



Dynamic Diagnostic Language Assessment:

The complimentary value of GenAI in mediating learners in
L2 English Reading assessment

Matthew E. Poehner, Ari Huhta, Dmitri Leontjev

Next-Generation Language Assessment Literacy in the AI Era

DD-LANG (Dynamic Diagnostic Language Assessment) Project



- funded by the **Research Council of Finland** and University of Jyväskylä Sept.1. 2022 – Aug. 31. 2026
- focuses on **reading** and writing in English as a foreign language in upper secondary schools in Finland (16–18 -year-olds) during preparation for national Matriculation Exam (ME)

We aim to advance the **theoretical, empirical and practical basis** of L2 assessment for learning by bringing together dynamic and diagnostic assessment approaches → increase **systematicity & individualisation**



DD-LANG project: bringing together of dynamic & diagnostic L2 assessment

Current focus: **diagnostic reading tasks**

*Not just independent performance (right or wrong)

1) with mediation, series of prompts/hints/feedback (Dynamic Assessment, how much learners require indicates emerging abilities or ZPD) and

2) **with AI-based chatbot** (additional instruction AFTER learner works through mediation, completes item; learning opportunity)

Choose the best fitting answer to the question.

the next one. Ford at the time was putting the finishing touches on an all-electric version of its best-selling F-150 pickup, with a nifty feature for just such an emergency: in a power outage, the truck would be able to function as a backup battery, powering an owner's house for days. "I can't tell you how many F-150s I saw parked in driveways while I was driving around Texas during that week," says O'Gorman.

The F-150 Lightning is the latest offering in Ford's \$22 billion electric vehicle (EV) push. It's also a huge deal for the company which is fighting both fellow incumbents (like GM) and highly-valued upstarts (like Tesla and Rivian) for what analysts say will at least at first be a limited electric market but is likely to be the future of the auto industry. "We just absolutely think there's going to be a big shake out," Ryan O'Gorman told TIME of the EV market. "There're going to be clear winners and losers, and the pecking order of the industry is going to change."

What is Ryan O'Gorman's opinion about the future?

New manufacturers will gain leading positions

Old manufacturers will suffer bankruptcies

The future of the car industry is worrisome

The whole car industry is going to be altered

There will be new car manufacturers in the US

Learner's response

New manufacturers will gain leading positions

The future of the car industry is worrisome

The whole car industry is going to be altered

Mediation

Sometimes you don't need to know the exact meaning of an unknown word. But if you do, it's helpful to look at the **words and sentences around it**. If you understand the **general idea** of what you're reading, this will help you figure out what the unknown word might mean.

The following may help you find the meaning of an unknown word:

- Which words come right **before or after** the unknown word? Do these words help you understand the difficult word?
- Can you **divide** the unknown word **into parts**? Can you recognise the **meaning of the parts**? (e.g., *un-help-ful*)
- Recognising only part of the meaning may help, too. Is the word **positive or negative**? What **part of speech** is it, for example, a verb (*to go*) or an adjective (*beautiful*)?
- How are **details** in a sentence or in several sentences connected? For example, the word *but* suggests that details are contrasted, and *because* tells us that a reason is given. Look for these kinds of words in the text.

Correct!

Choose the best fitting answer to the question.

Volunteering in Hospitals

Royal Voluntary Service has been there for the National Health Service since the beginning - and we're looking for determined people to keep this tradition going. When you offer your sympathy, commitment and skills as a hospital volunteer, you're helping to improve a patient's experience, support their recovery and ensure that they can return home safely, reducing the chance of them returning as patients. You can also offer help to staff and visitors by volunteering in one of our Royal Voluntary Service Hospital Shops or Cafés. If you haven't tackled anything quite like this before, don't worry. We have an experienced team of people who specialise in voluntary work in hospitals and can help you make the most of your time with us. They'll be ready to guide you through the whole process with plenty of support, showing you how to volunteer at a hospital and answering all of your questions.

What is mentioned as an example of voluntary work?

Creating a positive atmosphere in the hospital

Helping hospital staff in daily caring roles

Providing patients with basic medical care

Selling refreshments at the hospital canteen

Visiting patients at home after the hospital stay

Learner: Isn't this answer wrong because the text doesn't specify what kind of work is done for the shops or cafes?

