



PAPER

An inquiry-based model to support writing instruction in the context of generative AI

Roisin Donnelly^a  and Ita Kennelly^b 

^aTechnological University Dublin, Ireland, ^bNational College of Ireland, Ireland

ABSTRACT

Within a university writing instruction context, generative AI (gen AI) is changing how writing is learned, demonstrating positive impact potential through boosting learners' motivation, automating instructional tasks, and offering instantaneous, personalised feedback. As a result, these are times of unprecedented opportunities and challenges. This is an exploratory qualitative case study on the potential of a four-stage inquiry and academic writing (IAW) model developed by the authors to facilitate educators in two HEIs to work proactively and responsibly with gen AI tools in writing assessments with their students. The study involved 15 educators across Business and Education disciplines interested in supporting students' academic writing and introduced the IAW model as a practical support to their TLA approaches. Findings indicate educator concerns on gen AI impact on both students' learning and confidence along with perceived advantages for writing instruction. The study contributes meaningfully to growing conversations about gen AI and writing instruction.

KEYWORDS: academic writing, assessment, ChatGPT, critical thinking, gen AI, writing instruction, authenticity.

ARTICLE HISTORY: Received 28 February 2026. Accepted 22 May 2026.

Introduction

For many educators in HE today, writing instruction is an essential skill in their teaching toolkit. At the core of this is enabling their students to master academic writing by offering them opportunities to practise, encouraging them to share their written work, giving them individual, face-to-face feedback, and pointing them towards practical resources. Hesse and

Helm report that generative AI (gen AI) applications are said to 'provide numerous new possibilities for writing in universities and schools, which will certainly continue to develop in the future' (2024, p. 30). However, alongside possibilities for writing instruction, it is important to understand the challenges educators face with gen AI. Findings from a study by Hysaj et al. (2025) concerning academic writing, report that students articulate disengagement and a lack of individual representation, suggesting various motivations for turning to gen AI tools. Kenny (2023) argues that HE staff need to carefully consider what gen AI tools can do and what they cannot. This current study on supporting disciplinary student academic writing in the age of gen AI was conducted in two HEIs in Ireland in 2023 to do just that.

An Inquiry and Academic Writing (IAW) model was developed by the two authors of this study as a teaching framework to support learning using AI responsibly; specifically, it was to facilitate educators (who have writing instruction embedded in their role) to respond to recent developments by working proactively with gen AI tools with their students' writing. A small-scale exploratory qualitative case study was undertaken across two HEIs with the objectives to firstly explore the needs of academics when supporting their students' writing in the era of gen AI, and secondly to evaluate the usefulness of the new IAW model as a proposed solution and support. Through focused discussions on the IAW model, this paper discusses the potential for gen AI to assist educators in guiding students' writing while also supporting learning and authentic assessment approaches.

We argue that in the era of gen AI tools, we have an opportunity to reposition academic writing as an important part of the learning process for students. This is a time when writing instruction can take a lead role in promoting criticality and authenticity and enhancing students' learning and engagement. The contribution of the paper is twofold: a synopsis of Business and Education academic perspectives has highlighted five common concerns across the disciplines, and the model disseminated as a practitioner-focused intervention in academic writing support uses these educator voices to add insight into how writing pedagogy is evolving in response to gen AI technologies. We offer an intentional pedagogical response to a complex and evolving challenge for educators and consider the implications for gen AI to impact learning and writing instruction, thus contributing to debates around gen AI use in higher education.



Research aim and questions

The focus of this study was the disciplinary areas of Business and Education which are the disciplines in which the researchers work. The research aim was to explore how the IAW model could be implemented with two distinctive cohorts of lecturing staff across different institutions and to ascertain whether it could be a useful framework to facilitate busy educators in supporting students' learning and assessment in the age of gen AI. The goal was to share and scale the approach for other disciplines across the institutions at a later stage. This approach offered the opportunity for researchers to share their research interest within their disciplines and to identify active concerns, challenges, and responses to the framework from different perspectives.

The research questions underpinning this study were:

- What are the challenges of gen AI tools such as ChatGPT in assessment, supporting learning, and writing instruction?
- Can the IAW model help educators to respond to gen AI developments in their T&L practice?
- Can the IAW model contribute to academic writing instruction and critical development in students' learning?

The inquiry and writing model: addressing concerns about gen AI

Theoretical frameworks have a clear role in understanding the current debates on gen AI in the HE landscape and can be applied as a structured approach to assess, implement, and evaluate gen AI capabilities when integrated into educational contexts. Belkina et al. (2025) offer a systematic examination of empirical case studies that demonstrate the integration of gen AI into T&L, providing actionable insights and guidance for academic practice. Their review also includes consideration of several frameworks for exploration of gen AI including Laurillard's Conversational Framework¹, the SMAR Model², and the Technological Pedagogical

¹ Aimed at helping educators optimise technology-enhanced learning by providing theory-informed tools and scaffolding.

² Designed to help guide educators to maximise the value of gen AI technologies while avoiding shallow implementations that fail to address deeper educational goals.



Content Knowledge (TPACK) Framework.³ The IAW model contributes to this theoretical knowledge base by assisting curriculum designers in the reconceptualisation of existing module learning outcomes and can equally provide a framework for educators for assessment design, classroom instruction, and the support of academic writing.

The model is a four-stage approach to engage students' active involvement at all stages of the development of their university writing assignments. The emphasis on the processes of learning at different stages of the development of assignments is a way to support deeper learning, improve knowledge and understanding, and also to help counter the risks of inappropriate use of gen AI writing. The aim of the IAW model is to support educators across disciplines and at different levels of study to respond more proactively to the changes in an era of rapid AI developments.

Inquiry learning has its origins in constructivist learning theory with a focus on students doing the work and building their understanding and skills through active engagement. As an approach that places emphasis on what learners do and how they construct their knowledge, inquiry learning provides a useful pathway to address some of the issues relating to assessment of students' work particularly where the assignment (artefact/product) has been the sole representation of a student's achievement of learning outcomes.

