

日本語教育学会
Global 8

東京電機大学

宍戸 真

科学研究費概要

- AIを利用した英会話システムの開発と英語発話力の向上の検証
科学研究費助成事業（学術研究助成基金助成金 基盤研究(c)）
課題番号：18K00794
- AI・選択肢型チャットボットを利用した英会話システムの開発
と英語力の向上の検証 科学研究費助成事業（学術研究助成基
金助成金 基盤研究(c)） 課題番号：21K00688
- AI・ゲーミフィケーションを利用した英会話学習システムの開
発と英語力向上の検証 科学研究費助成事業（学術研究助成基
金助成金 基盤研究(c)） 課題番号：24K04086

ELST
Introducing Japan in
English

Reading – Pronunciation

← Read Aloud Practice 01

精度 : 62 流暢度 : 84 完成度 : 61 良 可 不可 未読

得点 : 73点

Where is Japan located? Japan is an island country in East Asia. It is located in the Pacific Ocean, and lies off the eastern coast of the Asian continent, stretching from the Sea of Okhotsk in the north to the East China Sea and the Philippine Sea in the south. Tokyo, located almost in the middle of the archipelago, is the largest city and the capital. It lies at 140 degrees east longitude and 36 degrees north latitude. The latitude of Tokyo is about the same as that of North Carolina in the US. The total land area of Japan is approximately 378,000 square kilometers, which is about one twenty-fifth of that of the United States. It is about the same size as Germany and much smaller than the state of California.

録音を再生



Dialog Practice

← Role Play Practice 01

英 日

 ||| I hear that Japan is a relatively homogeneous nation. 73

70  But there are many foreign residents these days. |||

 ||| How many foreign people are living in Japan? 88

87  More than 2.5 million were reported to be living there in 2017. |||

 ||| Where are those people from? 92



Speaking Practice

← Speaking — ×

説明
Listen to a sample speech and write your own speech using the key phrases below. AI will evaluate the content and your delivery.


[🗣️ 翻訳](#)

ヒント

Key Phrases:

- My home town is (Funabashi / Osaka / Sendai)
- The population density is (7,400 / 12,000 / 1,300) per square kilometer.
- The number of people over 65 years old consists of (23 / 26)% of the population.
- The biggest concern is (there are many elderly people who live alone / depopulation with more elderly and fewer younger people / younger people are leaving the city)

[前回の成績](#)



ELST

Virtual Travel around the
World

Reading - Shadowing

← Shadowing Practice

再生速

5/5

得点：48点

発音：13 流暢度：52 完成度：94
練習回数：1回 最高得点：48点

字幕 off on

表示言語 英 日

シャドーイング：イヤフォンを装着し、音声を聴きながら、音声に続いて発音してください。

If time allows, go outside of the continental United States. Enjoy the Hawaiian Islands or Alaska's glaciers and fjords.

If time allows, go outside of the continental United States. Enjoy the Hawaiian Islands or Alaska's glaciers and fjords.

🔄 録音を再生 📧 誤りを報告



Speaking - Role Play Practice

← Role Play Practice

再生速

No.1 60

No.2 69

No.3 61

No.4 75

No.5 85

No.6 90

No.7 86

No.8 79

No.9 90

英

発音 : 29 流暢度 : 91 完成度 : 55 ● A ● B ● C ● 未読

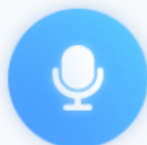
練習回数 : 1回 最高得点 : 60点

得点 : 60点

I'd like to check in for United Airlines flight 854.


録音を再生 音声認識 誤りを報告

チャレンジ



Speaking – Multiple Choice Chatbot

← Speaking

Where would you like to visit in the US? 



Student

I'd like to visit the East Coast of the US.

I'd like to visit the Central region of the US.

I'd like to visit the West Coast of the US.

