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RESEARCH ARTICLE

Exploring the Impacts of GenAI on English and Applied Linguistics: Implications for a Future-Ready Journal

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Abstract: This perspective paper discusses several key revelations relating to generative artificial intelligence (GenAI) and its relevance to the fields of English and applied linguistics. The article proposes a number of research initiatives and areas for further study, while envisioning the future of the *Journal of English and Applied Linguistics* in the GenAI era.

Keywords: English, linguistics, applied linguistics, GenAI, artificial intelligence

Introduction

Since publishing our review in the *Journal of English and Applied Linguistics* on artificial intelligence (AI)-powered writing tools in 2023, a lot has changed and will continue to change in the field of English and applied linguistics. Primarily, this is a result of the “AI spring” that global industrialized society is currently experiencing. In this paper, I will discuss my perspective on some of the major developments over the last year in reference to teaching and research with generative AI (GenAI) and attempt to chart what seems to be the most salient points of these technologies for our journal, in the hope that it will stimulate discussion, argument, experiments, and research and contribute to the broader field.

In very late 2022, when initially writing our review of AI-powered writing tools, ChatGPT was still in

its infancy, although the underlying architecture had been around for several years (Vaswani et al., 2017). It appeared to us that the situation was somewhat more straightforward than we know now. Looking back on scholarship at those early stages of ChatGPT’s public release, while we found it exciting, I personally viewed the effects of such a tool on education and applied linguistics as fairly limited to textual plagiarism and perhaps some classroom activities. Maybe this was a result of my former experiences with the basic and easily confused chatbots of the early 2000s. I felt that it would have some pedagogical value as a chatbot for assisting students practice English and perhaps generate basic text that could be further augmented for nefarious purposes by combining use with translation software or automated paraphrasing tools, which we began researching in the early 2020s (see

Roe & Perkins, 2022, for a review). I had no issue in viewing ChatGPT as somewhat equivalent to the other AI tools that students were using at that time in the English language classroom, such as those for finding sources, making text recommendations, or translating from another language. I was not aware that the “AI spring” was beginning, nor that many successors (Bard, now Gemini; Claude; and many others) would follow suit, nor that Microsoft and Google would be rapidly (perhaps too rapidly) implementing GenAI into the interfaces of their search engines. At the time of writing, text generation has now been followed by image and audio generation, and the newest model from OpenAI—Sora, yet to be released to the public—can create high-definition, realistic videos from text instructions. The pace of development is staggering and will transform much of our society—one way or another. In academia, different camps are beginning to splinter off, and diverse perspectives on the value, risks, and politics of GenAI are now crystallizing, while a body of research literature begins to take shape.

From an educational perspective, the abilities of ChatGPT have also been demonstrated to be greater than I had thought. The model has shown its worth by passing bar examinations, demonstrating an ability to answer almost any question (Anders, 2023), and showing an ability to complete a variety of different tasks (Niedbał et al., 2023). At the same time, awareness of the potentially serious negative impacts of GenAI are growing, including the copyright implications of training GenAI models and the environmental impact of GenAI tools, given the high level of carbon emissions required in their production (Patterson et al., 2021). Other concerns include the creation of deepfakes, the production of false information, the use of GenAI to facilitate cybercrime, and the production of fabricated information and hallucinations (Emsley, 2023; Perkins, 2023). Less focus is now on the potential of a destructive, awry superintelligence, suggesting that public understanding is starting to see GenAI for the very real, imperfect, yet impactful thing that it is—and not a science fiction movie.

However, it is also understandable that there are doubters—those who begin to wonder whether GenAI is “living up to the hype” or will be merely a flash in the pan. This is a reasonable take, as we are all familiar with the news cycle and the tendency for exaggeration in the hopes of attracting readers. Consequently, we are increasingly flooded with news articles (see Roe

& Perkins, 2023, for an analysis of the catastrophic way that AI was portrayed in news headlines), tweets, posts, and media reports on GenAI. Even writing for an academic audience on GenAI has started to become difficult—such is the multitude of (often conflicting) research being produced, that we may ask “where do we start?” when researching the topic. Consequently, “AI fatigue” has become a real phenomenon—but one that we should be cautious not to let get the better of us. When we are faced with such an onslaught of information, it can be overwhelming—but I believe that GenAI is, and will continue, to live up to the hype, making it unlikely to be a passing fad. We are just scratching the surface of the capabilities brought to us by these new technologies, and as they develop further, changes will continue to disrupt many aspects of our social and professional lives. If we consider the iterative nature of technology over relatively short periods, for example, from the first mobile phone to the smartphone era, what we will see in the coming years represents a step-change for society.