The development of the IAW Model was influenced by Murdoch's (2015) Inquiry Learning model, which provides a transparent and accessible framework for student learning that can be shared by educator and student to set clear expectations and more tangible parameters for work. Specifically, we argue that it provides a framework for thinking, learning, and discussion and thereby creates an opportunity for shared understanding of the learning goals, processes, and outcomes for activities and assessments. Indeed, this transparency of process coupled with clear articulation of expectations is a key objective of the IAW model.

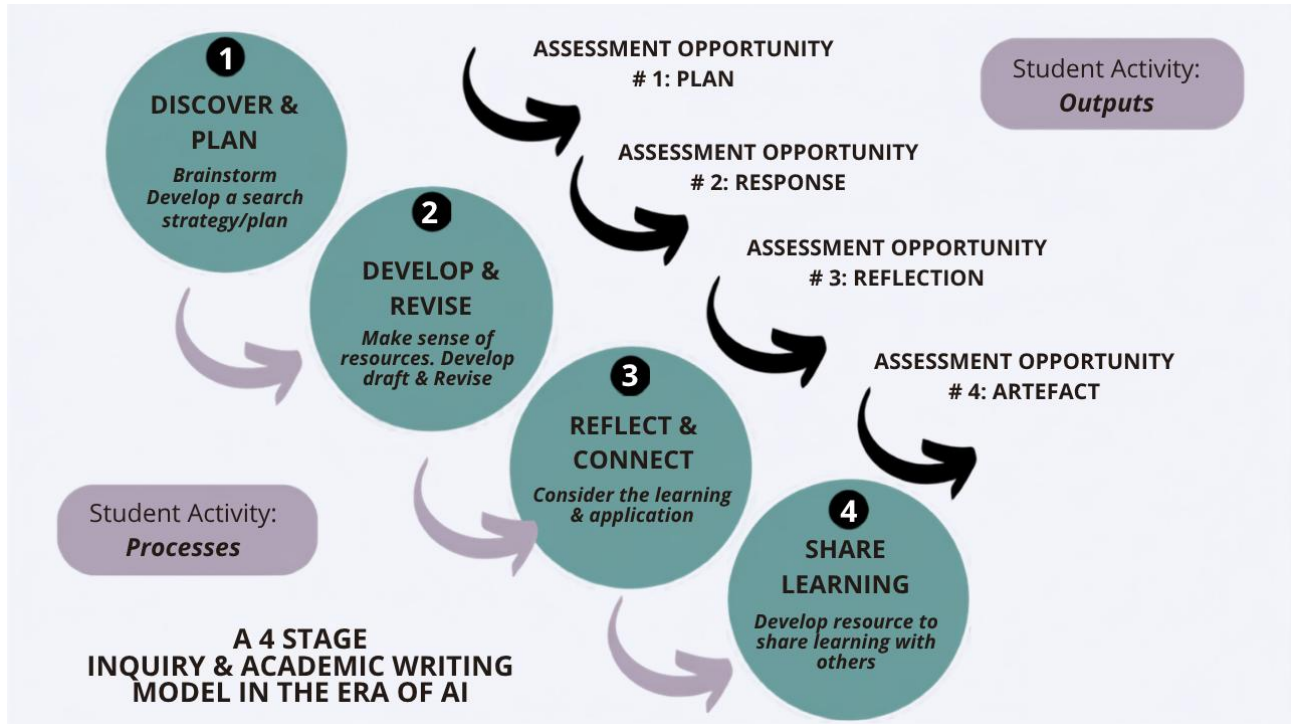
By setting out incremental stages of development of assessment activities, the IAW model enables discussion, sharing, and opportunities to work individually or collectively as part of class-based or independent learning. We believe that the focus on transparent and

³ Provides a comprehensive lens to evaluate the interplay of technology, pedagogy, and content in integrating gen AI.



incremental activities as part of assessment creates space for authentic work, for collaboration, and, importantly, for formative feedback. In this way, the model can create a space for greater student engagement and ownership of work which can help mitigate some of the challenges of assessing student work in the era of gen AI.

Figure 1. The Inquiry & Academic Writing (IAW) model.



The four stages of the IAW model (Figure 1) make the processes of student inquiry, writing, reflection, and knowledge-sharing more transparent. The model can be projected upon the construct of writing and aims to foster a culture of writing support for educators. The holistic approach presented in the model encompasses the fundamental aspects of teaching writing, as detailed below.

The model identifies student inputs and processes of learning while also creating a link to associated outputs or assessment opportunities that an educator can build into their teaching, learning, and assessment strategy. Students are encouraged to explore what they already know about the topic, to curate the information that they find, to act upon any gaps or further needs that arise, to develop and craft their writing, to reflect on their learning and consider its application, and finally to share their learning by means of an artefact. We see this focus on process and incremental activity as essential to encouraging students' ownership of their work and to bolstering their confidence as they gradually achieve learning outcomes which are more explicit and tangible. We also see the different learning and assessment

milestones (for example, a research plan, a reflection, a presentation on their findings) as useful ways to encourage more authentic learning. By building in a process of student learning activity, the educator can see the origins and development of thinking more clearly.

