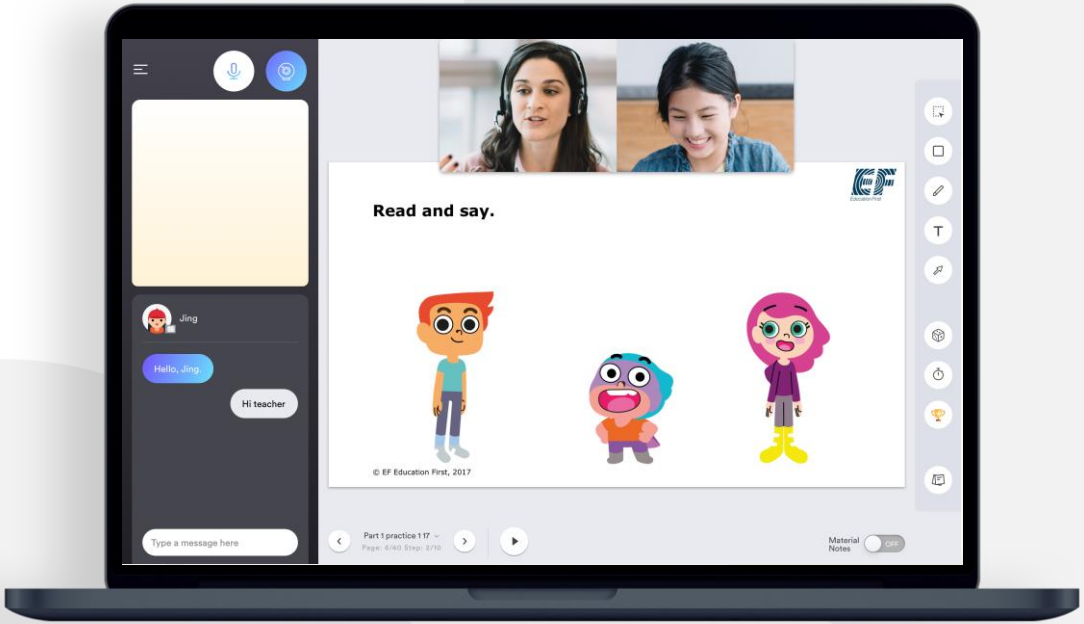
2019
UI refresh



2018
Virtual classroom

2019
UI refresh

2019
Double Wing

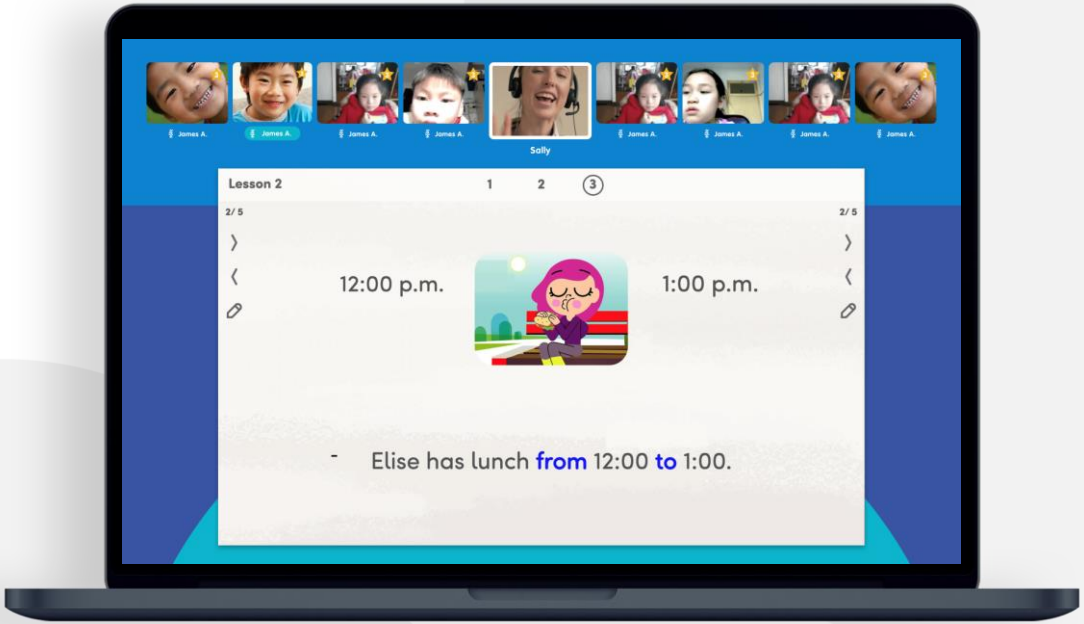


2018
Virtual classroom

2019
UI refresh

2019
Double Wing

2020
Kids Group



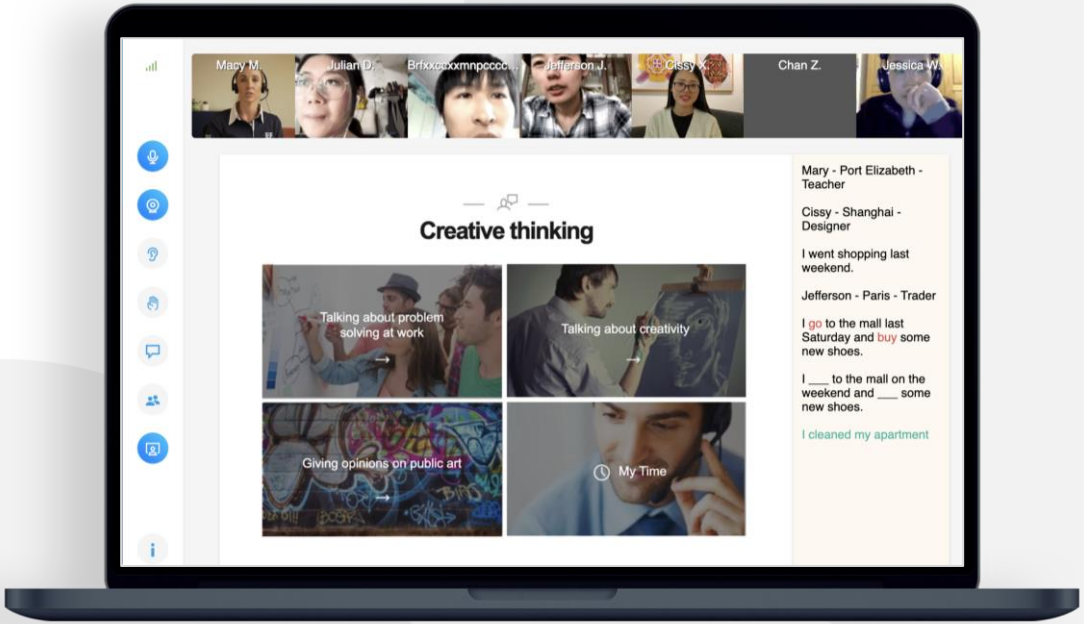
2018
Virtual classroom

2019
UI refresh

2019
Double Wing

2020
Kids Group

2020
Video Group



2018
Virtual classroom

2019
UI refresh

2019
Double Wing

2020
Kids Group

2020
Video Group

2021
Classroom 2.0

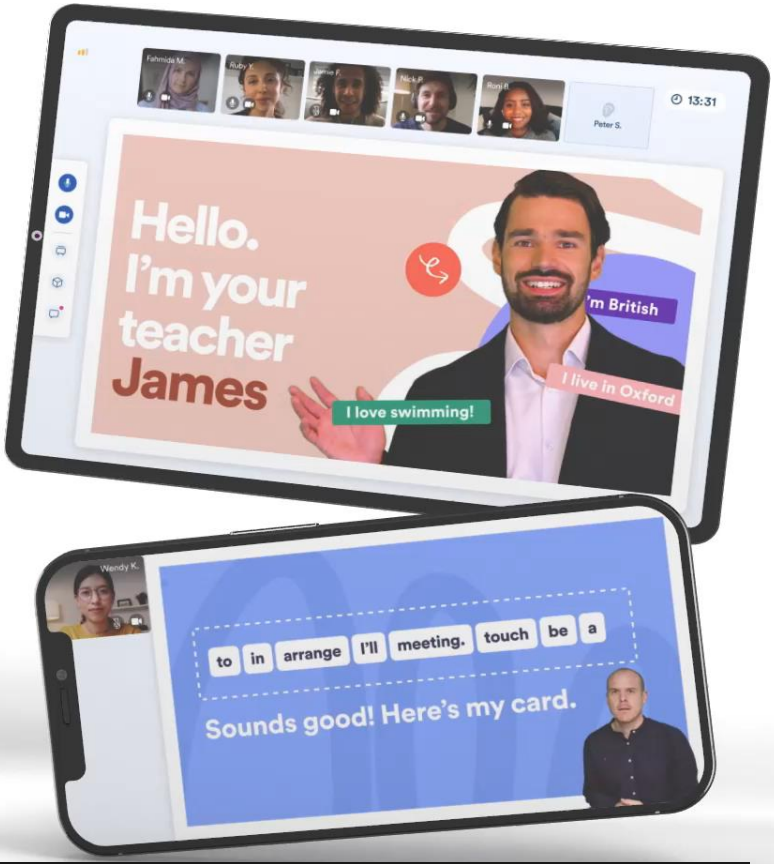


We needed a bold reinvention.

Hyper Class:

The classroom of the future

- Teacher guides student focus
- More active and engaged learners
- More flexibility to personalise
- Build confidence through real-life simulation
- Not just for language



Delivered at scale.



EF Aya H.

21:42

Many people hold Gandhi in high esteem.

Elon Musk's ideas are often considered visionary.

I really respect Stephen Hawking.

Serena Williams inspires many people.

Nelson Mandela is admired by many people.



