What should be the reaction of an LSP teacher¹ to the appearance of tools based on LLM²s?

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Given the widespread enthusiasm for "*ai*" among many human decision makers, teachers should be ready to explain where this technology can be applied in education. There are two main critical points of view: One looks at the technology, as it has appeared, in the hands of large corporations which are opaque and hard to regulate. In this view, these tools could be beneficial, if we can change the management of them by skillful regulation and democratic control. The second kind of critique regards the basic form of the technology, based on pattern recognition in huge collections of language, as inherently problematic. This view suggests a different line of arguments that we need to develop more "convivial" or "**negentropic**" machines which would truly augment human beings in their "range of freedom³" (Illich, 1973). It is certainly not the case that the present trajectory is the only one possible (Acemoglu, 2025). This article considers the situation for language teachers as it presently exists, where teachers have had little influence over the design of the tools. On another level, as citizens, we should be asking for a say on the management and regulation of "*ai*" and also on the development of tools which will have better effects on people's learning and well-being.

I am not proposing a blanket position in relation to "*ai*". My conclusions are not a simple FOR or AGAINST. Furthermore, I think there is a distinction between the best practice in general language learning and what should happen in the field of Language for Specific Purposes.

My arguments regard these technologies as a "*pharmakon*⁴", in the sense that they can be helpful as remedies for a particular problem, but poisonous in the wrong context or the wrong dosage. I believe that teachers ought to define where it is appropriate to use any technological aids, and they have a duty to oppose their use where they will be harmful.

Paul Nation described "*four strands*" of things you need to do to learn a foreign language (Nation, 2007). In this article, I'll take the application of the four strands to general language teaching as a starting point, and then go on to refine why Language for Specific Purposes might take a different line from other more general contexts, such as learning a foreign language in school, learning the local language of a new place, or as a hobby for adults.

These are the four strands which, Nation suggests, should each take up approximately equal amounts of study time:

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¹ Language for Specific Purposes, see the presentation by Cédric Sarré (CATAPULT, 2020)

² The names for this technology are sometimes misleading. That's why I'm using "artificial intelligence" in quotation marks. LLM stands for Large Language Model, although the platforms aimed at students and teachers are not only statistical models of language use, the LLM is a key component of the system. I don't exclude the possibility that, in the future, some other "*ai*" tech may appear which will change these arguments.

³ See Ivan Illich for the description of "convivial" tools, and Bernard Stiegler for the similar concept of "negentropic" technology to counter the present trends towards entropy.

⁴ Pharmakon – I would like to use this term in the way Bernard Stiegler (see for example page 70 in Bifurcate (Stiegler & others, 2021) <u>https://library.oapen.org/handle/20.500.12657/52198</u>) uses it to discuss technology following on from discussions in Plato and Derrida.

- 1. Meaning-focused input reading and listening to another language to understand the writer or speaker.
- 2. Meaning-focused output writing and speaking in another language to be understood by another person.
- 3. Language-focused learning memorising, analysing, investigating language
- 4. Fluency development practice with the aim of increasing the effectiveness of the language user, sometimes this could imply higher speed, but more broadly just better communication with greater ease.

1. Meaning-focused input

LLM-based tools such as chatbots are often able to create a plausible illusion of communication. Their generated outputs relate to the prompts or questions that are fed into them. However, when a learner listens to, or reads, this output, they should be aware that it has been produced on the basis of statistical vectors extracted from a large corpus. There is no speaker or writer, no biographical and no cultural context to them (all machines are cultural products, but not participants in a culture). It doesn't make sense⁵ to ask "what does the bot **mean** by this particular phrase?".

We can and do, of course, project our own meanings into the generated material but that is not the aim of the language teacher. Indeed, progress in foreign language learning happens precisely at the moment when the listener or reader grasps a meaning which is in the "*zone of proximal development*". That is to say a new meaning which the learner had not understood before in the target language. Language learners develop a skill of guessing at meanings, however this should only happen where a meaning actually exists to be discovered.

As teachers, our priority in this area should be to make sure that there is no shortage of study material written and spoken by real people with the aim of actually communicating something. This means **open educational resources** (Knowledge Innovation Centre, 2017) with authentic language use. It would be a poor substitute to generate imitations which are meaningless. There is also a moral danger if society is going to create an environment where people (and especially children) are accustomed to dealing with avatars or machines that seem to be human beings. The risk is that they will come to see other people as similar machines, without the rights to dignity and respect that we accord to human beings.