 誤りを報告



残り : 17s



Multiple Choice Chatbot (27 Patterns)

AI	Student	AI	Student	AI	Student
Canada					I'd like to go to the Maritime Museum of the Atlantic in Halifax.
			I'd like to go to Nova Scotia.	What would you like to do in Nova Scotia?	I'd like to go to the Halifax Town Clock.
					I'd like to visit Prince Edward Island.
					I'd like to go to the Notre Dame Basilica.
	I'd like to visit the eastern part of Canada.	What part would you like to go in the eastern part?	I'd like to go to Montreal.	What would you like to do in Montreal?	I'd like to go to the Old Port of Montreal.
					I'd like to go to the Montreal Biodome zoo.
					I'd like to stroll around Old Quebec.
			I'd like to go to Quebec City.	What would you like to do in Quebec?	I'd like to visit Château Frontenac.
					I'd like to take a stroll along Dufferin Terrace for a magnificent view of the St. Lawrence River.
					I'd like to visit Toronto Tower.
			I'd like to go to Toronto.	What would you like to do in Toronto?	I'd like to visit Niagara Falls.
					I'd like to watch a Blue Jays' baseball game.
					I'd like to go to the Canadian Museum for Human Rights.
What part of Canada would you like to visit?	I'd like to visit the central part of Canada.	What part would you like to go in the central part?	I'd like to go to Winnipeg, Manitoba.	What would you like to do in Winnipeg?	I'd like to go to the Assiniboine Park and Zoo.
					I'd like to go to the Forks National Historic Site.
					I'd like to go to the Columbia Icefield.
			I'd like to go to Calgary.	What would you like to do in Calgary?	I'd like to go to Lake Louise.
					I'd like to go to the Canadian Rockies.
					I'd like to visit Staley Park.
			I'd like to go to Vancouver.	What would you like to do in Vancouver?	I'd like to visit the Capilano Suspension Bridge.
					I'd like to go to Canada Place.
					I'd like to go to the British Columbia Parliament Building.
	I'd like to visit the western part of Canada.	What part would you like to go in the western part?	I'd like to go to Victoria.	What would you like to do in Victoria?	I'd like to go to Hatley Castle.
					I'd like to go to Butchart Gardens.
					I'd like to go to Yellowknife and see northern lights.
			I'd like to go to Northwest Territories.	What would you like to do in Northwest Territories?	I'd like to go to Inuvik and try snowmobiling.