Delivering great learning experiences

Delivering great learning experiences

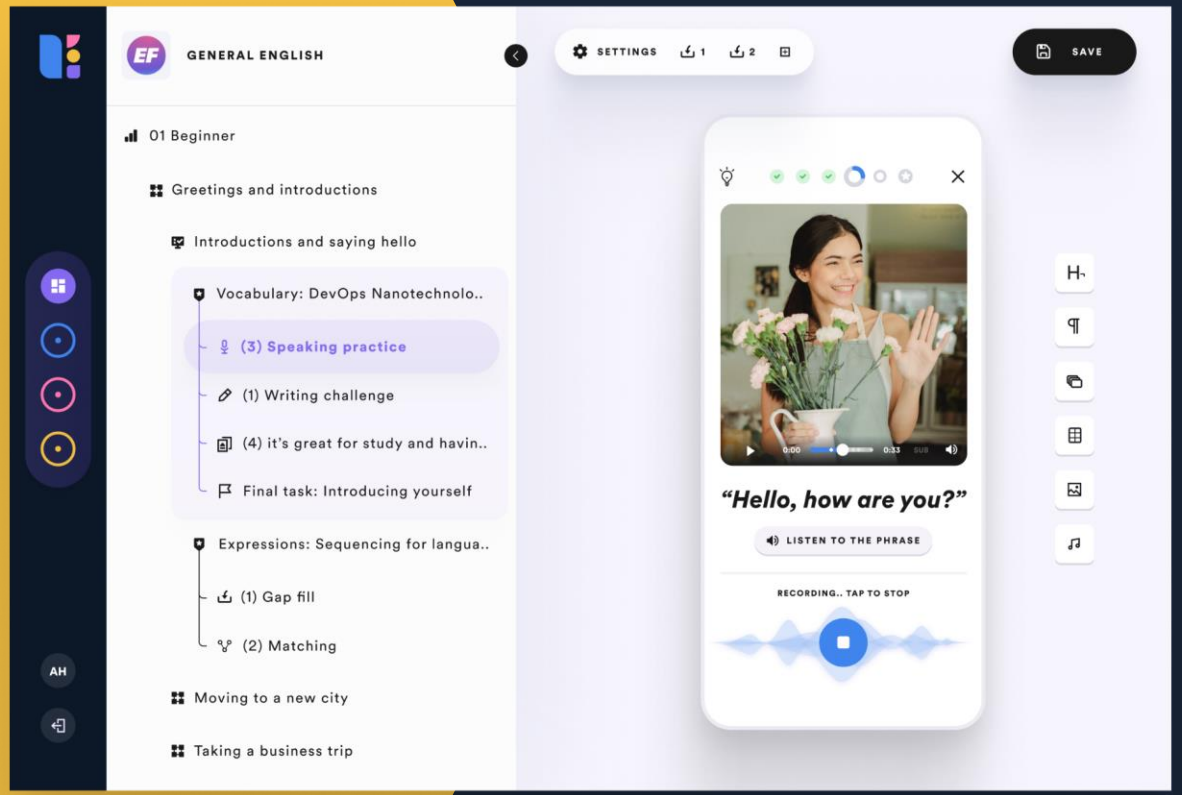


Turning students into great learners

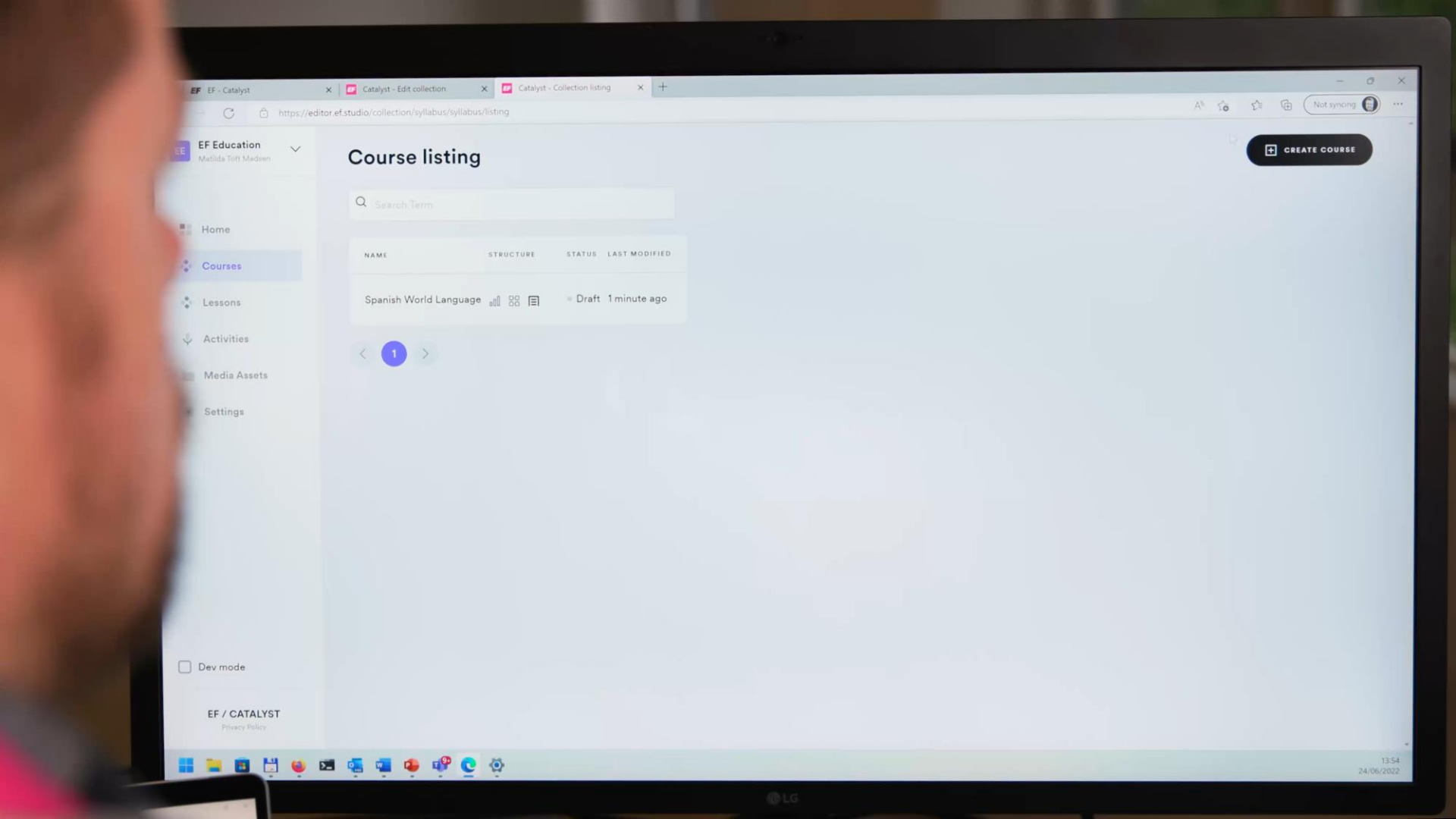


EFEKTA


Content editor
Student portal
Teacher Ops
Hyper Class

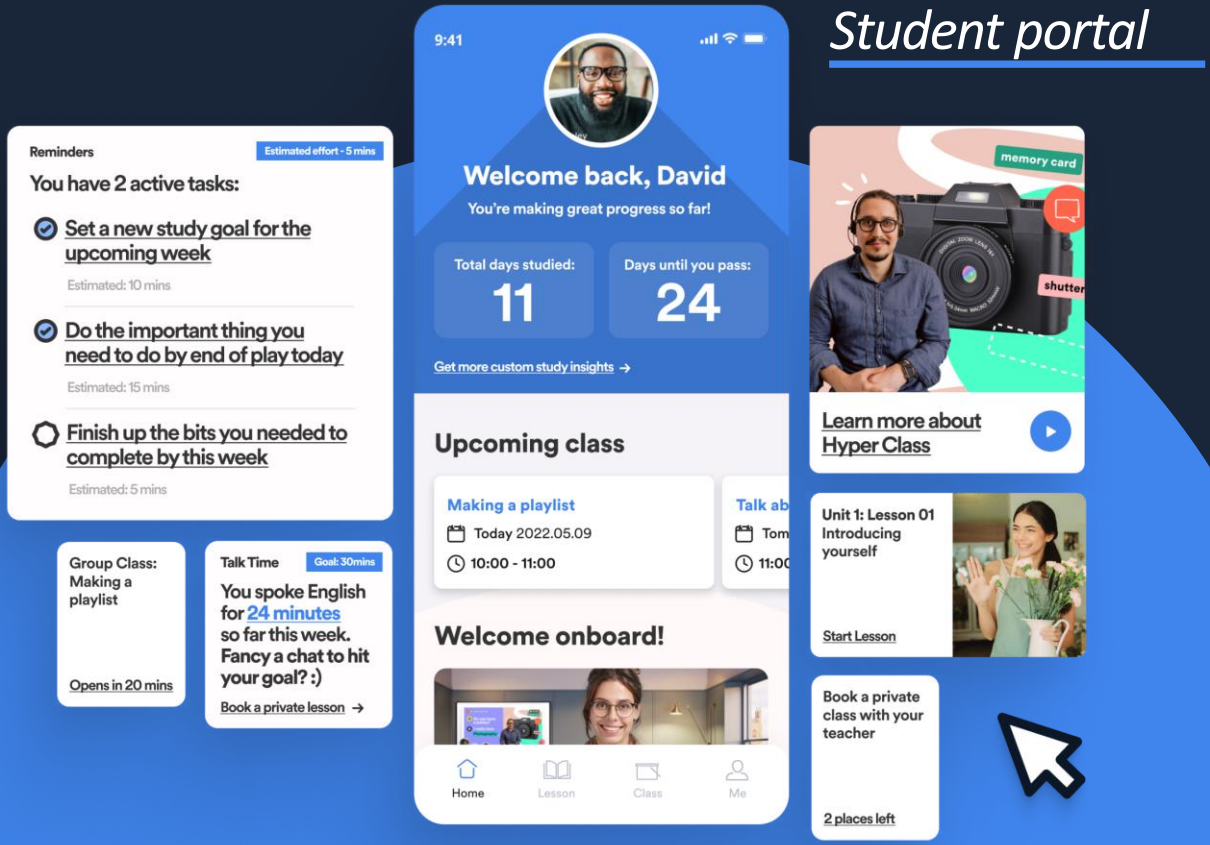


Content editor


EF - Catalyst
Catalyst - Edit collection
Catalyst - Collection listing
https://editor.ef.studio/collection/syllabus/syllabus/listing
Not syncing
EF Education
Matilda Toft Madsen
Course listing
CREATE COURSE
Search Term
Home
Courses
Lessons
Activities
Media Assets
Settings
NAME
STRUCTURE
STATUS
LAST MODIFIED
Spanish World Language
Draft 1 minute ago
1
Dev mode
EF / CATALYST
Privacy Policy
13:54
24/06/2022


Content editor
Student portal
Teacher Ops
Hyper Class

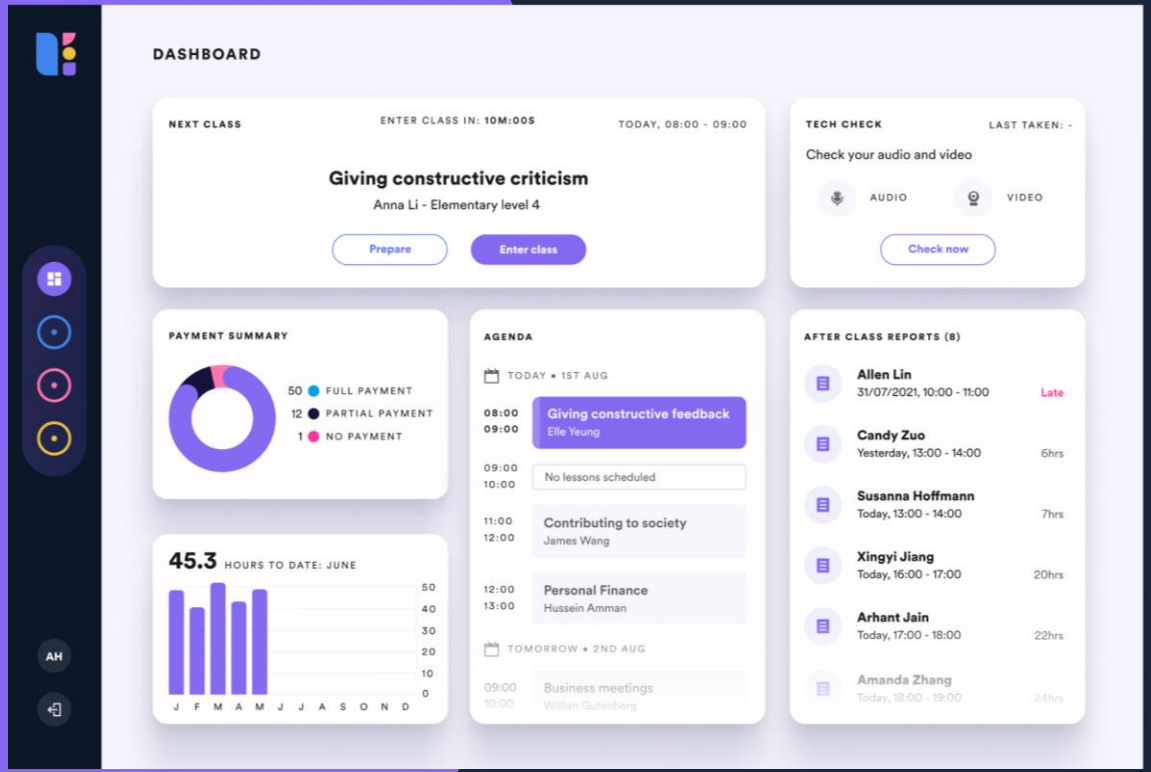
Student portal

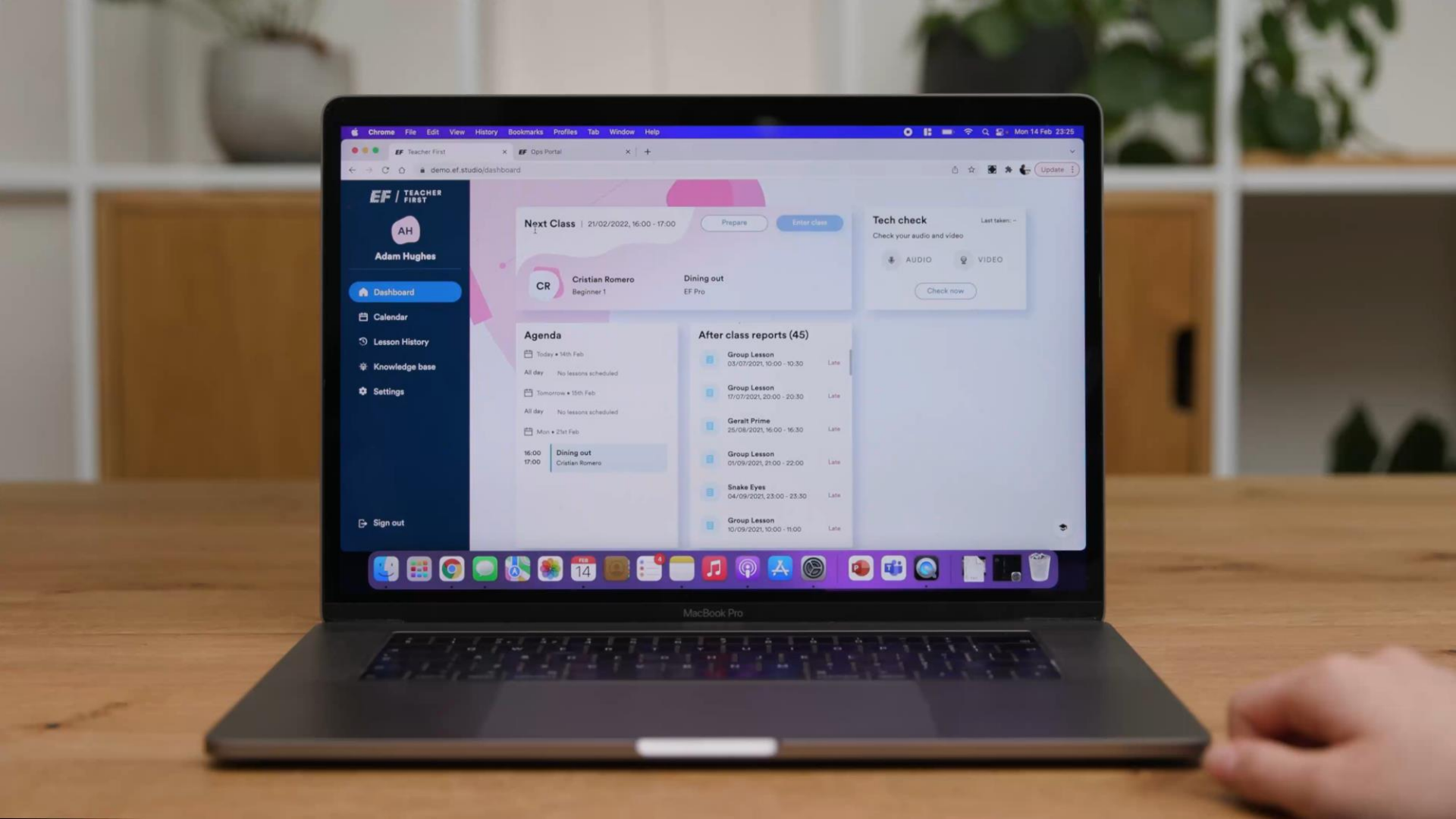





Content editor
Student portal
Teacher Ops
Hyper Class

Teacher Ops


DASHBOARD
NEXT CLASS
ENTER CLASS IN: 10M:00S
TODAY, 08:00 - 09:00
Giving constructive criticism
Anna Li - Elementary level 4
Prepare
Enter class
TECH CHECK
LAST TAKEN: -
Check your audio and video
AUDIO
VIDEO
Check now
PAYMENT SUMMARY
50 FULL PAYMENT
12 PARTIAL PAYMENT
1 NO PAYMENT
45.3 HOURS TO DATE: JUNE
J F M A M J J A S O N D
AGENDA
TODAY • 1ST AUG
08:00 09:00 Giving constructive feedback Elle Yeung
09:00 10:00 No lessons scheduled
11:00 12:00 Contributing to society James Wang
12:00 13:00 Personal Finance Hussein Amman
TOMORROW • 2ND AUG
09:00 10:00 Business meetings William Gutenberg
AFTER CLASS REPORTS (8)
Allen Lin 31/07/2021, 10:00 - 11:00 Late
Candy Zuo Yesterday, 13:00 - 14:00 6hrs
Susanna Hoffmann Today, 13:00 - 14:00 7hrs
Xingyi Jiang Today, 16:00 - 17:00 20hrs
Arhant Jain Today, 17:00 - 18:00 22hrs
Amanda Zhang Today, 18:00 - 19:00 24hrs
AH