Another application of "generative ai" could be as a labour-saving device for teachers. LLMs can produce summaries, simplified versions or different kinds of comprehension test. For example, to create exercises where students will try to identify the most appropriate summary of a longer (authentic) piece of writing. This seems to be potentially useful for teachers, although they will need to carefully check such automatically generated exercises.

In the field of LSP, there really can be a lack of appropriate materials - especially when working on narrow specialisations. The issue here is whether the LLMs have had sufficient access to a good corpus of texts, which are for some reason not available to the teacher. I could imagine this happening in large organisations or professional bodies which create their own proprietary language models from internal documents and recordings. In these situations, it could be very beneficial for educators to have access to the language models, even without the training data. However, authentic materials would still be preferred where these are forthcoming.

2. Meaning-focused output

⁵ See (Bender et al., 2021) « the tendency of human interlocutors to impute meaning where there is none can mislead both NLP researchers and the general public into taking synthetic text as meaningful.»

As "*ai*" tools appeared, the first reaction of language teachers was to try to ban them at least from student work that was going to be assessed. In my view, this was the right response. When a student is able to produce writing or speech faster and more correctly with the help of a bot, there are several reasons why the teacher should object:

(a) depending on the tool and how it is used, the student may not be communicating the actual meaning that they intended. How much effort they put into communicating will depend on the student's motivation. See the **engagement matrix**⁶ on this point.

(b) feedback from the teacher becomes less valuable because of the doubt about meaning, and also because any shortcomings, or especially good features, visible in the text may be the result of the technology rather than student learning.

(c) it may be hard to regulate the fairness of assessment if students have different access to different tools. Some may be disadvantaged, and these may be the most hard-working and serious participants in the class who do all the work themselves.

(d) A lot of courses aim to develop skills in critical thinking, time management and research which are best practised when the students are going through the full process themselves. LLM-based tools are usually designed as "*labour-saving*" devices, and they tend to create short-cuts in these areas.

In the field of LSP by contrast, these issues should be reconsidered in the light of differing student needs. It often happens that the students are more expert in the specialized area than the teacher, and this means that feedback relating to the meaning is more likely given peer-to-peer. In these classes, clarifying texts and suggesting improvements will be a useful student activity, even if the text being discussed is partly synthetic or "artificially" authored. Students in this activity will also be required to give a full description of what digital tools they used to create the text, and how they arrived at the finished product.

In LSP classes, making a good choice of tools to help with speech and writing is likely to be a real student need. Teachers should design activities on the basis of needs analysis, which will establish which kinds of documents, presentations and recordings are relevant for particular specific purposes. LSP teachers should be involved in researching the available "bots" and other kinds of "ai helper / agent" and include this information as part of the course content. The LSP classroom is a good place for working on the competences connected with the use of "*ai*" for their students' chosen field.

3. Language-focused learning

After students have finished work on a meaning-focused activity, they frequently go on to look at the features of language that appeared in the study materials. An LLM knows nothing at all about meaning, but it certainly contains a lot of information about language. There are a number of ways it can help:

(a) usage. Bots are a reliable source of feedback on the grammatical correctness of sentences, on genre, collocations, spelling and other features of text.

(b) speech recognition for many languages is quite reliable. This can help with the study of listening materials by producing transcripts.

(c) the work of memorising words and phrases can be structured using a "spaced repetition" algorithm. This is a big part of the task of learning a language, especially in the early stages, but it is well provided by traditional software. A good example is Anki⁷.

(d) summaries and simplifications. Bots can produce these quite accurately as a way of beginning to tackle a complicated text, however this is **not** recommended for use by general language learners. It's far better to follow the usual structure of a reading or listening lesson, which

⁶ A blog post on this about ai in education generally (Levrai & Bolster, 2024) written by teachers of English for Academic purposes.

⁷ see <u>https://apps.ankiweb.net/</u>

will have a **language focus stage** - after students have dealt with the meaning by finding the gist and then more detailed comprehension.