英語発話力向上の検証

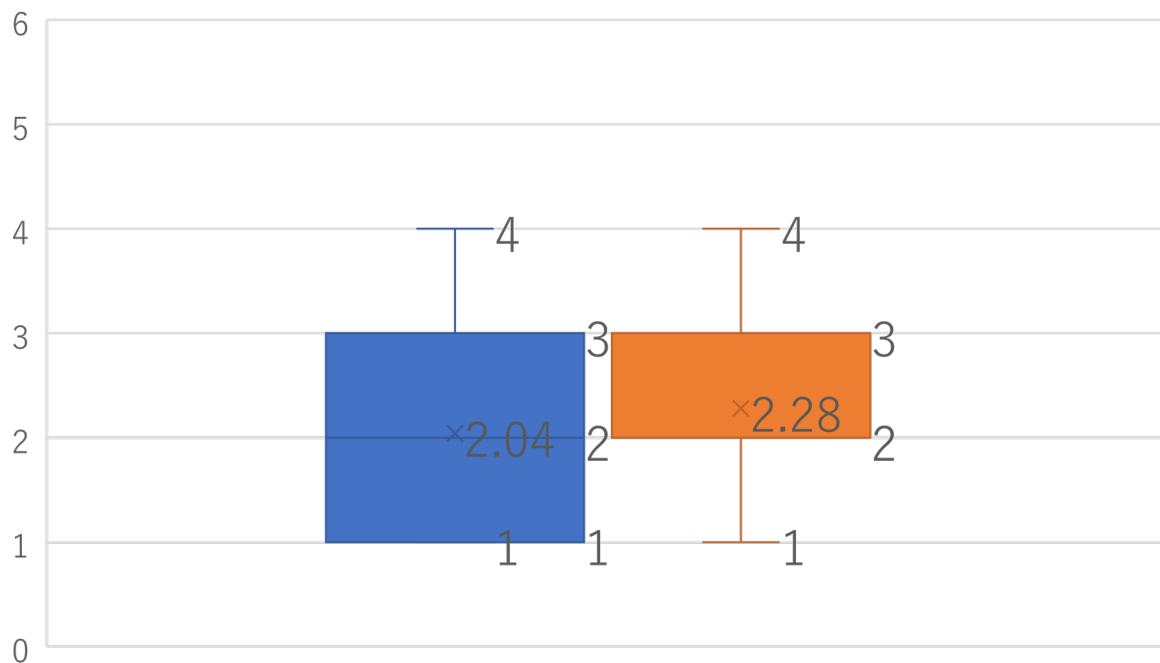
OPIc ・ TOEIC 事前・事後テスト比較

アンケート

OPIc レベル 事前・事後 比較

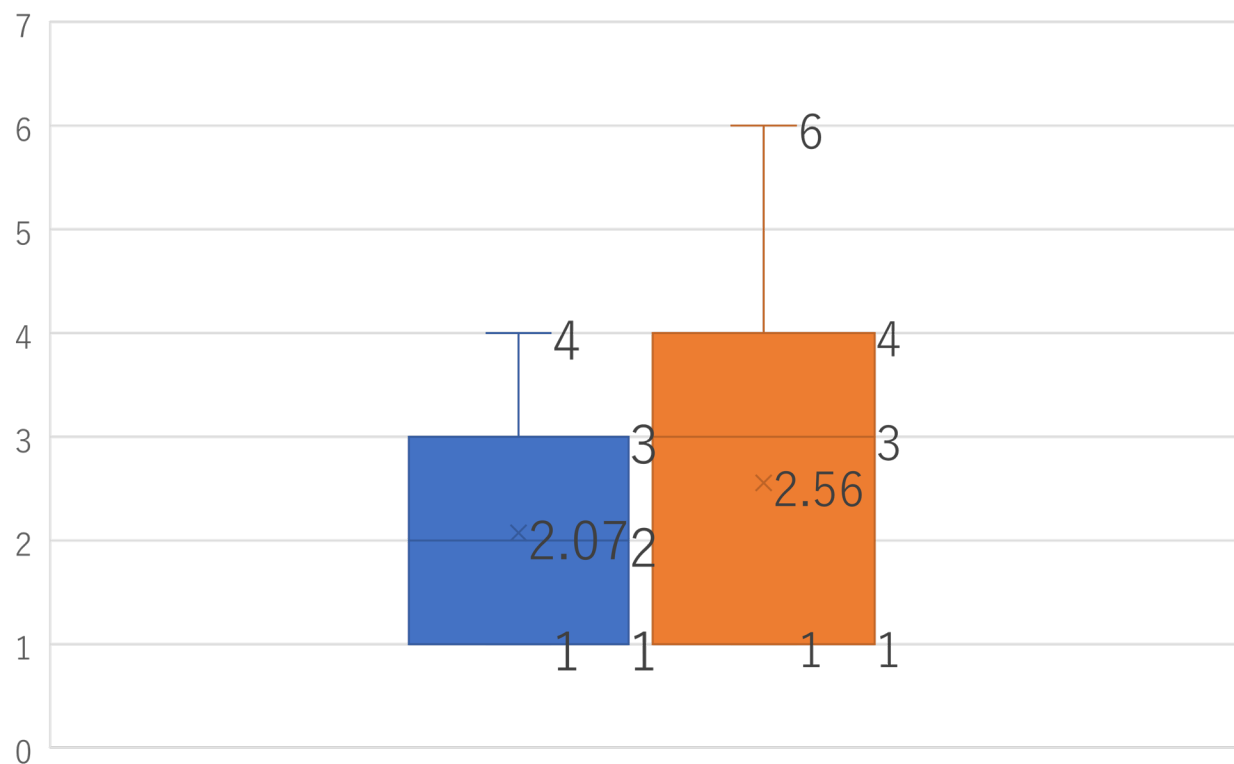
ELST 1 - OPIc Level

■ Pre-test ■ Post-test



OPIc level