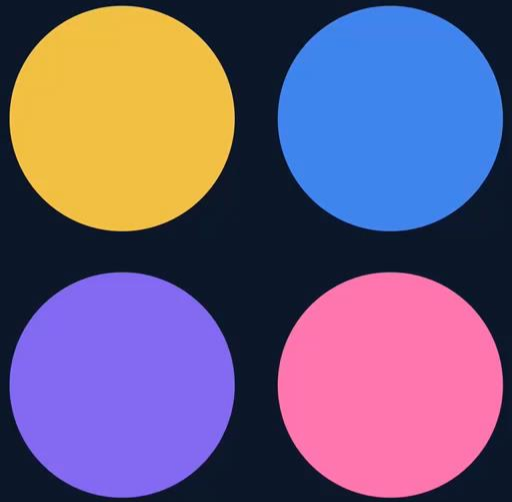

Chrome File Edit View History Bookmarks Profiles Tab Window Help
Mon 14 Feb 23:25
Teacher First
Ops Portal
demo.ef.studio/dashboard
Update
EF / TEACHER FIRST
AH
Adam Hughes
Dashboard
Calendar
Lesson History
Knowledge base
Settings
Sign out
Next Class | 21/02/2022, 16:00 - 17:00
Prepare
Enter class
CR
Cristian Romero
Beginner 1
Dining out
EF Pro
Tech check
Last taken: –
Check your audio and video
AUDIO
VIDEO
Check now
Agenda
Today • 14th Feb
All day
No lessons scheduled
Tomorrow • 15th Feb
All day
No lessons scheduled
Mon • 21st Feb
16:00
17:00
Dining out
Cristian Romero
After class reports (45)
Group Lesson
03/07/2021, 10:00 - 10:30
Late
Group Lesson
17/07/2021, 20:00 - 20:30
Late
Geralt Prime
25/08/2021, 16:00 - 16:30
Late
Group Lesson
01/09/2021, 21:00 - 22:00
Late
Snake Eyes
04/09/2021, 23:00 - 23:30
Late
Group Lesson
10/09/2021, 10:00 - 11:00
Late
MacBook Pro


Content editor
Student portal
Teacher Ops
Hyper Class

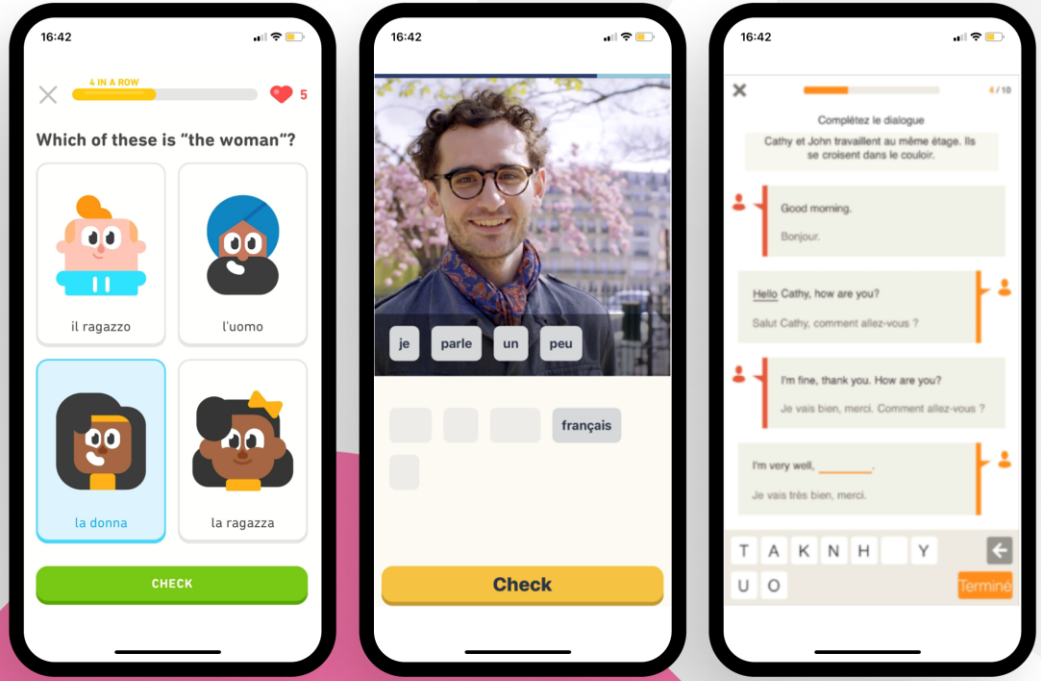

Teacher Name
Q
Do you have a hobby?
A
I really love
Photogr
00:00
memory card
shutter
DIGITAL ZOOM LENS 16X
f=5.04mm MACRO 52mmW