The Discover & Plan stage can involve brainstorming the development of a research plan or search strategy to encourage students' involvement in their research query and to help establish greater ownership of the task from the outset. The Develop & Revise stage draws upon good practice in academic writing by encouraging students to draft ideas and develop and revise a working draft as their response to the assignment question. This stage affords opportunities for formative feedback and discussion which can encourage student ownership and authenticity while also fostering important learning and writing skill development. The Reflect & Connect stage is an opportunity for students to consider, personalise, and apply their learning to other aspects of their study and/or practice. This stage supports a deeper and critical engagement while also prompting a more personal and authentic account of their learning. Finally, the Share Learning stage is an opportunity for students to conceptualise their learning so they can share it with others. Demonstration of learning can be mediated through a variety of means including classroom presentation, video, or poster. This stage provides a good opportunity for students to show their achievement of learning outcomes within the module. Furthermore, it creates a valuable space to show authentic learning and understanding. This final stage is where students are encouraged to make conclusions and take actions for their learning so that they consider application to other situations, with greater emphasis on critical engagement and writing thereby mapping onto HE assessment processes. An educator can set the culture for using this model in a positive, productive manner, inviting students to explore their writing in meaningful, authentic ways, embracing and employing transparency, variety, and engagement.

Methods

Yin (2012) defines a case study as an inquiry about a contemporary phenomenon set within its natural or real-world context. A case study was chosen here as a means for better understanding the perceptions of educators on the impact of gen AI on academic writing and their experiences of utilising the IAW model to support writing instruction. While a multiple case study was initially discussed, it was decided to conduct the study as an exploratory case study conducted across two different institutions as embedded units of analysis. This focus



was on exploring the different perspectives and experiences across the institutions as multiple sources of evidence to help build our understanding.

The study was undertaken at a time when changes were unfolding, and educators were experiencing pressure to question and change existing teaching and assessment practices in the light of gen AI. We presented the IAW model as a potential aid to educators and conducting this study afforded an opportunity to question whether it had any value or applicability across different disciplines and institutions. While we acknowledge the limitations of the study in terms of generalisability due to size of sample, we also agree with Flyvbjerg's (2001) assertion that case studies can enrich and expand our understanding. Through the context-specific knowledge generated in this research, we can 'make it possible to move from the lower to the higher levels in the learning process' (Flyvbjerg, 2001, p. 71).

This type of exploratory case study is suited to situations in which the intervention being evaluated has no clear, single set of outcomes. Several steps were taken to enhance the rigour and transparency of the research process and to aid the reflexivity of the researchers given that both were involved in decision-making regarding learning and assessment in their respective institutions. This included drawing from multiple sources of data across institutions shown in Table 1, which shows the three stages of interaction with participants for the case study. An invitation went out to all educators in the selected disciplines in each institution, and a total of 15 participants accepted.

Table 1. Data collection methods and stages.

Stage	Methods	Outputs
1	Padlet boards to understand educators' initial impressions and concerns of academic writing as impacted by use of gen AI (shown in Figure 2).	Padlet board curated for each institution.
2	30-minute Information Sessions to brief on the IAW Model.	Briefing delivered by both researchers in each institution to ensure participants had a good understanding of the model prior to the focus groups.



3	Three online focus groups held with cohorts to discuss the applicability of the IAW model (two in the Education discipline and one in Business, with seven and eight staff respectively).	Focus groups held in each institution by both researchers.
---	---	--

Ethical clearance was granted from the relevant committees in both HEIs in which the researchers were located. Purposeful sampling was used to recruit participants who could provide in-depth and detailed information about the phenomenon under investigation. In terms of the profile, there was a mix of relevant experiences of AI in academic writing instruction represented in the sample, with two participants from each institution having what was termed 'basic awareness' of gen AI tools and limited usage in their practice, and a further two from the Business disciplines having made use of ChatGPT in their assessments.

Table 2. Participant profiles.

Institution	Staff / programme	Profiles
1	5 staff from UG Education.	Participant 1: Lecturer 1 in Early Childhood Education (female). Participant 2: Lecturer 2 in Early Childhood Education (female). Participant 3: Educator in Study Skills for International Students (female). Participant 4: Senior Education Lecturer/Management (male). Participant 5: eLearning/IT Support Officer (male).
2	10 staff from UG and PG Business.	Participant 6: Lecturer in HRM (female). Participant 7: Head of Discipline Management (female). Participant 8: Senior Lecturer 1 in Strategy & Leadership (male). Participant 9: Senior Lecturer 2 in Strategy & Leadership (male). Participant 10: Lecturer 1 in Management (female). Participant 11: Lecturer in Strategy & Leadership (female). Participant 12: Lecturer in Business Law (female). Participant 13: LTA Staff (female). Participant 14: Head of Discipline HRM (female). Participant 15: Lecturer 2 in Management (female).

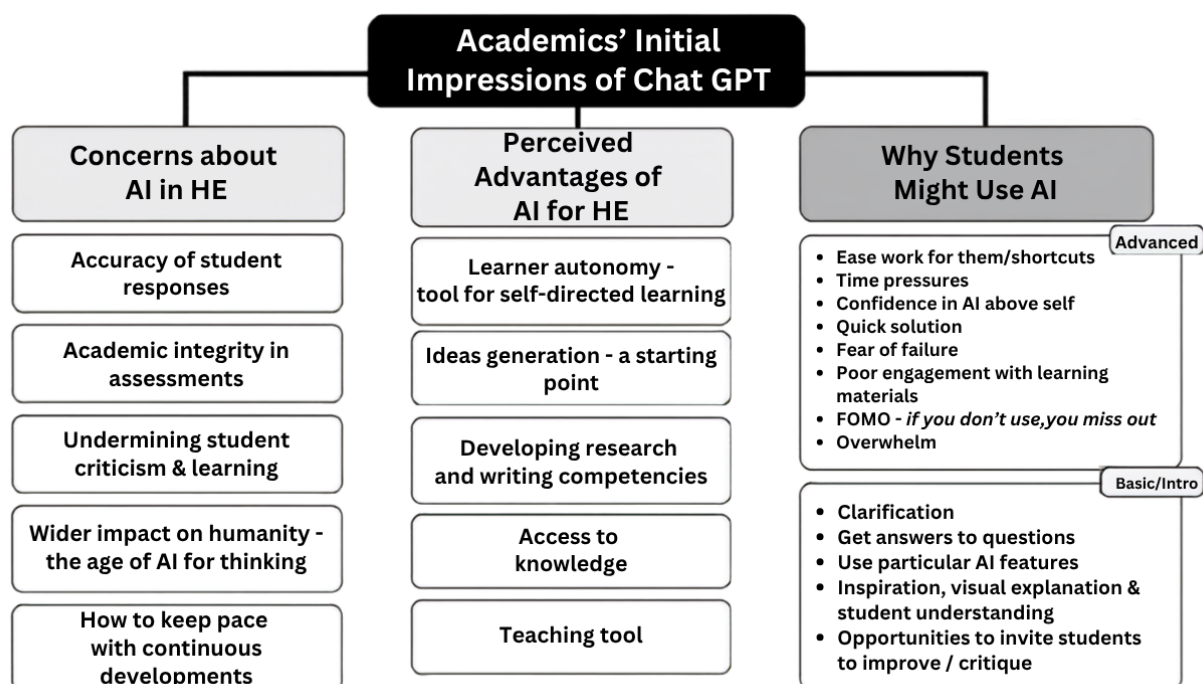
Thematic analysis (Braun & Clarke, 2006) was employed to analyse responses and generate themes from the three focus groups. Both researchers watched recorded meetings and used transcripts to make notes, identify initial codes, and generate themes. After initial analysis, researchers met to discuss commonalities and differences and to agree the main themes emerging from the data. Findings aligned with the research questions of the study are now presented.