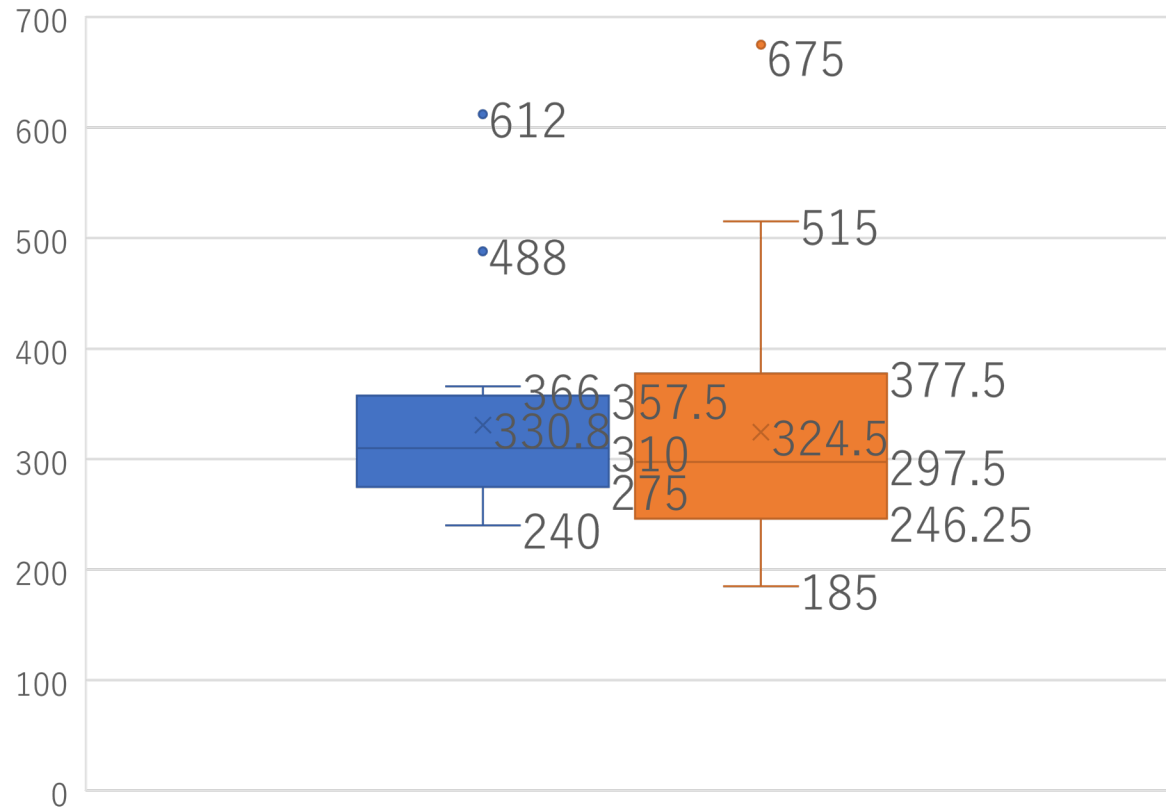
■ Pre-test ■ Post-test



TOEIC スコア 事前・事後 比較

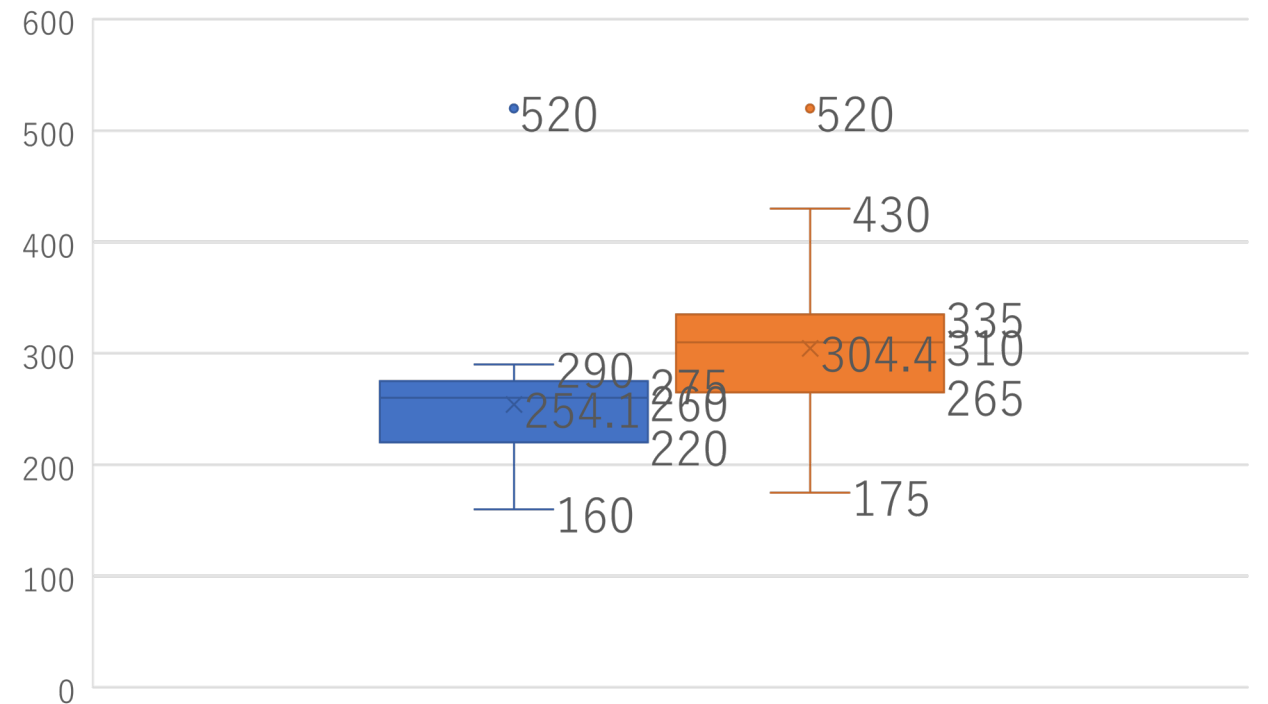
ELST 1 - TOEIC Score

■ Pre-Test ■ Post-Test



TOEIC Total Score

■ Pre-Test ■ Post-Test