Hyper Class


Content editor
Student portal
Teacher Ops
Hyper Class

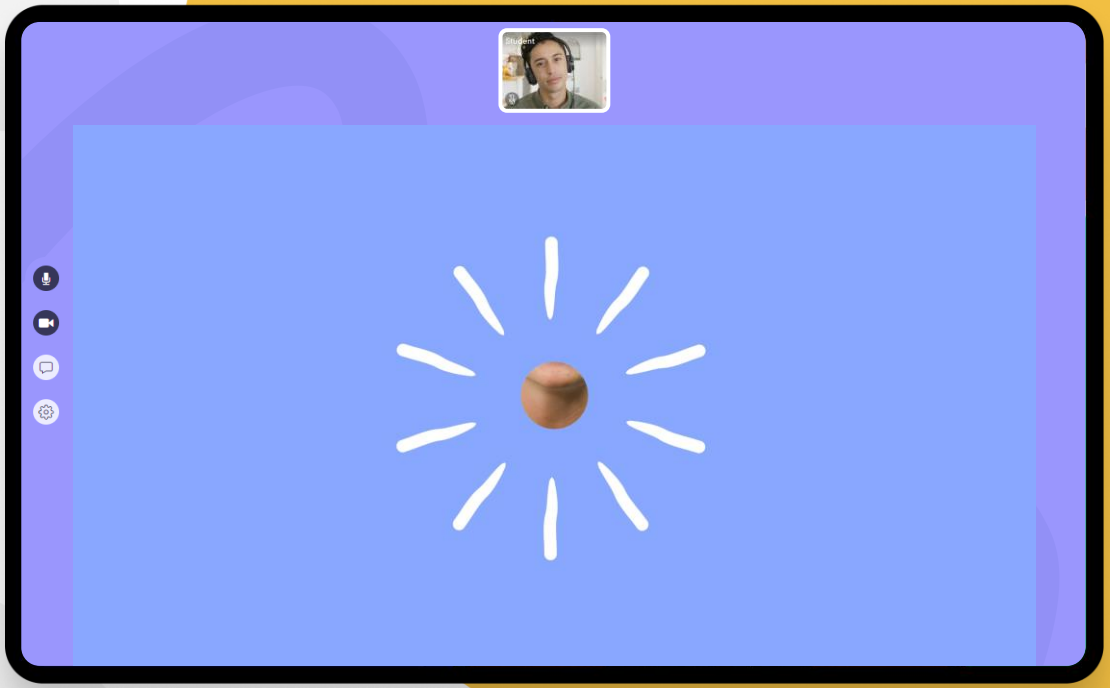


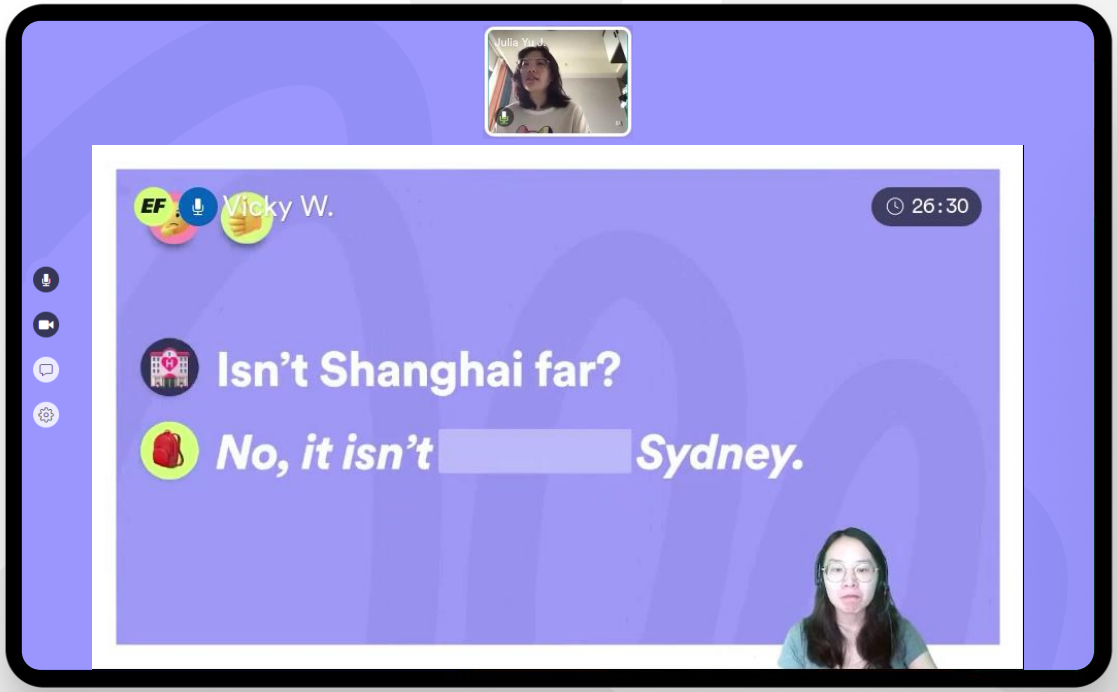
Remember we mentioned a huge opportunity…

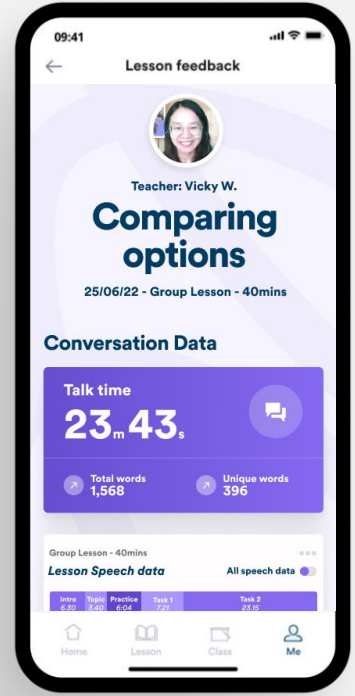


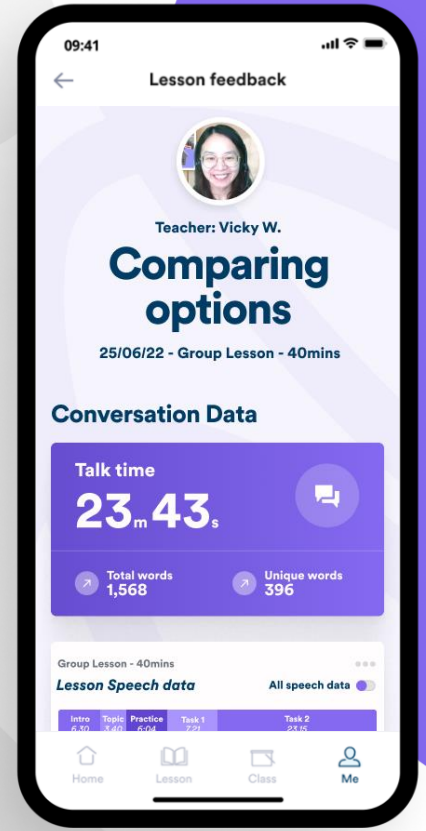
Capturing data *here* is actually pretty easy!

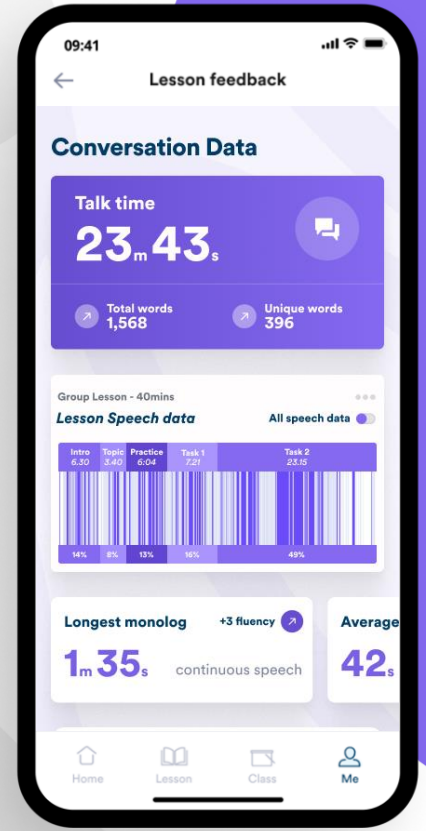
Capturing data *here* is ground-breaking...