For readers of this journal—researchers, academics, practitioners in English teaching, applied linguistics, and education—we must understand our place in the field and contribute our unique insights and perspectives. GenAI tools are at their core linguistic—they produce language in various forms. While they are highly technical, there is much to be said for our place in researching them from qualitative, interpretive, and social perspectives, and not just in the fields of computer science. This especially includes their use in education, including English or foreign language teaching and their use in applied linguistics research and scholarship.

A Call to Action for GenAI Scholarship in English Education

Research has shown that students and teachers have different perceptions of how acceptable it is to use GenAI tools in education (Barrett & Pack, 2023), and from my own experience, among professional educators, the opinions on their use also vary widely, as does familiarity. It is not unreasonable to assume that most language teachers worldwide have only a very cursory understanding of GenAI or even no understanding of it at all. We are still in an early adoption phase. Understanding how much awareness educators and students have of these tools then is a

pressing area for future study in diverse contexts and cultures of learning across the globe.

This is especially important as there is convincing evidence that using GenAI can benefit the learning process (Niedbał et al., 2023) and some of the many potential affordances of GenAI for language learning include real-time conversation, immediate formative and corrective feedback, natural language explanations of vocabulary in contexts, instant generation of texts of specific registers and genres, dictionary definitions and examples, and machine translation (Kohnke et al., 2023). However, we do not know just how effective specific activities or uses are for different groups of students, and we also do not know the limitations or negative educational effects of these tools—so critical research should also be welcomed. In this area, it is reassuring to see a growing body of pioneering research around critical studies in AI and education (AIED; Holmes et al., 2022; Holmes & Tuomi, 2022). That said, until we can draw solid conclusions from several large, empirical, cross-cultural studies, we will not have a consensus on efficacy and best practice for using GenAI in English teaching or in the teaching of other foreign languages. Even when this occurs, more social research will be needed on teachers' and students' roles, their self-identity, and their needs—especially given that different individuals will potentially bring with them cultural and technological differences that may affect their use (Chiu, 2023). In other words, future-ready, culturally informed pedagogies that incorporate GenAI are high on the agenda.

Much like with the COVID-19 pandemic, the advent of GenAI has demonstrated the strength of collaborative analysis in academia to try and solve societal problems, and academic and nonacademic institutions are now coming together to investigate and recommend ways forward for GenAI in education. The United Nations Educational, Scientific and Cultural Organization (UNESCO) has released a number of publications that may serve as good starting points for educators and researchers who wish to develop their understanding of how to use it in the classroom. Equally, UNESCO guidance suggests that GenAI activities should be codesigned by learners, teachers, and researchers—therefore, we should seize the opportunity to make our voices heard, rather than get lost among the commercial interests of “big” EdTech. With that in mind, we must also try to sharpen our own critical thinking skills and not just those of our students.

What I mean by this is that when we hear of new GenAI tools that may enrich our teaching from a linguistic approach or help us with solving an educational problem, we should maintain a degree of caution. It is known that GenAI language models reproduce biases and culturally limited interpretations of the world, and we need to recognize and share this information with our students—GenAI is not an arbiter of truth and, conversely, can be a source of misinformation.

We should not miss the chance to reflect on the lessons that have presented themselves over the last two years because of technological solutionism. One of these is GenAI text detection technologies, an example of “jumping the gun” that occurred in many educational institutions. The speed with which these applications were released to the public allowed little breathing room—as a result, as GPT models evolved, it became clear that GenAI text cannot yet be reliably detected (Perkins, Roe, et al., 2023; Sadasivan et al., 2023). There is no answer as to how many students were affected by unjust technologies which also happen to be biased against non-native speakers of English. At the same time, it is highly probable that many students have been able to pass assessments by claiming authorship for GenAI-produced works. As a result, traditional modes of assessment such as essays are now being questioned, and new modes of incorporating GenAI, such as AI Assessment Scales (see Perkins, Furze, et al., 2023), are being proposed.

The validity of GenAI in student work is another area that requires insight. One of the major, open questions that the field needs to tackle is how we should deal with student GenAI written work. Perhaps we can follow a cue from what established researchers who submit to academic journals are doing—in a study of institutional publishing houses, we noted that GenAI is not prohibited in the production of manuscripts and is even in some cases encouraged (Perkins & Roe, 2023). As a result, I believe that while GenAI text detection software is not without its use as a diagnostic or learning tool, it cannot at present be used in a way that punishes students or accuses them of GenAI written work in the classroom—the risk of a false positive is just too high and well-documented in popular media (Klee, 2023). Further to this, if we continue to try to take a punitive approach, we will continue to engage in an unwanted arms race that wastes resources. For that reason, research approaches should start to engage with ways that we can retain the value of written academic

work while understanding that we may be moving towards a “post-plagiarism world” as technologies progress (Eaton, 2023).