Results

RQ1: What are the challenges of gen AI tools such as ChatGPT in assessment, support of learning, and writing instruction?

As part of the study, we explored concerns about, perceived advantages of, and rationale for, students using gen AI. We used Padlet to capture staff's perceptions about gen AI and these are shown in Figure 2.

Figure 2. Academics' initial impressions of academic writing impacted by ChatGPT.



Concerns across both institutional contexts mainly centred on the ethical implications of gen AI (ethics of AI need to be embedded for all students), it being a disruptor for current approaches to assessment, and a negative impact on student criticality. The negative impact extended to academics' practice, as it posed challenges to them in terms of keeping up with

the pace of change and a wider concern was expressed on the influence on humanity. This is reflected by Naidoo (2023) when she asks what are the wider responsibilities that emerge for universities in relation to the spread of AI into the fabric of society? She argues that AI raises important questions for us on what it is to be human. In working with academic staff, it is important to dispel the narrow claims of inevitability—which at its extreme is that AI will automatically benefit (or destroy) humanity. The ability to personalise learning while maintaining community has huge potential for equity along with the use of AI in research for the common good, which can be profound.

Perceived advantages from the two contexts were that AI offered students an opportunity to be more autonomous, broadening students' scope by giving them access to a wider range of knowledge, supporting them in ideas generation and in their research and writing competencies; this is echoed in a study by Chan & Hu (2023) who highlight that gen AI can be used to spark students' creativity by generating diverse and unpredictable ideas and prompts. It was also perceived helpful as a cognitive learning and teaching tool in that they can see how concepts and ideas on a topic might be applied to their area of study, and it can help them see connections and visualise on a given topic. Similarly, Niemi (2021) discusses how gen AI for learning provides many applications and multimodal channels for supporting learners in cognitive and non-cognitive task domains.

Several suggestions on how students could use gen AI tools in their writing were summarised as adverse or beneficial. For the former, a notable point is that students perhaps place more confidence in the gen AI tool than in their own ability.

RQ2: Can the IAW model help educators to respond to gen AI developments in their T&L practice?

Some of the themes that cropped up in the Padlet were then explored in more detail through the focus groups in each institution and in relation to the IAW model and its application as a tool to support learning, assessment, and writing. While focus group participants across both teaching contexts saw benefits to using the IAW Model, data revealed different nuances to the perceived opportunities and some caveats or concerns as to how it could be practically implemented.



Participants from the discipline of Education saw the model as a useful way to reconsider their current teaching, learning, and assessment (TLA) practices. As part of preparation for the new academic year and the need to consider pedagogic approaches in the light of gen AI developments, they viewed the model as highly supportive and particularly welcomed discussions around the learning process and assessment. Across all focus groups, participants commented on the usefulness of considering the learning process more transparently and across stages. Several participants commented on the benefits of discussing the opportunities of gen AI as an alternative to talking uniquely about the threats. They found the model useful as a tool to open up insightful conversations about TLA, as well as how students' academic writing can be improved; the latter is also reflected in a study by Javaid et al. (2023) on how students' writing abilities may be enhanced by using text completion, translation, and text summarising tools. One early career lecturer in Education, said that she felt empowered by the open discussions. The focus group discussion itself seemed to create a needed space for candid discourse and sharing that helped lecturers to see new possibilities for adaptation and pedagogical developments.

Participants from both institutions highlighted the model's value as a mechanism to support students' understanding of academic requirements. Education lecturers identified a use for the IAW model to support the explanation of assessment, learning processes, and expectations to students. They highlighted opportunities to use the model to enhance assessment literacy which they saw as a way to facilitate students' engagement. The HEA's (2015) Framework for Transforming Assessment in HE emphasises the importance of helping students understand the many purposes of assessment and developing a shared understanding, embracing assessment for learning.

One Education lecturer observed that the model could be 'something that a student could have in front of them that they can say these are the steps that I need to follow' (Participant 1). Another commented: 'I think it's useful for both sides [lecturers and students], if they can see that journey and assessment piece through that lens' (Participant 2). A senior lecturer highlighted the further potential of using the model to enact a form of assessment partnership where the transparency of the process would enable a dialogue between lecturer and student on the assessment: 'So, have a couple of choices there and get them to figure out what might work as an assessment piece' (Participant 4).



Discussions in the Business education context highlighted the importance of transparency and the need for a common understanding among staff and students on the TLA approaches across programmes, and not uniquely for modules. One lecturer saw potential for the model (beyond any considerations of gen AI) as an opportunity to situate and articulate pedagogy (Participant 11). Its purpose, she noted, can be to show

this is the way it works and there is an understanding across faculty that this is the knowledge, the map, the expectations in terms of what their output should be and the process they are using to get from A-Z (Participant 11).