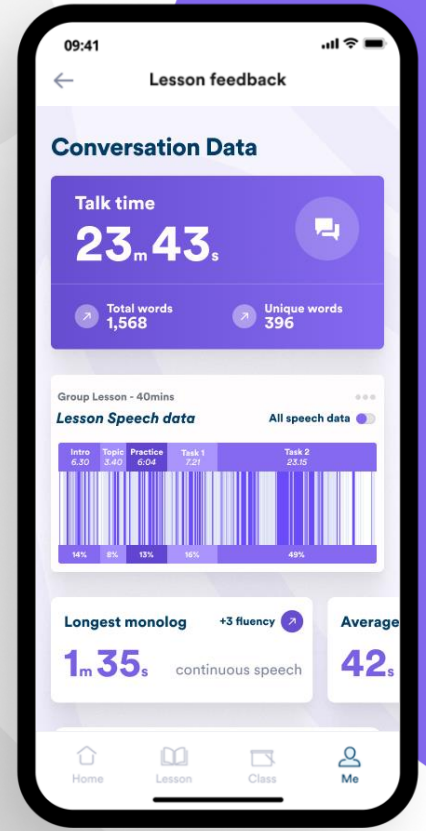



Julia Xu J.
Vicky W.
26:30
Isn't Shanghai far?
No, it isn't Sydney.


09:41
Lesson feedback
Teacher: Vicky W.
Comparing options
25/06/22 - Group Lesson - 40mins
Conversation Data
Talk time
23m 43s
Total words 1,568
Unique words 396
Group Lesson - 40mins
Lesson Speech data
All speech data
Home
Lesson
Class
Me


09:41
Lesson feedback
Teacher: Vicky W.
Comparing options
25/06/22 - Group Lesson - 40mins
Conversation Data
Talk time
23m 43s
Total words
1,568
Unique words
396
Group Lesson - 40mins
Lesson Speech data
All speech data
Intro
Topic
Practice
Task 1
Task 2
Home
Lesson
Class
Me


09:41
Lesson feedback
Conversation Data
Talk time
23m 43s
Total words
1,568
Unique words
396
Group Lesson - 40mins
Lesson Speech data
All speech data
Intro 6.30
Topic 3.40
Practice 6:04
Task 1 7.21
Task 2 23.15
14%
8%
13%
16%
49%
Longest monolog
+3 fluency
1m 35s
continuous speech
Average
42s
Home
Lesson
Class
Me



