Generative AI and its Potential Implications for EAP Practitioner Scholarship

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There has been a growing institutional drive for English for Academic Purposes (EAP) practitioners to engage in scholarship in recent years. This is driven by a recognition that EAP is a rapidly evolving field that requires ongoing research and innovation (Davis, 2019; Ding & Bruce, 2017; Webster, 2022) to keep up with the changing needs and expectations of students, peers, and academic institutions. This paper proposes that GenAI (General Artificial Intelligence) tools have the potential to revolutionize the field by facilitating EAP practitioner scholarship. These tools can be used to enhance the research process, from finding the relevant literature, to data collection and analysis, and from writing to manuscript preparation and publication. They can help EAP practitioners to improve the quality and rigor of their scholarly outputs, while also making publishing more efficient and accessible. By leveraging the power of AI, EAP practitioners can overcome some of the challenges associated with traditional research and scholarship, such as time constraints, language barriers, and limited resources. The paper begins by outlining the recent impact of ChatGPT, then proceeds to examine the significance of scholarship for EAP practitioners. Subsequently, it argues for the integration of GenAI-powered tools to accelerate the scholarship process and enhance the quality of scholarship outputs for professionals in the field of EAP. However, the paper also cautions against the temptation to replace human work and thought with machine-generated text.

The ChatGPT Revolution

ChatGPT (Generative Pre-trained Transformer) is an OpenAI-developed large language model that makes use of artificial intelligence to generate texts similar to that produced by human beings. The release of ChatGPT in November 2022 reflected a turning point in language technology with the language model showing its capability to understand and respond to naturalistic language inputs. It can be trained to do specific tasks, such as completing a half-written sentence, answering questions, assisting with writing, acting as a research assistant, offering individualized feedback, and helping people communicate more effectively. The fact that it can learn and grow better with time,

potentially makes it an extremely promising tool for carrying out research and scholarship in higher education.

The emergence of Generative Pre-Trained Transformer 3 (GPT-3) has caused much excitement but simultaneously sparked controversy and debate among academics worldwide about its use and application. Scholars are mainly concerned with the ways in which it could support researchers and academics' work and how it might be used and misused to negatively affect research and scholarly works (Chan, 2023; Lund & Tang 2023). These tools can allow scholars to utilize the capabilities of AI, which can serve as powerful resource that can assist EAP practitioners in synthesising information, generating ideas, and enhancing the overall quality and efficiency of their work. However, there are concerns regarding the ethical use of LLMs such as ChatGPT in academic research with a growing anxiety that researchers may rely too heavily on these models, resulting in unfair and unreliable, or even plagiarised work.

EAP Practitioner Transitioning into Scholarship

These developments in GenAI are relevant for the English for Academic Purposes (EAP) practitioner transitioning into scholarship writing. As the EAP sector continues to change and evolve, scholarship has been promoted actively as a desirable EAP practitioner activity for several years now (Webster, 2022). Yet, works published by EAP scholars remain low. Du et al.'s (2022) study on 107 articles published in the Journal of English for Academic Purposes and English for Specific Purposes found that research by and about EAP teachers continues to be an underdeveloped area within the field. Similarly, Bell (2022) points out that research into EAP methodology is far from adequate. Thus, even though scholarship has been recognized as a key element of teacher professional development (Martin, 2014) to give educators in EAP the desired credibility and status in higher education (Ding & Bruce, 2017), its uptake has been slow. Whong (2023) makes the case for EAP practitioner scholarship by suggesting, "for those who teach academic language in particular, it is important that they 'practice' academic writing as a product of systematic, academic, peer-reviewed exploration" (p. 4) In effect, publications demonstrating scholarship are seen as a way forward to

enhance the professional advancement of EAP practitioners (Davis, 2019) and increase their professional standing among students and peers in universities. As a way forward, Godfrey and Whong (2020) recommend a collaborative scholarship model between EAP research and practice, whereby not only can EAP researchers and practitioners work together on a practitioner-led scholarship project but a partnership framework that also allows for EAP teachers to work with content teachers to boost scholarly activities.