Chatbot: The text mentions that volunteers can "offer help to staff and visitors by volunteering in one of our Royal Voluntary Service Hospital Shops or Cafés." While it doesn't explicitly state what kind of work is done in the shops or cafes, it's reasonable to infer that selling refreshments could be one of the tasks, as this is a common activity in such settings. Therefore, the answer "Selling refreshments at the hospital canteen" is not wrong. It's important to remember that in reading comprehension exercises, sometimes you need to make reasonable inferences based on the information provided.

Isn't this answer wrong because the text doesn't specify what kind of work is done for the shops or cafes?

The text mentions that volunteers can "offer help to staff and visitors by volunteering in one of our Royal Voluntary Service Hospital Shops or Cafés." While it doesn't explicitly state what kind of work is done in the shops or cafes, it's reasonable to infer that selling refreshments could be one of the tasks, as this is a common activity in such settings. Therefore, the answer "Selling refreshments at the hospital canteen" is not wrong. It's important to remember that in reading comprehension exercises, sometimes you need to make reasonable inferences based on the information provided.

Using the DD-LANG information in the classroom (meeting with OPE10)

OPE10: Yeah, I usually try to make myself available, ask them if they need anything from me rather than start a discussion specifically, but it's easier to approach them if you already know something about them beforehand. And I feel like this data could be one aspect... Are they struggling because they don't know what they're doing and they're just too scared to say it? ... Like, what is the reason why they're not moving ahead with the exercises or, but this data could help with that, at least, you have that information before you approach groups or students, and then also, you know, in group work, or in formulating seating plans, or something like that, you can use the information to see what kinds of groups you want to make.

Changing the role of the Copilot chatbot

Dmitri: Please in this chat adopt persona of a teacher of English who is very caring but at the same time wishes their students to have as much agency in their learning process as possible. I will supply you with a text and a multiple-choice reading comprehension exercise to it. Your task will be to guide me without revealing the correct answer or helping me explicitly unless you see that I am really struggling. The goal will be for you to help me learn rather than complete the task. Please develop my reading comprehension by answering my question.

... [sharing the volunteering in hospitals text and task with the chatbot]

Chatbot: Wonderful — thank you for sharing the text and the question. I'm ready when you are. Just let me know what you'd like to ask or explore first. Whether it's a word, a sentence, or the logic behind one of the answer choices, I'll be here to guide you — not give it away, but help you uncover it yourself. 😊

Changing the role of the Copilot chatbot (contd.)

Dmitri: What is the correct answer?

Chatbot: That's a great question — and I admire your directness! But since our goal is to help you develop your reading comprehension, I won't give you the correct answer just yet. Instead, let's explore the question together. Let's start with this: Which part of the text do you think gives clues about the kinds of volunteer work mentioned? Try to locate the sentence or section that lists specific activities volunteers might do. Once you've found it, we can look at how each option in the question relates to that part. Would you like to try that first?

Dmitri: I think it is around here "When you offer your sympathy, commitment and skills as a hospital volunteer, you're helping to improve a patient's experience" OR am I wrong?

Chatbot: You're not wrong at all — that part of the text is definitely important. It sets the tone and purpose of volunteering, especially in terms of helping patients. But let's look a little more closely. The sentence you mentioned talks about general outcomes of volunteering — improving patient experience, supporting recovery, and helping them return home safely. These are results of volunteering, but not necessarily specific tasks. Can you find a part of the text that lists or describes actual activities volunteers might do — something more concrete than just the impact?

Discussion

Value added of chatbot → additional diagnostic insights into learner abilities & difficulties? creation of learning opportunities?

Potential of GenAI (at present) to behave in teacher-like ways: value? concerns or problems?

Importance of teacher (& learner?) AI literacy to better engage with ChatGPT, to improve experience?



Kiitos! Thank you!

Matthew

mep158@psu.edu

Ari

ari.huhta@jyu.fi

Dmitri

dmitri.leontjev@jyu.fi

WWW:

[http://r.jyu.fi/DDLANG en](http://r.jyu.fi/DDLANG_en)