Less resistance to speaking English

3.94

Speaking practice with AI matches with your learning style

3.58

Not embarrassing to make a mistake

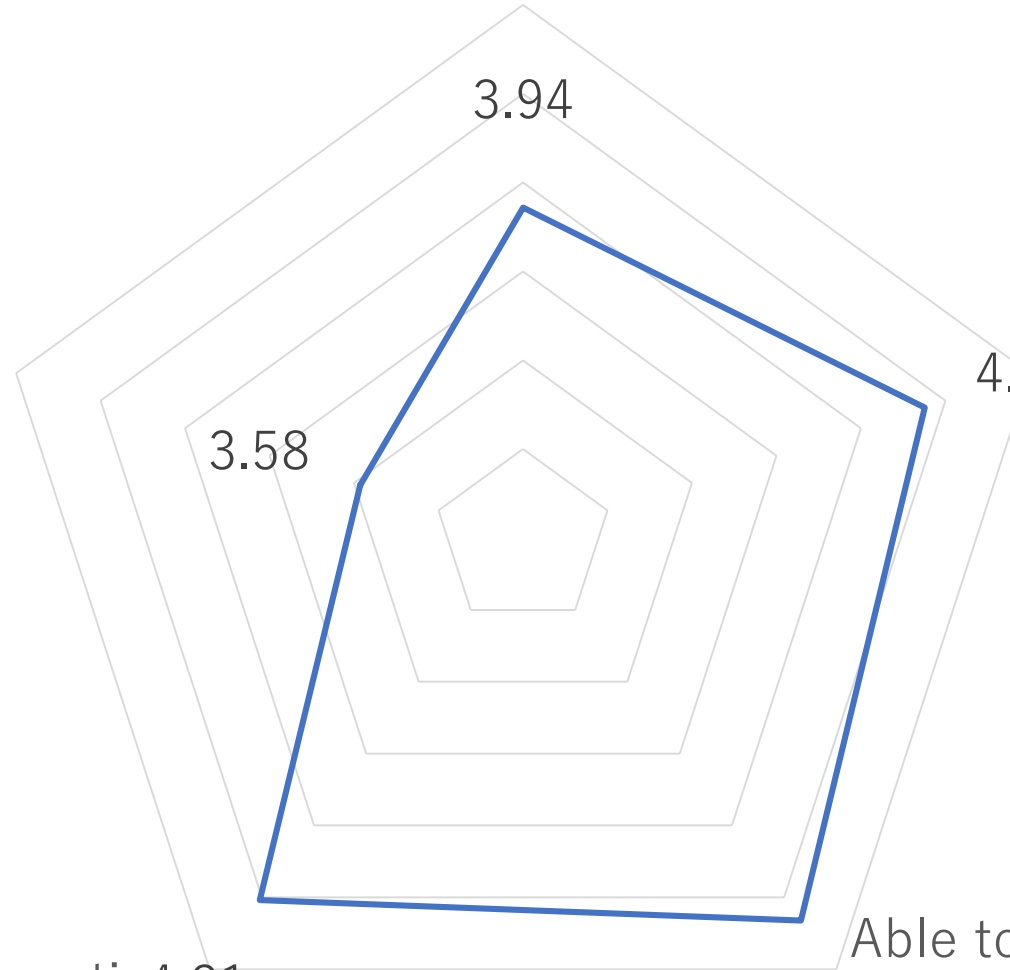
4.15

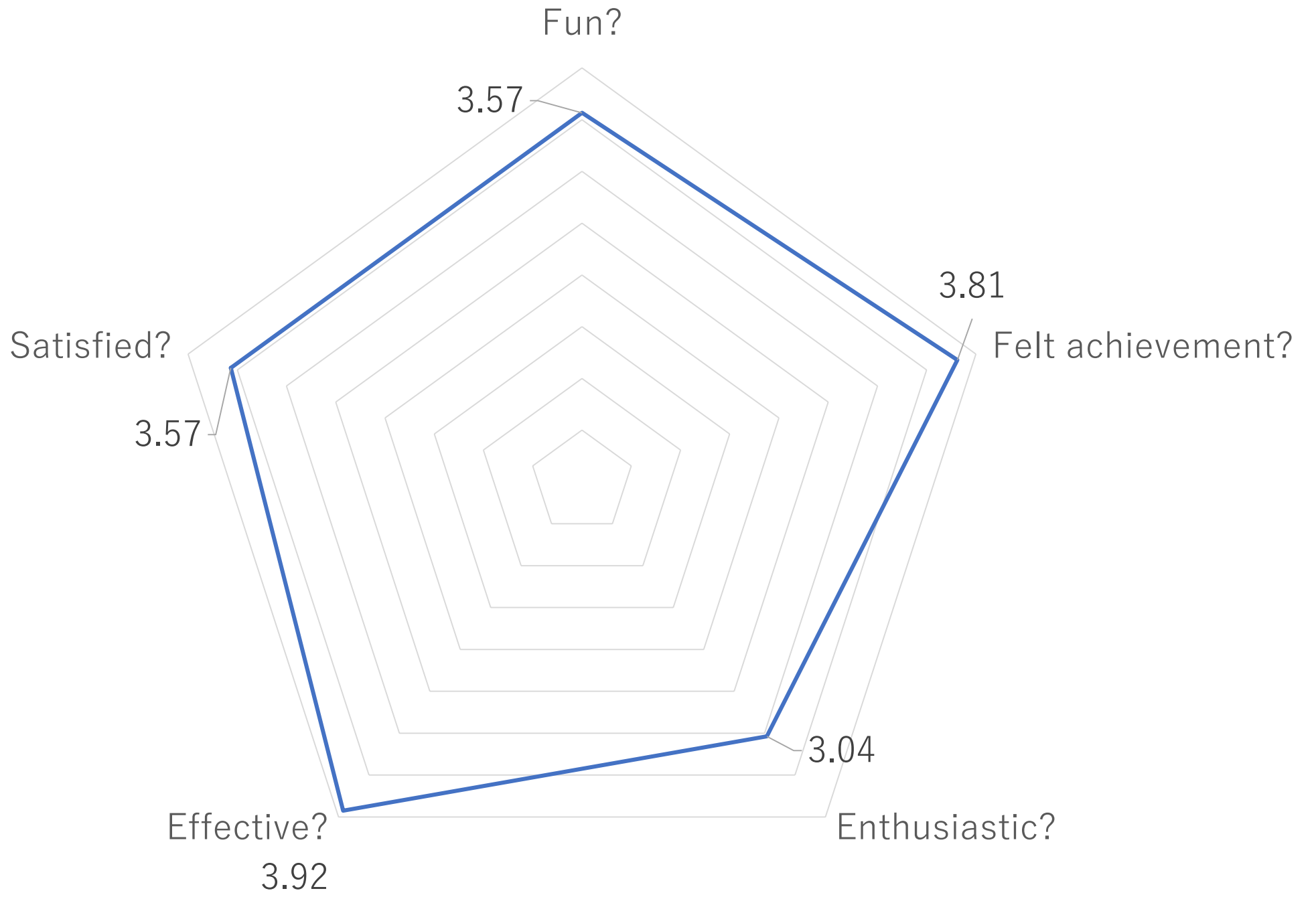
Able to study anytime

4.21

Able to practice repeatedly

4.26





新企画 新たに加える機能

ゲーミフィケーション
ソーシャリゼーション

ADVENTURES IN ENGLISH

with Cambridge



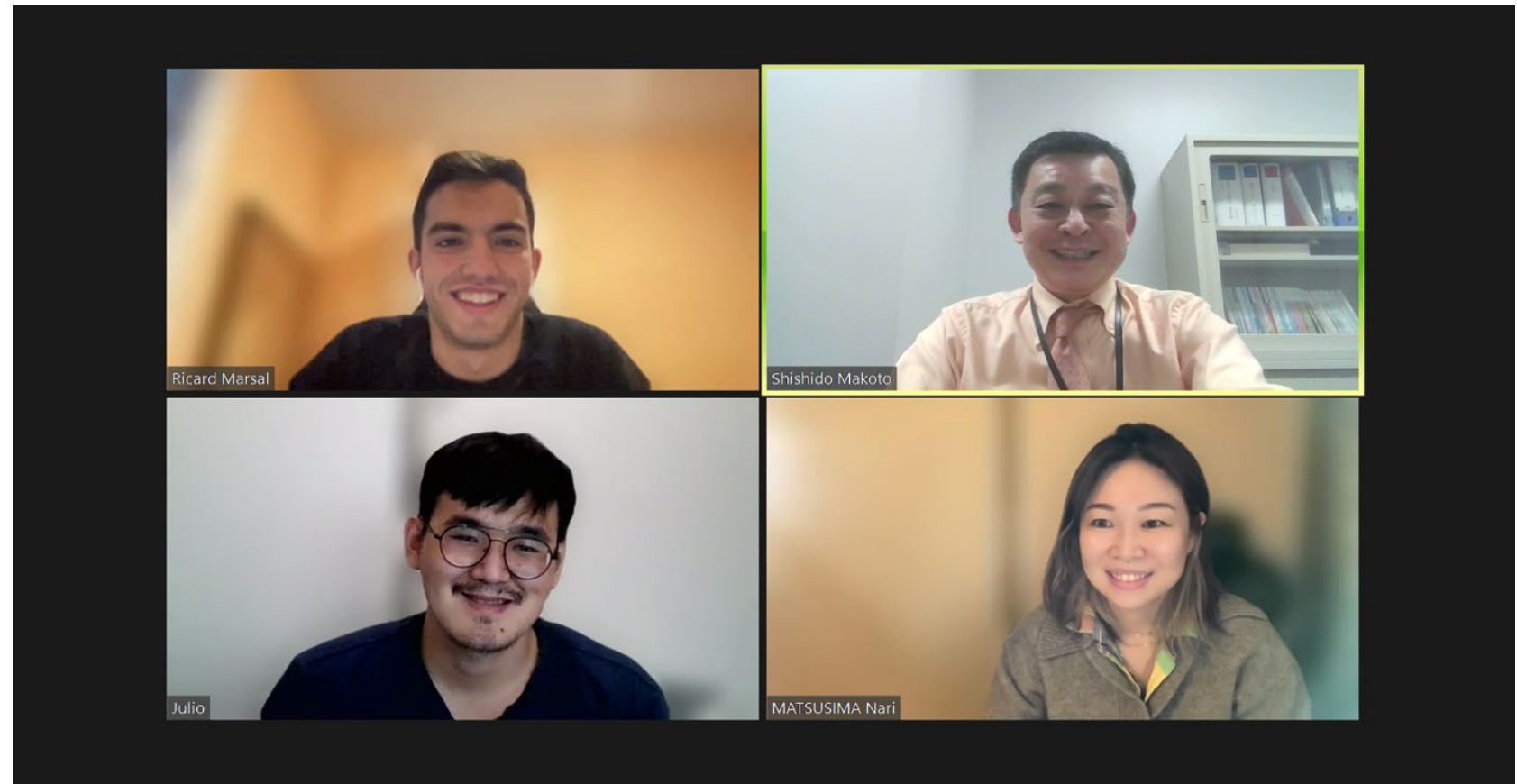
Cambridge Assessment
English

<https://education.minecraft.net/ja-jp/lessons/english-adventures>



<https://www.tducraft.com/>

Breakout room in Zoom



- <https://www.gather.town/>



- <https://www.ovice.com/ja/>