Impacts in Applied Linguistics Research

In applied linguistics research outside of the classroom, GenAI is also having an impact. GenAI tools are increasingly being used as a “copilot” or being used to produce works regarding itself (Stewart, 2023). At the same time, GenAI as a research tool or assistant poses certain problems—ethical issues include how the data are put together (copyright arguments), the carbon emissions used to train language models, and the fact that GenAI tools may perpetuate inequalities and reflect structural discrimination. On the subject of academic capital and inequality, using GenAI tools even to conduct literature searches may equally leave us open to the Matthew effect (Merton, 1968) in which highly cited researchers may benefit from further algorithmic biases, reinforcing inequalities and limiting our ability to engage with new authors. Therefore, GenAI as a research tool may be questionable from this perspective.

Other risks to the future of applied linguistics research are not quite so visible or have not yet begun to appear, but we may anticipate them. As tools like ChatGPT are trained on the internet, and the internet is becoming flooded with GenAI-produced media (University College London, 2023), a recursion risk is likely. GenAI tools are known to contain racial, ethnic, and gender biases; these will be intensified and rehashed again and again, possibly amplifying their visibility. This means that taking big-data approaches to studying linguistic phenomena, such as corpus linguistics, may become less tenable—as it is impossible to know what is “human authored” and what is not. Corpus linguists have long argued for the use of corpora to analyze natural language and teach foreign languages, but due to a lack of mass access, capital, user-experience design, and other factors, tools like ChatGPT have captured the imagination of the public in a way that could not previously be achieved (Crosthwaite & Baisa, 2023). Researchers in corpus linguistics have convincingly argued that now corpora are back “in vogue,” and those working in this area may be able to leverage this to their advantage. As a result, even fields that were traditionally seen as being “overtaken” or potentially replaced by tools like ChatGPT now have a compelling task, to combine the use of traditional

corpora techniques for teaching and research with new GenAI technologies. In other areas of linguistic research, for example, discourse analysis, which may use texts collected from the internet, other challenges emerge. For example, how effectively can one conduct a thematic analysis, content analysis, or qualitative assessment of the meaning of texts if we are not sure whether they have been produced by humans? Bot farms and fake actors are likely to perpetuate and become increasingly more sophisticated—does this make it impossible for us to gain true insights into peoples’ opinions in the online space? Will face-to-face data collection become the gold standard for social and linguistic research?

One final point I would like to end on is to highlight that English teaching and applied linguistics has always had an element of social critique, activism, and criticality. GenAI tools are primarily Western cultural products which have implications for language learners and researchers and are embedded in relationships of capital, politics, and an arms race of technological solutionism. Meanwhile, our field has moved to focus on inclusion, inequality, and structural barriers that affect learners and educators. Questions that remain in this area include whether the availability of these tools in English as a default benefits native English speakers or whether it provides a way for non-native English speakers to challenge long-standing biases in academia. Does it remove structural obstacles that non-native speakers may face or enhance them? And will the increasing use of GenAI have the ability to save languages from extinction, or will it accelerate an English hegemony?

Looking Forward

In this short perspective paper, I have tried to touch on as many of what I feel are the big issues as possible, setting the scene for the *Journal of English and Applied Linguistics* as a potential site for field-leading social research on GenAI in English teaching, learning, and linguistics research. To summarize the flood of literature being generated each day would be an impossible task—but we should welcome this deluge and draw from it what we can—without succumbing to AI fatigue—because the reality is that the questions and effects are many, and tools such as ChatGPT are likely to undergo further developments in their complex reasoning abilities and become more

powerful (Wu et al., 2023). Recent release of video-to-text tools only confirms that this will continue in future. A concerted effort should be made by applied linguistics researchers and educators to carve out our niche, break new ground, and create a solid foundation for the future of our field in a changing world.

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Author's bio profile

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Statement of Originality

"I attest that this work is the result of original study, that it is not currently under review in other journals, that it was not published before in any format except in abstract form in conferences/university repositories, and that its similarity index with a similarity detection software is 10% or below."

Declaration of Conflict of Interest

No conflict of interest is noted in producing this article.

Declaration of AI Use

No chatbots, GenAI applications, translations, or paraphrasing tools were used in the creation of this manuscript.