Longest monolog +3 fluency

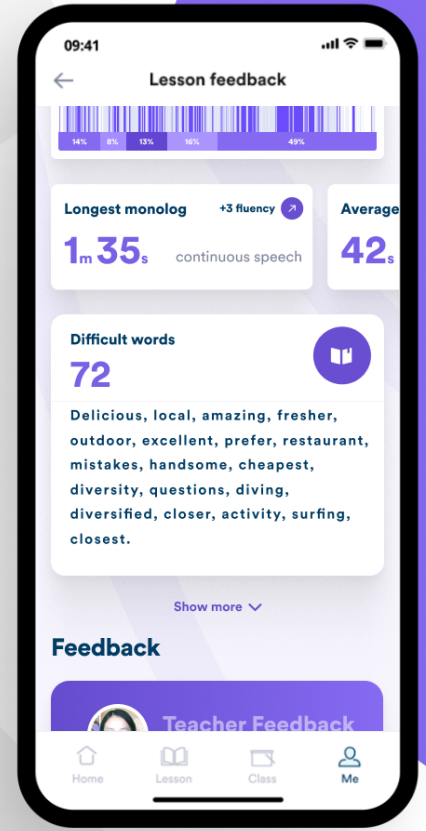
1m 35s continuous speech

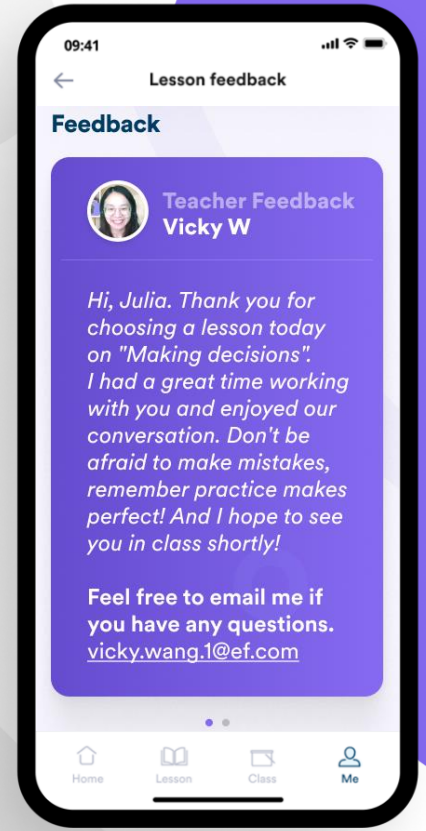
Average monolog +1 fluency

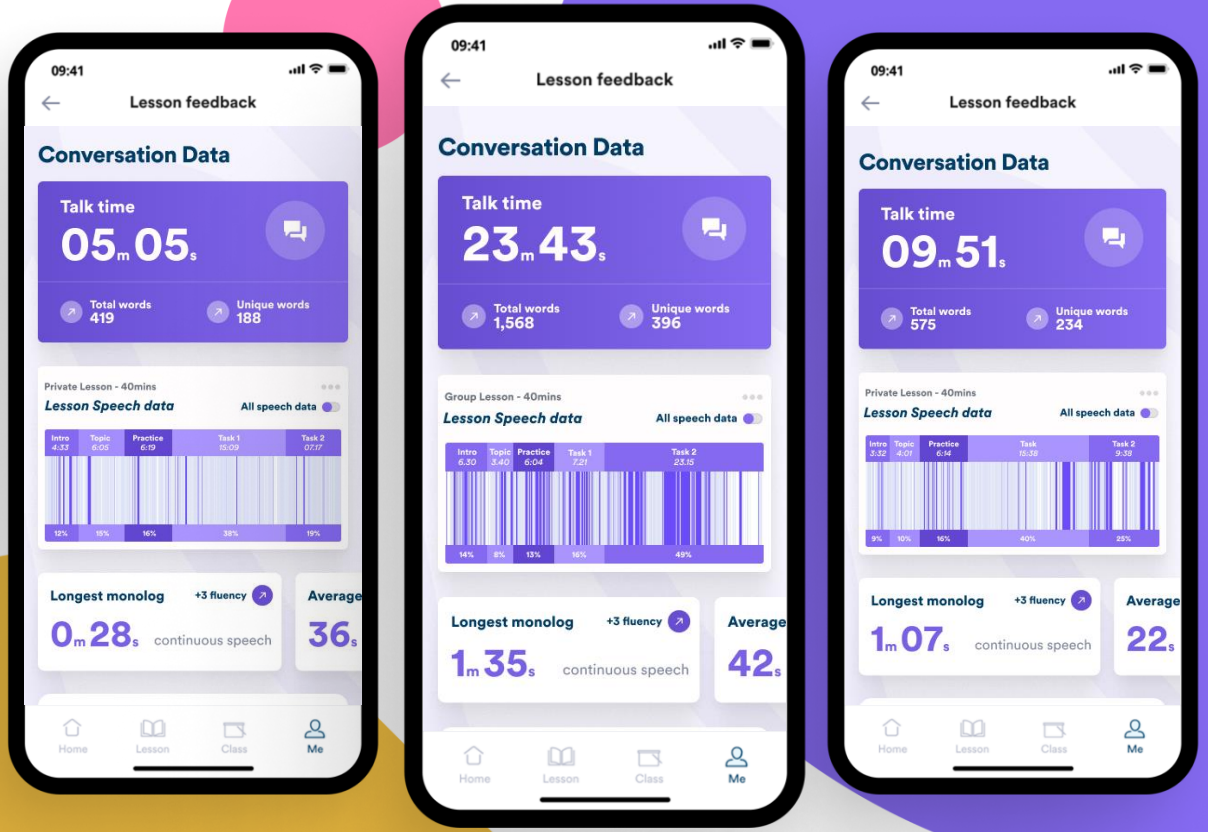
42s continuous speech

Speech score

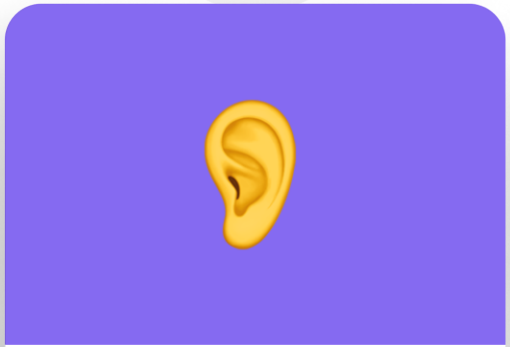
0.925/1 pronunciation


09:41
Lesson feedback
14%
8%
13%
16%
49%
Longest monolog
+3 fluency
1m 35s
continuous speech
Average
42s
Difficult words
72
Delicious, local, amazing, fresher, outdoor, excellent, prefer, restaurant, mistakes, handsome, cheapest, diversity, questions, diving, diversified, closer, activity, surfing, closest.
Show more
Feedback
Teacher Feedback
Home
Lesson
Class
Me


09:41
Lesson feedback
Feedback
Teacher Feedback
Vicky W
Hi, Julia. Thank you for choosing a lesson today on "Making decisions". I had a great time working with you and enjoyed our conversation. Don't be afraid to make mistakes, remember practice makes perfect! And I hope to see you in class shortly!
Feel free to email me if you have any questions.
vicky.wang.1@ef.com
Home
Lesson
Class
Me

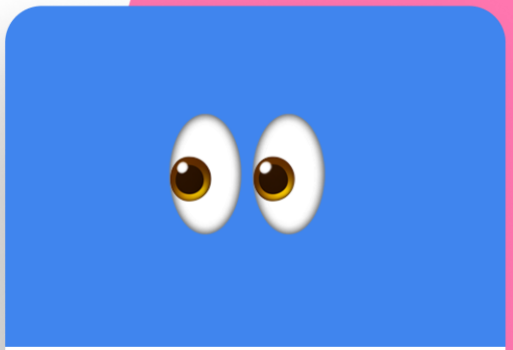

09:41
Lesson feedback
Conversation Data
Talk time
05m 05s
Total words
419
Unique words
188
Private Lesson - 40mins
Lesson Speech data
All speech data
Intro 4:33
Topic 6:05
Practice 6:19
Task 1 15:09
Task 2 07:17
12%
15%
16%
38%
19%
Longest monolog
+3 fluency
0m 28s
continuous speech
Average
36s
Home
Lesson
Class
Me
09:41
Lesson feedback
Conversation Data
Talk time
23m 43s
Total words
1,568
Unique words
396
Group Lesson - 40mins
Lesson Speech data
All speech data
Intro 6.30
Topic 3.40
Practice 6:04
Task 1 7.21