In addition to seeing potential uses for the model, participants from the Faculty of Business also voiced more practical concerns about implementation. These centred around time pressures and lecturer workload and the need to think about how the different stages of the model could be practically managed within a 12-week semester. There were misgivings initially that adopting the model could increase difficulties rather than alleviate them. One participant asked, ‘how much work does it create for lecturers?’ and another commented ‘but it just eats into so much of your time having to correct all of that work—so that’d be a big concern’ (Participant 9). For one lecturer, time and workload were also a live concern but she saw the potential of the model to help mitigate issues of student time management and their planning and development of coursework. She noted: ‘but when students hear that an assignment is not due until week 8, they can procrastinate, so the stages are helpful for countering this, helping with time management and giving formative feedback’ (Participant 6). The lecturers’ comments do cast light on this challenge of managing workload and addressing gen AI in the planning and delivery of modules and there is no getting away from the fact that implementing change takes effort and time. Adopting the IAW model may require a re-think in a lecturer’s current teaching and assessment strategies and the redevelopment of a module. However, the model aligns with good practice student-centred pedagogy which places the onus on what the student does to facilitate their learning. In this regard, IAW, while demanding practical changes initially, may prove useful in the longer-term in providing opportunities to enhance student engagement and learning. It may also provide a return on investment for this time by helping to mitigate the potential for academic dishonesty which can be a laborious aspect of the lecturer role.



RQ3: Can the IAW model contribute to academic writing instruction and critical development in students' learning?

Discussions about the applicability of the IAW model revealed a significant interest among lecturing staff in both institutions to help support students' learning and writing. Interestingly, while the model generated rich discussions about gen AI and academic writing, it also revealed other concerns about student learning, student criticality, and authenticity of student work. The opportunities and limitations of the model are now discussed in more detail across two major themes below

Discussion

Theme 1: Writing supports learning where learning supports writing

Several observations about academic writing and its role in student learning emerged in the focus groups. All participants in the Business Education focus group asserted the importance of academic writing in their modules and in students' learning, using descriptors such as 'it's paramount', 'it's huge', 'it's super important!'. Discussions about academic writing and the IAW model also raised questions about some of the difficulties students experience in writing and developing criticality.

Business lecturers highlighted the need to continually support students' writing throughout the four years of their degree programme. They admitted to frustration that they need to continually revisit instruction on writing, conducting literature reviews, and referencing. Discussions on the advent of gen AI and its impact on student writing centred around its potential to amplify the existing challenges relating to students' lack of writing skill and/or confidence. A Management lecturer commented 'AI tools can help students overcome the feeling that they will not be adequately able to produce a piece of work—that AI could do this for them instead'. She furthermore highlighted the lack of confidence noting 'they are doubting their own skills and believe that ChatGPT can do it much better than they can!' (Participant 10) and argued for a more holistic way to support students by integrating gen AI into writing practice development. As part of this she called for clearer understanding of gen AI and reflected that students need to understand that tools are not necessarily the fix or support that they think they need. She argued for making it clearer how it can be used efficiently. This view is echoed in another focus group where a lecturer from Education



advocated for the use of gen AI but with the caveat that this needs to be complemented by training for students. A senior Education staff member articulated how he viewed gen AI's potential to support learning and critical engagement. For him, the opportunities and potential would only be realised by students and staff having a better understanding of what gen AI is and what it does. He noted: 'Because it is not actually creating anything new, whereas a learner can create something new' (Participant 5). This point is disputed by Ciampa et al. (2024) who highlight the advantages of gen AI literacy for students, emphasising its capacity to enhance writing skills, foster critical thinking, and also tackle challenges associated with an overdependence on gen AI tools. Nevertheless, the potential for overreliance on gen AI by students is noted: 'it comes from a misunderstanding on the learners' point of view' (Participant 2).

Discussions within the discipline of Education also focused on the implications of gen AI on academic writing and student learning. A senior academic commented on the importance of the process of writing and distinguished the value—from a learning perspective—of the assignment that is written or created by the student:

There's something more complete about an assignment that you write versus an assignment that you compiled from other sources ... So as an artefact, it may not be possible to tell the difference between the two, but as an education journey, there's a big difference (Participant 4).

Here, the participant referred to the education journey as a process of learning, seeing it as holistic and student-centred. The notion of completeness derives not from a completed assignment or artefact but rather from a completeness of the students' learning—that they have achieved the learning outcomes as part of their work on the assignment.

Another Education lecturer underscored the importance of experiential learning as part of writing development. Recounting a conversation with a student on academic integrity she recalled:

I was saying to her how will you improve if you're not doing it. To get good at writing, you have to write. You know you have to keep writing to get good at it and how will you improve if you're letting this do the work for you? (Participant 3).



The thread of writing, assessment, and academic integrity emerged for another lecturer who was prompted by the model to consider the expectations for writing for her first-year students and the issues experienced in plagiarism and poor academic practices. She observed that students 'rely on a lot of stuff from the Internet that maybe is copy-paste' and that they see gen AI text generation as 'convenient', as an opportunity to 'suddenly fill a word count', and to 'get my good marks'. By reviewing the model, and in particular the idea of building a planning stage for assignments, she reframed her thinking on students' challenges with writing and saw an opportunity to consider more supportive writing processes as part of in-class learning:

But when you see it on the plan that you've got mapped out, it makes me feel like actually there's a space to build this into lecture time. I sometimes think actually this is the independent learning stage and the students need to go off and do that part ... and it's like this is the very first step and maybe as a lecturer I would scaffold that into my semester and actually give them more space and time to do it (Participant 1).

In a different focus group, explorations of the model similarly prompted the Business lecturers to reconsider the intersections of writing, learning, and assessment. While for some lecturers there were clear concerns that the four stages of the model might present an increased workload, there was also a realisation that the model could likewise present an opportunity to realise a more unified TLA approach. A senior lecturer commented:

The stages of the IAW model can seem like there's maybe four pieces of assessment for the student and four pieces of correction for the lecturer. But what I found is sometimes bringing some of that into the classroom can be beneficial if you don't have the time. For example, the plan is something that's done within the classroom, and students can learn from each other. And some of the assessment pieces like the reflection might be included as part of the assessment (Participant 8).

It is important to highlight the opportunities afforded by creating a transparent and staged learning and assessment approach in the light of gen AI developments. The model's emphasis on planning and researching as distinct stages in the writing process creates a space for lecture/tutorial learning which scaffolds this learning and potentially reduces risks of plagiarism by building in opportunities for students to develop ideas and avenues for their research. Equally this supported classroom engagement can encourage students to take



ownership of their work. As Chan et al. (2014) note one way to improve student achievement is through supporting ownership of learning, a core component of formative instructional practices. As students become meaningfully engaged in their learning, they gain a better understanding of learning targets, how to collect and document evidence of their learning, and how to evaluate and clarify additional learning needs, leading to the goal of improving student achievement. As the lecturer noted above, this is about 're-thinking how we scaffold the learning' in practical terms. This can mean exchanging some of the space for independent learning with collaborative brainstorming and in-classroom planning activities. Arguably, if this happens and is supported, students may feel less likely to need AI generated work and, in tandem with this, the lecturer gains more in-class feedback on where students are at in terms of their learning and ability to complete the assignments. We argue that this real-time and open exchange on learning is a positive step in student-centred learning.

Theme 2: Gen AI can support authenticity and critical thinking when writing instruction empowers student ownership and confidence

Several points were made about authenticity and its importance in relation to the writing, learning, and assessment processes. Lecturers from both institutional contexts spoke of the challenge of assessing written work, determining authorship, and being able to stand over work for grading purposes. At the beginning of discussions, one early career lecturer talked about her concerns and how she saw the use of gen AI as a form of cheating. This is reflected in a U.S. study by Nietzel (2023) who reports that over half of college students (51%) believe that using gen AI tools like ChatGPT to complete assignments and exams is cheating. This lecturer's challenge, she noted, was to understand gen AI further 'to figure out what is it that you can see in a student's writing which tells you that this is not the students' work'. She came back to points about authenticity, assessment reliability, and student learning throughout the discussion but by the end of the focus group, a shift in her thinking was perceptible as she reflected on the importance of students using gen AI appropriately and transparently. She concluded that students need to be 'educated enough to know how to use it in the right way while keeping things authentic' (Participant 15).

Other participants also raised questions about authenticity, academic writing, and identity. Authenticity was seen as particularly important for Early Childhood lecturers who placed a value on students developing authentic research and reflection that would inform their



professional practice. One lecturer commented on the importance of the ‘ownership piece’ that she is looking for especially in relation to students’ final dissertations or capstone projects (Participant 2).

A Business lecturer saw an opportunity to support authenticity through reflection, and this is an integral part of experiential learning as a signature pedagogy in Business education. For her, building in reflective elements into assignments offered an opportunity to make the assignment (and learning experience) more relatable and authentic for the student while also providing an aid to lecturers to assess the authenticity of the final work too:

I also have introduced reflection to make it very personal to them ... I think that can be a good thing in terms of getting around it—that ChatGPT didn’t just produce this for you. But also, it makes it very personal to them (Participant 10).

Deliberations about authenticity traversed both ‘product’ and ‘process’ in the focus groups. Alongside the concerns about assessing written work and determining authenticity in the light of gen AI, lecturers attached great importance to the learning and educational journey of their students. Acknowledging that gen AI developments mean that it may not always be possible to distinguish between artefacts written by his students and those that are gen AI, a lecturer nonetheless argued that it will always be possible to discern a difference between the two in terms of the educational journey. He used the metaphor of listening to music to make his point:

If I go into a room and I listen to music, it’s very pleasing and I have a certain engagement with that music and admiration for the people that have created it but I would never call myself a musician ... even if I had good taste in music and picked great songs, but not played them, I would still feel that there’s an aspect of that skill that’s not available to me (Participant 4).

Mollick (2024) from Wharton Business School advocated that we should focus on *how* people use AI in class, rather than *whether* they use it, as this will result in better learning outcomes, happier students, and graduates who are better prepared for a world where gen AI is likely to be ubiquitous. In addition to the emphasis placed on authenticity, participants across both institutional contexts voiced their belief in the importance of critical thinking and also concerns about the potential losses of learning, knowledge, and skills development for their students. In the Faculty of Business, lecturers placed great emphasis on critical thinking as part of students’ academic writing and learning in their discipline. One lecturer reflected:



It is hugely important for the dissertation module where research and critical thinking skills are merged; students need to bring together and arrange sources and synthesise them in a coherent way so that it flows well from start to finish and tells the story of the data (Participant 6).

Similarly, a lecturer from Education raised the point about the importance of criticality and the need to get students thinking in her programme. For her, academic writing as a final product was of lesser importance than the process of getting students to engage in critical thinking. She noted: 'But I think a bigger part of the academic writing that I'm looking for in the key modules that I teach is actually just about the thinking that they show' (Participant 2). This is supported in the literature; Iñiguez (as cited in Grove, 2024) points out that students who turn to chatbots for advice and inspiration while learning are at greater risk of producing bland and unimaginative arguments in their work. Specifically, he argues 'there is something still missing from generative AI, namely an ability to think outside of the box or provide that unexpected insight' (Iñiguez, as cited in Grove, 2024, para. 4).

Bonnett (2023) argues that gen AI cannot do innovation. Originality is an assessment criterion in most institutions and originality requires contemplation and connection; it is about knowing what has gone before and, in some specific and useful way, adding to it, and it has to be justified and anchored in the literature. One of the primary ways of utilising gen AI tools positively is to embrace how it can help to develop the narrative imagination in our students. In our study, we argue that developing writing skills enhances students' development of narrative imagination and the ability to thrive as citizens of the world. Recognising the importance of writing to take other positions, to put ourselves in others' shoes is paramount here. This meaning making then is not just about knowledge of a topic (which can be generated) but rather the discussion of perspectives and expression of them. A question to ask here is how much of this can be achieved with gen AI?

A lecturer in Education talked about the use of gen AI as a threat to students' criticality and originality. She questioned how students can make a point when repeating or generating words from gen AI and used the metaphor of 'sitting on the fence' to describe writing that does not feel critical. She observed, in respect to the writing: 'it sounds good and looks good, but the point is missing ... they're using all the right words, but they're not committing to anything' (Participant 2). In stark contrast to the engagement, ownership, authenticity, and learning evoked by the idea of a student telling the story of their data, the idea of sitting on



the fence evokes a lack of engagement and learning. Getting critical is about more than thinking, it is about learning and authentic engagement. This lack is characterised by another Education lecturer as a 'learning obstruction'. Discussing how his students might use gen AI in their work, he highlighted the potential for people to lose the ability to do their own work and, importantly, not '[see] the importance of doing their own work for the learning process' (Participant 3).

One participant outlined the importance of reflection in her module and how reflective writing was a way for students to connect their learning to their professional practice, to be 'able to communicate that thinking process' (Participant 1). Other participants saw the value in building in a substantial reflective element to their students' assessments to engage students in more thinking about their learning and also to support more authentic engagement. Opportunities and potential would only be realised by students and staff having a better understanding of what gen AI is and what it does. He noted: 'Because it's not actually creating anything new whereas a learner can create something new' (Participant 4). His point perhaps illustrates the complexities of the educational environment and the need for understanding and adaptation. Mulaudzi et al. (2025) argue that adopting a balanced approach to gen AI integration in education is essential and advocate for more training of lecturing staff and students. This is about engagement in a process of transformation to uphold learning and criticality. The IAW model, while not offering a magic wand, does provide a tool that can engage students and lecturers and thereby participate in this process of change.

Conclusion

As gen AI tools become more prevalent in HE, educators are grappling with integrating gen AI while preserving academic integrity and supporting student learning. This paper begins to evaluate how models might be used to support students' writing, specifically the created IAW model as a case study that has the potential to inform the work of other practitioners. The model is offered as a holistic and proactive approach to inquiry writing and assessment in the form of strategies to prioritise student learning and effectively incorporate ChatGPT in the process of writing instruction. We showcased several practical examples that can be used to enhance gen AI literacy, stimulate critical thinking, and support academic writing skills.



This study has shown that gen AI can help support writing, engagement with assessment, and learning through the model. A clear finding was that all participants saw benefits to using the IAW Model to support their teaching and assessment strategies. Data revealed different nuances to the perceived opportunities for the IAW model, which was viewed as a useful tool for considering and reconsidering participants' current teaching, learning, assessment, and writing practices across both disciplines. It was seen as highly supportive of student learning and all particularly welcomed the insightful conversations around learning, the writing process, the stages of development within assessments and the opportunities for student engagement. Participants noted that the model afforded useful consideration about the learning and writing processes and incorporated important elements to encourage students to work authentically and critically.

There are several broader implications of the IAW model for both staff (writing instructors, curriculum designers) and HEIs today. Firstly, the IAW can impact educators working across writing instruction and their role as designers of modules and programmes in their disciplines. It offers a practical and flexible way to revisit existing learning outcomes, and TLA strategies. Findings suggest that the model can act as a trigger for vital programme team discussions about curricula with a particular focus on how gen AI can be a valuable tool for course design and student support.

Secondly, from a theoretical perspective, using the IAW model can transform the dual learning and writing experience by meaningfully merging our understanding of pedagogy, learning processes, and student writing challenges. For deepening an assessment literacy perspective, there was perceived use for the model to support lecturers to explain assessment, learning processes, and expectations to their students. Participants highlighted opportunities to use it to enhance assessment literacy and to enact a form of assessment partnership where the transparency of the learning and assessment process enables a meaningful dialogue between lecturer and student on the assessment process.

Thirdly, HEIs can benefit from including the IAW model in their assessment guidance to staff to help in the consideration on how to respond to ongoing changes and challenges with gen AI tools. It can provide an approach to maintain writing as an integral part of the learning process for students while also aiding greater integrity and ownership of work. Educators



commented on the benefit of discussing the opportunities of gen AI with their students as an alternative to talking solely about the threats.

While the model generated rich discussions about gen AI and writing instruction, there were some caveats or concerns as to how it could be practically implemented. Specific concerns on student criticality, authenticity of student work, and lecturer workload emerged. Therefore, the IAW model is no panacea, but it does provide a tool for educators to work more holistically and proactively. By creating a space for authentic inquiry and integrous writing, use of the model opens up important opportunities for reflection, critical engagement, creativity, and communication. As a pedagogical response to a technological challenge, the IAW model may not answer everything that arises, but it does empower lecturers and writing instructors to continue to place value upon the pedagogy and the process of learning, while also promoting agency and active engagement for students.

Reflecting on the limitations of the research, as it was conducted in two HEIs, and in two disciplines (Business and Education), it is a qualitative small-scale study, with self-reported data from educators. The limitations on scope present a foundation for future research; as a longer-term ambition for our work is to sow the seeds for programmatic reviews in the two institutions, there are opportunities for further research on the use of gen AI in supporting curriculum design and also to extend the study to other disciplines.

Gen AI is here to stay—findings show an acceptance of a changing landscape in learning and writing in HE as a result of gen AI developments but also a call to recognise the opportunity and potential that is always a bedfellow of change and challenge. Using the IAW model, arguably we can potentially gain a greater understanding as educators of how we can use gen AI to better support student learning and writing instruction.

Disclosure statement

The authors did not use generative AI technologies in the creation of this manuscript.

The authors report there are no conflicts of interest to declare.



Funding

No internal or external funding was received in support of the research contained in this manuscript.

References

- Belkina, M., Daniel, S., Nikolic, S., Haque, R., Lyden, S., Neal, P., Grundy, S., & Hassan, G. M. (2025). Implementing generative AI (GenAI) in higher education: A systematic review of case studies. *Computers and Education: Artificial Intelligence*, 8, Article 100407. <https://doi.org/10.1016/j.caeai.2025.100407>
- Bonnett, A. (2023, July 6). Teaching Originality: An essential skill in the age of ChatGPT. *Times Higher Education*. <https://www.timeshighereducation.com/campus/teaching-originality-essential-skill-age-chatgpt>
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Chan, P. E., Graham-Day, K. J., Ressa, V. A., Peters, M. T., & Konrad, M. (2014). Beyond Involvement: Promoting student ownership of learning in classrooms. *Intervention in School and Clinic*, 50(2), 105–113. <https://doi.org/10.1177/1053451214536039>
- Chan, C. K. Y., & Hu, W. (2023). Students' voices on generative AI: perceptions, benefits, and challenges in higher education. *International Journal of Educational Technology in Higher Education*, 20, Article 43. <https://doi.org/10.1186/s41239-023-00411-8>
- Ciampa, K., Wolfe, Z. M., & Bronstein, B. (2023). ChatGPT in education: Transforming digital literacy practices. *Journal of Adolescent and Adult Literacy*, 67(3), 186–195. <https://doi.org/10.1002/jaal.1310>
- Flyvbjerg, B. (2001). *Making Social Science Matter: Why social inquiry fails and how to make it succeed again*. Cambridge University Press.
- Grove, J. (2024, March 15). Academic solipsism' risk from chatbot use. *Times Higher Education*. <https://www.timeshighereducation.com/news/academic-solipsism-risk-chatbot-use-warns-university-head>
- Hesse, F., & Helm, G. (2024). Writing with AI in and beyond teacher education: Exploring subjective training needs of student teachers across five subjects. *Journal of Digital Learning in Teacher Education*, 41(1), 21–36. <https://doi.org/10.1080/21532974.2024.2431747>



- Higher Education Academy. (2015). *Framework for Transforming Assessment in Higher Education*. Advance HE.
- Hysaj, A., Dean, B. A., & Freeman, M. (2025). Exploring the purposes and uses of generative artificial intelligence tools in academic writing for multicultural students. *Higher Education Research & Development*, 44(7), 1686–1700. <https://doi.org/10.1080/07294360.2025.2488862>
- Javaid, M., Haleem, A., Singh, R. P., Khan, S., & Khan, I. H. (2023). Unlocking the opportunities through ChatGPT Tool towards ameliorating the education system. *Bench Council Transactions on Benchmarks, Standards and Evaluations*, 3(2), 100–115. <https://doi.org/10.1016/j.tbench.2023.100115>
- Kenny, K. (2023, May 25). An evaluation of ChatGPT in action. *Times Higher Education*. <https://www.timeshighereducation.com/campus/evaluation-chatgpt-action>
- Mollick, E. (2024, March 11). AI is much more of an opportunity than a threat to universities. *Times Higher Education*. <https://www.timeshighereducation.com/blog/ai-much-more-opportunity-threat-universities>
- Mulaudzi, L. V., & Hamilton, J. (2025). Lecturer's perspective on the role of AI in personalized learning: Benefits, challenges, and ethical considerations in higher education. *Journal of Academic Ethics*, 23, 1571–1591. <https://doi.org/10.1007/s10805-025-09615-1>
- Murdoch, K. (2015). *The power of inquiry: Teaching and learning with curiosity, creativity and purpose in the contemporary classroom*. Seastar Education.
- Naidoo, N. (2023, September 6). Universities, AI and the common good. *Times Higher Education*. <https://www.timeshighereducation.com/campus/universities-ai-and-common-good>
- Niemi, H. (2021). AI in learning: Preparing grounds for future learning. *Journal of Pacific Rim Psychology*, 15, 1–12. <https://doi.org/10.1177/18344909211038105>
- Nietzel, M. (2023, March 20). *More than half of college students believe using ChatGPT to complete assignments is cheating*. Forbes. <https://www.forbes.com/sites/michaelnietzel/2023/03/20/more-than-half-of-college-students-believe-using-chatgpt-to-complete-assignments-is-cheating/?sh=148ccac518f9>
- Yin, R. K. (2012). *Applications of Case Study Research*. Sage Publication.



Author details

Roisin Donnelly is Head of School of Management, People and Organisations in the Faculty of Business, Technological University Dublin, where she leads a portfolio of programmes and research at UG, PG, and Executive Education levels. Prior to this, she was Head of Learning Development in the College of Business DIT, Sectoral Project Manager in the National Forum for the Enhancement of Teaching and Learning in Irish Higher Education, and an academic developer for 15 years in DIT's Learning, Teaching and Technology Centre. She is co-editor of the Irish Journal of Academic Practice, and a Principal Fellow of the Higher Education Academy.

With a career spanning industry, public, and educational sectors, Ita Kennelly has worked in several roles as Lecturer, Associate Professor, Programme Director, and Academic Developer. In her previous role, she was responsible for leading the curriculum design for several innovative educational initiatives including a tertiary degree. Ita has several publications and has presented at conferences nationally and internationally. She is a recipient of Research Ireland's New Foundations funding award. Her research interests include curriculum design, academic writing, critical thinking, reflective practice, creativity, and student success.

ORCID

Roisin Donnelly  <https://orcid.org/0000-0001-9053-6375>

Ita Kennelly  <https://orcid.org/0009-0005-8957-9622>