In LSP teaching these same issues apply. Points a, b and c are useful; as they were for general language learning. As for point (d), I do not see a good case for using "*ai*" to summarise and simplify texts that are going to be studied in detail for a focus on language. As I explained above in relation to meaning-focused input, there is a big role for LLM-based tools as labour-saving devices for language teachers. There are lots of ways to manipulate study materials so as to create exercises and tests. However, if learners create study materials for their peers, the process of creation is a form of practice. It would be pointless to automate it.

4. Fluency development

This is an unfashionable part of language learning, but according to Nation, it could be around ¼ of study time. Fluency development involves a number of skills. Foremost are the motor skill of pronunciation, and the recall of lexis, especially in ready-made "chunks". There are fluency aspects to reading, listening and writing too. All of these are kinds of training which cannot be unloaded to technology because they are part of the embodied experience of the learner. Teachers should remember that, when doing fluency practice, students will make a lot of mistakes which they themselves can self-correct. Here, any tool intervening in the process reduces the benefit to the student. Personally checking what they have written, or playing back a recording of speech, is a good step after quick writing/speaking fluency practice.

The requirements for fluency in LSP will be more variable, sometimes it is a key objective, in other cases, students may be mostly concerned with slower asynchronous communication. Or they may only need fluency in one skill – for example "skimming and scanning" a written text. So generally, where fluency is an aim, letting an "*ai*" into the loop is going to be a hindrance. It will be preferable, for example, for students to find practice partners, penfriends and reading circles⁸ comprising real people.

Conclusions

Outside of language learning, in education generally, students and school pupils should be experimenting with the new tools with guidance from teachers. A lot of very familiar procedures – such as essays written for homework, will need to be re-imagined.

In purely symbolic fields of study, like law, programming or mathematics, I imagine that teachers will train their students to use the new tools as an integral part of the course. In fields where teaching depends on a critical investigation of external facts / knowledge – sciences and humanities, it may be more appropriate to have separate training in digital literacy⁹. But learning a new human language is a special kind of task which belongs in a different category from other disciplines. It is not one of the symbolic fields. Language refers to the real world, and beyond that, to the complete range of things that human beings can imagine or speculate on.

Language teachers spend some study time looking at the language as a symbolic field, with rules about grammar, syntax and so on... but half of lesson time will typically be spent focusing on the meaning which human language users communicate. For general foreign language classes, students should not be using "*ai*" if they are focusing on the meaning of language. LSP has different priorities from general language learning, and it should make more room for LLM-based tools in the activities I have mentioned above.

On the other hand, when it comes to language-focused activities, there is a clear usecase for LLM-based tools as aids to the creation of study materials. They can help teachers make

⁸ The Academic Reading Circle (Seburn, 2016) is a methodology applicable to other forms of LSP teaching.

⁹ See <u>https://ailiteracyframework.org/</u> for a competency framework at primary and secondary school level.

better use of the huge range of authentic digital materials now available online by efficiently creating exercises and explanations suitable for their students.

References

Acemoglu, D. (2025). AI's biggest secret: We can shape it.

https://www.prospectmagazine.co.uk/ideas/technology/70087/ai-artificial-intelligencebiggest-secret

Bender, E. M., Gebru, T., McMillan-Major, A., & Shmitchell, S. (2021). On the Dangers of Stochastic Parrots: Can Language Models Be Too Big? L. Proceedings of the 2021 ACM Conference on Fairness, Accountability, and Transparency, 610–623. https://doi.org/10.1145/3442188.3445922

- CATAPULT (Director). (2020, January 24). *Module1 Video 1—Common misconceptions, history and approaches to LSP* [Video recording]. https://www.youtube.com/watch? v=Q4TWwhX76fU
- Illich, I. (1973). *Tools for conviviality*. Harper and Row.
- Knowledge Innovation Centre (Director). (2017, January 30). *The State of Open Education—Dr. Cable Green* [Video recording]. https://www.youtube.com/watch?v=PGkEzEi_La0
- Levrai, P., & Bolster, A. (2024, November 15). Supporting ethical and developmental AI use with the AI Quality of Engagement Matrix [Blog]. *Theory into Practice Blog.* https://theory-into-practice.weebly.com/tip-blog/supporting-ethical-and-developmental-ai-use-with-the-ai-quality-of-engagement-matrix

Seburn, T. (2016). Academic Reading Circles. CreateSpace Independent Publishing Platform.

Stiegler, B. & others. (2021). *Bifurcate: There is no alternative*. Open Humanities Press.