Task 2 23.15
14%
8%
13%
16%
49%
Longest monolog
+3 fluency
1m 35s
continuous speech
Average
42s
Home
Lesson
Class
Me
09:41
Lesson feedback
Conversation Data
Talk time
09m 51s
Total words
575
Unique words
234
Private Lesson - 40mins
Lesson Speech data
All speech data
Intro 3:32
Topic 4:01
Practice 6:14
Task 15:38
Task 2 9:38
9%
10%
16%
40%
25%
Longest monolog
+3 fluency
1m 07s
continuous speech
Average
22s
Home
Lesson
Class
Me

Here’s the science behind it:



Audio signal processing

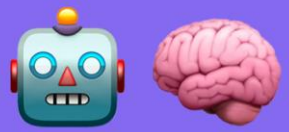
We transcribe the entire class and can determine levels of contribution with high accuracy by accessing individual microphones.



Computer Vision

Using deep learning models, we detect exactly which stage or scene the student is at, and capture all custom text added to the screen.

Here’s the science behind it:



Machine Learning

Amazon Transcribe
Amazon Rekognition

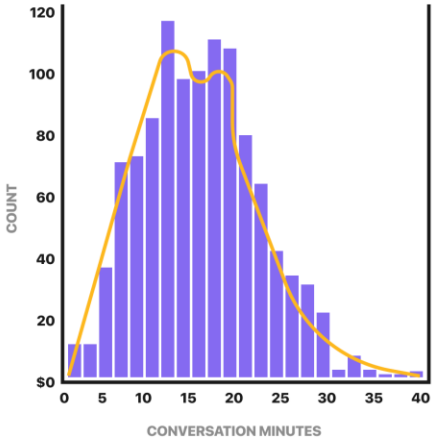


Natural language processing

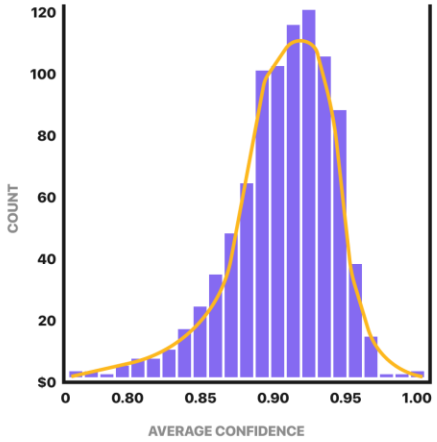
We use the latest language models to undersand the conversations, allowing the computer to answer questions about the class.

We have already analysed 1000's of lessons

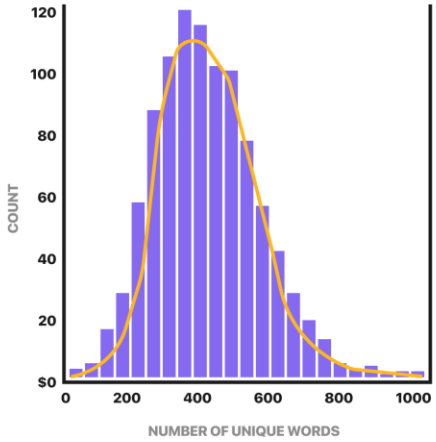
Hyperclass speaking time



Average ASR confidence



Number of unique words



For the first time, we can enhance teaching with science.


Opening the world through education

Get in touch!

start.efekta.io



Bjorn Toft Madsen
EVP EFEKTA



Tim Ackroyd
Creative Director

Thank you!



Please complete the session survey in the **mobile app**

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