Defining Scholarship in EAP

Scholarship here refers to activities associated with educators in teaching track careers in higher education settings, which can include a range of outputs such as blogs, reflections, and reviews, in addition to research articles. Shulman (2001) defines scholarship as work that teachers do, which is peer reviewed, critiqued, exchanged with other members of the professional community, and made public so that others can build on this work. Smith (2015), however, sees it as any form of teacher inquiry that is made public, thereby offering a more inclusive perspective on scholarship. The lowered expectations and requirements in submission of scholarship outputs as compared to top-tier journal articles allows greater scope for small-scale, practitioner-based inquiry and research to be formally recognised at the institutional level (Leathwood & Read, 2013). Within the EAP sector, these different forms of scholarship writings can facilitate increased understanding and sharing of practices among members of the community of practice, thereby building a credible body of knowledge in this area (Borg, 2013).

Challenges to EAP Practitioner Scholarship

But producing scholarship writing can be demanding owing to the specific and stringent requirements of individual publications (Huang et al., 2018). Moreover, where the appropriate genre knowledge is lacking, writing and publication attempts are unlikely to be successful (Tardy, 2009). This is made even more difficult as EAP practitioners tend not to get support with research from peers and few undertake PhDs (Ding & Bruce, 2017). The inability to take up PhD supervision disadvantages EAP teachers in research and scholarship because they lose a valuable opportunity for

training in conducting research and research writing (Tusting et al., 2019). Thus, without support, it appears that carrying out research as well as the writing and publication processes all present substantial challenges to the EAP practitioner from engaging in scholarship.

Much has already been written about the challenges of scholarship and research writing (see for example, Habibie & Hyland, 2019). Producing work that is publishable depends not only on in-depth subject knowledge and an awareness of what is valued in the field, but also the ability to write effectively in ways that conform to the expected stylistic and disciplinary conventions (Huang et al., 2018). In fact, even experienced researchers can find publishing in reputable journals rather demanding. As a native speaker of English, Casanave (2019) argues that publishing has become even more difficult for her because of invisible factors, such as expertise, patience for publication, overwhelming research information and the ability to find new ways to approach and extend existing theories. As a result, the lack of writing and publishing experience along with the need to take reviewers' and editors' comments onboard can make the prospect of engaging in scholarship especially intimidating for novice writers in EAP.

Additionally, EAP teachers are employed on the contractual terms of staff on teaching track positions, requiring them to teach a high number of hours compared to faculty on research track positions. The majority of EAP practitioner's work is consequently limited to teaching and administrative duties. Practitioners point out that this heavy teaching load means that they do not have much time left for scholarship, especially because publishing can be extremely time-consuming, and EAP teachers do not get sabbaticals and other forms of research support from universities to publish (Davis, 2019). Some language centres in universities have attempted to address this issue by allocating dedicated hours to scholarship in teachers' work schedules but many EAP teachers continue to cite time as the biggest challenge for engaging in scholarship.

Role of Generative AI in Facilitating EAP Practitioner Scholarship

Considering the needs of EAP teachers transitioning into scholarship and the challenges they face; this section of the paper will focus on how large language models and other Gen AI tools can

assist EAP practitioners with scholarship in different ways while scaffolding their research and writing process:

Research Assistance

EAP practitioners can use ChatGPT and other tools for assistance in conducting research. The large language models can provide relevant and recent information on EAP-related research methodologies, data analysis techniques, and conform to the norms of academic writing within the field. It can help scholars effectively navigate the vast amounts of information available to them and produce innovative and critical insights. For instance, IBM Watson Discovery is an AI-powered search tool that can help find relevant research papers, articles, and other documents, and also provide concise summaries of articles, which can help cut down the background reading time for busy EAP teachers cum scholars. Web browser extensions such as Research Rabbit can help them look for useful EAP and Applied Linguistics literature in multiple databases, save and organize results, and generate references. Similarly, Semantic Scholar is a search engine that uses AI to help find research papers and articles based on search terms within EAP literature. Different types of AI tools could be utilised throughout the EAP scholar's research process to pose hypotheses, design experiments, write manuscripts, and understand scientific results (Thorp, 2023), which could be particularly beneficial in settings where funding and human expertise for academic literacies in English may be limited.

This could accelerate educational research in EAP by letting automated tools perform many routine research tasks. Instead of spending precious time on previously considered time-consuming aspects of research such as finding relevant literature and managing references as part of the research process, the emphasis of the EAP scholar can now shift to the critical creation of new knowledge. But writers will need to be cautious and alert to the fact that the responses generated by chatbots, while well-written, are not guaranteed to be accurate. Texts generated may have incomplete or fabricated citations, highlighting some of the shortcomings of language models. These may be solved in time as GenAI LLM models learn to process prompts in a more nuanced way and

have access to the most up-to-date sources. However, in the meantime, scholars will need to double-check all information before it is sent for publication.

Writing Assistance

ChatGPT can provide EAP practitioners with assistance in writing academic texts such as research proposals, literature reviews, and research articles. The model can help practitioners with grammar, syntax, and vocabulary and provide feedback on the overall structure and coherence of their writing. GenAI tools, such as AI-powered writing assistants and grammar checkers (e.g., Grammarly) are already being used to provide suggestions on structure, grammar, and vocabulary. These can help teachers improve the clarity of their writing, which in turn can increase the chances of their work being accepted for publication. While Zotero and Mendeley are examples of two reference management tools that can help collect and cite sources used in a study, Ref-N-Write is an AI-powered writing assistant that can help non-native English speakers improve their writing and research skills. Many of these tools can also allow sharing of articles and folders for people collaborating on a writing project. In view of GenAI's capacity to automate many writing tasks, the EAP scholar need not spend too much time writing summaries and proofreading. The priority of writing, therefore, in current times, changes from polishing and presenting the text to new and innovative content, i.e., from the text, which is a medium for the knowledge, to the knowledge itself. This shift in emphasis suggests a disruption in the way EAP scholars work, conduct research and write.

But given that LLMs are made using digital data, it is crucial for researchers to understand the unintended biases that are already coded into these models, which may affect their output of written tasks through biased linguistic choices. Rich and Gureckis (2019) examine several causes of bias in AI outputs, including "small and incomplete datasets, and biased inference and evaluation processes." Moreover, poorly paraphrased ideas from these tools can contribute to distortion of the original content (Bouschery et al., 2023; Gao et al., 2022), leading to reproduction of biased or prejudicial information in written outputs. This can remind both novice and experienced EAP

scholars to do their own editing and proofreading too when using GenAI tools to support their writing.

Data Analysis

GenAI tools can assist EAP teachers with data analysis by providing tools for data visualization, statistical analysis, and machine learning. These tools can help teachers analyze data more efficiently and accurately and can automate data preprocessing tasks such as cleaning, formatting, and organizing data. They can help in handling large datasets, identifying and handling missing values, and performing data transformations. This saves time and ensures that the data is in a suitable format for analysis.

Since EAP scholars often work with textual data, such as academic articles, essays, or research papers, they can use AI tools that employ natural language processing techniques to assist in text analysis tasks. They can help with tasks like text classification, sentiment analysis, topic modelling, and extracting relevant information from large corpora and can aid in identifying patterns, themes, and key concepts within the text data.

AI-powered visualization tools can help EAP scholars create compelling visual representations of their data as these can generate charts, graphs, and interactive visualizations to present findings effectively. Visualizations can aid in understanding and communicating complex information to others within the EAP community of practice, making it easier for EAP scholars to present their data visually and engage their audience. For example, Tableau is a data visualization tool that uses AI to help users analyze and understand their data while providing a range of features such as data blending, predictive analytics, and natural language processing.

These tools can also be used to assist EAP scholars in performing various statistical analyses as they can automatically calculate descriptive statistics, conduct hypothesis testing, perform regression analysis, and apply advanced statistical techniques, which are particularly useful as it can enable the EAP teacher-practitioner to analyze data without requiring an in-depth understanding of complex statistical methods.

Additionally, cloud-based tools such as IBM Watson Analytics, can enable users to discover insights in their data. These technological advancements present an opportunity for EAP researchers as they can now focus on the findings of their data analysis and take the time to understand the reasons behind what they find, thereby using their freed-up time for deduction and interpretation of their results.

In order to keep themselves relevant at a time when so much of work within EAP can be completed by GenAI tools, EAP scholars, perhaps more than ever before, need to demonstrate the contribution they can make to the field through their own scholastic inquiry and human thought.

Peer Review and Publication Support

GenAI tools can help the EAP scholar-practitioner with the peer review process. These tools can help teachers receive feedback on their work from a wider range of reviewers, - both human and machine - which can increase the quality of their work and improve its chances of being accepted for publication. While GenAI tools may not replace the expertise and subject knowledge of human peer reviewers, they can help assess the relevance of a scholarly paper's content or by analyzing the context and semantic meaning, they can provide suggestions on strengthening arguments, clarifying concepts, or identifying potential gaps in the research. But it is pertinent for EAP authors and researchers to note that while these tools can be useful in the peer review process, they should not be relied upon exclusively and human peer review is still necessary to ensure the quality and accuracy of articles. At this stage, it is important that GenAI tools be seen as aids rather than replacements for human peer reviewers. They can significantly expedite the review process, improve the quality of papers, and reduce the burden on scholars, but the final evaluation and decision should ultimately rest with qualified human reviewers.

Additionally, GenAI tools have also been recognized for their ability to provide support for the publication process in EAP by providing tools for formatting, citation management, and manuscript submission. Some of these tools include Latex, Overleaf, Typeset and Manuscripts, which can enable EAP teachers prepare their work for submission to academic journals and increase the

chances of their work being accepted for publication. Many of these tools offer templates and pre-defined document styles that adhere to discipline-specific journal guidelines, ensuring that the publication meets the required formatting standards. Manuscript and Typeset platforms often integrate with popular journal submission systems within EAP and can streamline the process of submitting the manuscript to journals by automatically generating the required submission files, ensuring proper formatting, and transferring the manuscript directly to the submission system. This simplifies the submission process and reduces the chances of errors during submission. AI-powered tools such as Manuscript Matcher can also help find the best journals in EAP and Applied Linguistics to publish a research based on the content of the manuscript. These can provide databases with information about various journals, including their scope, impact factor, and submission guidelines, and suggest suitable journals based on the EAP research topic chosen.

Concluding Remarks

EAP practitioner scholarship is necessary to reaffirm EAP's status as an academic field. EAP has a prominent role within universities as a 'specialist, theory- and research-informed branch of English language and literacy education' (Ding & Bruce, 2017, p. 53). Its status within universities as a legitimate academic discipline has been agreed upon by scholars (see for example, Charles & Pecorari, 2016, Hyland, 2006); a status it can only continue to hold and enjoy if scholarship and publication are regarded as important elements of EAP practitioners' work in addition to teaching, demonstrating that the field is contributing to both theory and practice. Otherwise, there is a danger that EAP might forever be labelled down as a 'peripheral support service' in higher education (Ding & Bruce, 2017, p. 3).

GenAI technologies hold much promise for facilitating EAP practitioner scholarship because these tools can expedite the research, writing and publication process. Producing scholarly outputs and writing research papers is a time-consuming and complex task that can take years to master. It is even more challenging for EAP teachers transitioning into scholarship with little to no experience in publishing. Working with an effective GenAI tool can not only save time for these scholars but

could also level the playing field for EAP researchers worldwide (e.g., for non-native speakers of

English, scholars working in distant areas with little help, and for those employed in under-funded

institutions). By taking care of language-related issues and providing assistance to scholars with basic

background research and data analysis, LLMs can allow academics in EAP to focus more on creation

of knowledge that requires higher-order skills instead of spending hours on lower-order tasks such

as finding relevant sources and proofreading. However, for any meaningful integration of GenAI

tools into EAP scholarship, the EAP professional will need to painstakingly check for existing biases

and inaccuracies in machine-generated text before using the information and submitting their own

work as a scholarship output.

References

Atlas, S. (2023). *ChatGPT for higher education and professional development: A guide to conversational AI.* College of Business Faculty, University of Rhode Island. https://digitalcommons.uri.edu/cba_facpubs/548

Baidoo-Anu, D., & Ansah, L. O. (2023). Education in the era of generative artificial intelligence (AI): Understanding the potential benefits of ChatGPT in promoting teaching and learning. http://dx.doi.org/10.2139/ssrn.4337484

Bell, D. E. (2022). Methodology in EAP: Why is it largely still an overlooked issue? *Journal of English for Academic Purposes*, *55*, 101073.

Berg, C. (2023), The Case for Generative AI in Scholarly Practice, 1-15. http://dx.doi.org/10.2139/ssrn.4407587

Borg, S. (2013). *Teacher research in language teaching: A critical analysis*. Cambridge University Press.

Bouschery, S. G., Blazevic, V., & Piller, F. T. (2023). Augmenting human innovation teams with artificial intelligence: Exploring transformer-based language models. *Journal of Product Innovat*ion Management, 40(2), 139-153.

Casanave, C. P. (2019). Does writing for publication ever get easier? Some reflections from an experienced scholar. In P. Habibie & K. Hyland, *Novice writers and scholarly publication: Authors, mentors, gatekeepers* (pp. 135-151). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-95333-5

Chan, A. (2023). GPT-3 and InstructGPT: technological dystopianism, utopianism, and "Contextual" perspectives in AI ethics and industry. *AI and Ethics, 3*, 53–64. https://doi.org/10.1007/s43681-022-00148-6

Davis, M. (2019). Publishing research as an EAP practitioner: Opportunities and threats. *Journal of English for Academic Purposes*, *39*, 72-86.

Dergaa, I., Chamari, K., Zmijewski, P., & Saad, H. B. (2023). From human writing to artificial intelligence generated text: examining the prospects and potential threats of ChatGPT in academic writing. *Biology of Sport, 40*(2), 615-622.

Ding, A., & Bruce, I. (2017). *The English for academic purposes practitioner.* Palgrave Macmillan.

Du, J., Li, W. & Li, Q. (2022). Who Are We, What Can We Do, and What Do We Think? Review on EAP Teacher Development. *Chinese Journal of Applied Linguistics, 45*(4), 532-550. https://doi.org/10.1515/CJAL-2022-0403

Dwivedi, Y. K., Kshetri, N., Hughes, L., Slade, E. L., Jeyaraj, A., Kar, A. K., Baabdullah, A. M., Koohang, A., Raghavan, V., Ahuja, M., Albanna, H., Albashrawi, M.A., Al-Busaidi, A.S., Balakrishnan, J., Barlette, Y., Basu, S., Bose, I., Brooks, L., Buhalis, D., ...Wright, R. (2023). "So what if ChatGPT wrote it?" Multidisciplinary perspectives on opportunities, challenges and implications of generative conversational AI for research, practice and policy. *International Journal of Information Management, 71*, 102642. https://doi.org/10.1016/j.ijinfomgt.2023.102642

Gao, C.A., Howard, F.M., Markov, N.S., Dyer, E.C., Ramesh, S., Luo, Y., & Pearson, A.T. (2023). Comparing scientific abstracts generated by ChatGPT to original abstracts using an artificial intelligence output detector, plagiarism detector, and blinded human reviewers. *Npj Digital Medicine, 6*. https://doi.org/10.1038/s41746-023-00819-6

Godfrey, J. & Whong, M. (2020). A collaborative scholarship model of EAP research and practice. In M. Whong & J. Godrey (Eds.), *What Is Good Academic Writing? Insights into Discipline-Specific Student Writing* (1 ed., pp. 9-31). Bloomsbury Academic. http://dx.doi.org/10.5040/9781350110410

Habibie, P., & Hyland, K. (2019). *Novice writers and scholarly publication: Authors, mentors, gatekeepers*. Palgrave Macmillan. https://doi.org/10.1007/978-3-319-95333-5

Huang, J. C. (2014). Learning to write for publication in English through genre-based pedagogy: A case in Taiwan. *System, 45*, 175-186.

Leathwood, C., & Read, B. (2013). Research policy and academic performativity: Compliance, contestation and complicity. *Studies in Higher Education, 38*(8), 1162-1174.

Lund, B.D. & Wang, T. (2023). Chatting about ChatGPT: how may AI and GPT impact academia and libraries? *Library Hi Tech News*, *40* (3), 26 -29.

Martin, P. (2014). Teachers in transition: The road to EAP. In P. Breen (Ed.), *Cases on teacher identity, diversity, and cognition in higher education* (1 ed., pp. 287-316). IGI Global. https://doi.org/10.4018/978-1-4666-5990-2.ch012

Perkins, M. (2023). Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond. *Journal of University Teaching & Learning Practice, 20*(2). https://doi.org/10.53761/1.20.02.07

Rich, A. S., & Gureckis, T. M. (2019). Lessons for artificial intelligence from the study of natural stupidity. *Nature Machine Intelligence, 1*(4), 174-180.

Tardy, C. (2009). *Building genre knowledge*. Parlor Press LLC.

Thorp, H. H. (2023). ChatGPT is fun, but not an author. *Science, 379*(6630), 313.

Tusting, K., McCulloch, S., Bhatt, I., Hamilton, M., & Barton, D. (2019). *Academics writing: The dynamics of knowledge creation.* Routledge.

Webster, S. (2022). The transition of EAP practitioners into scholarship writing. *Journal of English for Academic Purposes, 57*, 101091.

Whong, M. (2023). Scholarship in its Own Right. *Scholarship of Teaching in Language Education, 1*(1), 1-5. https://doi.org/10.59936/stile.v1i1.78

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