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Citation:

MCGRATH, Lisa, NEGRETTI, Raffaella and FEAK, Christine (2026). Writing beyond the academy: towards tasks that promote genre knowledge and transfer across contexts. English for Specific Purposes, 81, 169-183. [Article]

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Contents lists available at ScienceDirect

English for Specific Purposes

journal homepage: http://ees.elsevier.com/esp/default.asp



Writing beyond the academy: Towards tasks that promote genre knowledge and transfer *across* contexts



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ARTICLE INFO

Article history:

Keywords: Genre pedagogy Genre knowledge Genre awareness Recontextualisation Transfer Task

ABSTRACT

Despite increasing expectations for scholars to communicate their research to the public, and the advanced communicative skills this expectation requires, research in genre pedagogy has almost exclusively targeted academic writing. Our aim was to design and trial a "multi-genre task", a task sequence that incorporates working with academic and outreach genres concurrently. This task combined examples of two genres tied to different social contexts (a blog post and an abstract), comparison and reflection, and guided practice. Doctoral students in the UK and Sweden completed the task. Textual analysis of task responses showed that participants reformulated and recontextualised their writing – from academic to outreach and vice versa – on the content, lexical, grammatical and structural level. Interview data revealed that the task fostered the development of genrespecific knowledge, genre awareness, and prompted metacognitive insights on the students' own writing. Our study provides new evidence of the dynamics behind the development of genre knowledge andawareness, recontextualization abilities across genres and contexts, as well as a task that promotes transfer.

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1. Introduction

"We can start small. We can start with a task."

(McGrath & Negretti, 2023)

Research has shown increasing variation in the genres that researchers perform (Perez-Llantada, 2021). As impact becomes a key funding criterion and performance measure, researchers are expected to engage in outreach genres, facilitating communication with the public (e.g. blog posts, tweets, debate articles etc.) (Baram-Tsabari & Lewenstein, 2017). Yet these genres may be unfamiliar to doctoral students, and they may feel ill-equipped to write them (Mason & Merga, 2021). This is not surprising; writing outreach genres requires refined composition skills so that knowledge constructed and communicated within the academy can be rendered comprehensible and applicable to those situated without. As Hyland (2010, p.9) observes: "[p]opular science does not just report scientific facts to a less specialist audience but represents phenomena in different ways to achieve different purposes."

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Despite the demands of outreach genres, writing development for doctoral students tends to neglect communication outside academia (Inouve & McAlpine, 2022) focusing instead on research genres (research articles, conference papers etc.) for various possible reasons: lack of space in curricula; lack of awareness of how academic writing development can be scaffolded by exploring non-academic genres; a lack of playfulness in EAP teaching. This neglect in practice is reflected in research. While blog affordances and genre features have been amply documented (e.g., Luzón, 2012; 2013; Mauranen, 2013; McGrath, 2016; