



Developing AI speakers for EFL (young) learners

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Overview

- AI Speaker
 - Can AI speakers help?
 - Limitations
 - Attempts
 - What's wrong?
- Solutions
- Projects
- Implications

What makes it difficult for EFL learners to become fluent in English?

- Lack of exposure to English
- Lack of opportunities to use English
- Lack of reading experience

Can AI speakers help?



Amazon
Echo



Google Home



Apple
HomePod



Microsoft
Invoke

Limitations of AI speaker for use with EFL language learners

“This study has found that there was limitation in interaction between young learners and AI voice recognition system(Google speaker).”

(J. Seo: 2017) (A) case study of early childhood English learning based on artificial intelligence voice recognition system: MA Thesis

Attempts to use AI speakers to help learn English

- M company distributed AI speakers to schools in Japan.
Results - not known.
- Google speakers were introduced to some private language schools. **Results – not working very well.**

Why are AI speakers NOT working well with EFL learners?

AI speakers are acting very differently from the people EFL learners have been communicating with. (e.g. Teachers or friends)

Why are AI speakers NOT working well with EFL learners?

AI speakers

1. only respond (no elicitation)
2. read out from Wikipedia (too difficult)
3. suggest no goals to achieve (Learners have no reason to use the speaker.)
4. are totally open about topics to talk about
(This makes it difficult for learners to come up with a relevant topics themselves.)

When asked, “Who is Einstein?”

- According to Wikipedia, Albert Einstein was a German-born theoretical physicist who developed the theory of relativity, one of the two pillars of modern physics.
- I'm more focused on being your assistant right now. But if you happen to know any single appliances...
- If you're asking if I've had work done..I'll have you know these are my original features...

Possible solutions

1. Create AI speakers that interact like a real human friend or a teacher.
2. Set goals to help motivate learners to use AI speakers.
3. Elicit ideas from learners as well as respond to learners.
4. Provide tasks to solve through interaction with AI speaker.

First Project



Second Project



An example task: Famous inventors

AI Speaker TBL Activity Sheet
HAND in HAND SB6

School Link 5 (p.74-75)
Extra Project

Make up the table below by asking AI Speaker.

	Wright Brothers	Thomas Edison	Alexander Graham Bell
Year of Birth			
Year of Death			
Country of Birth			
Invention			

Expressions

When was(were) ~ born?

When did ~ die?

Where was(were) ~ born?

What did ~ invent?

= Do you know what ~ invented?

= What is the invention that ~ made?

Implications

- Cassette – Interactive CD– On-line activities – Tablets - AI speakers
- When we had cassette tapes, it helped learners to experience NS utterances.
- CD-Rom, PC, and tablets helped learners to experience role-plays, and communicative tasks.

Implications

Now AI speakers could help learners to experience communication with personas of their interest. This will fill an important gap in English learning in many EFL contexts. (Personalized conversation is missing in EFL.)



Thank you!

Patrick Hwang
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- **Abstract**

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- Developing AI speakers for EFL learners

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- Smart speakers are becoming popular everywhere. Many companies equipped with IT technologies (Amazon, Google, Baidu, etc.) are competing in the global smart speaker market to secure an optimal customer base. They aim to create a smart speaker-based ecosystem in order to attract us to be part of this new, innovative ecosystem.

- Many of us use smart speakers to listen to music, hear the news, or to ask about the day's weather conditions.

- Smart speakers respond to our simple voice commands to let us access information that we need, in a very simple and easy way.

- Prominent players are attempting to integrate AI technologies to get smart speakers not just to respond according to scenarios set for music, weather, news etc., but to collect data and learn from the data how to better communicate with us.

- However, what is the implication of this advent of innovative voice-controlled smart speakers for us as teachers of EFL?

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- The presenter, Patrick Hwang, shares what he discovered from using existing smart speakers, how he got involved in developing AI speakers, and what his overall experiences have been like.

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- The goal of this presentation is to help English teachers and ELT publishers gain insights on how to integrate AI speakers into their field.

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- **Biodata**

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- Patrick Hwang is a current CEO of e-future co. ltd. He completed Dip. TESL and MA in Applied Linguistics from Victoria University of Wellington.

- He taught English at secondary schools and KNUE (Korea National University of Education). His interest areas are corpus linguistics and the development of digital contents for English language learning. He led the development of Smarttree, a comprehensive mobile-based young learner software and e-future e-library, a digital EFL library. He is now participating in developing English language learning modules of AI speakers with engineers from Samsung, NCSOFT, and Yahoo.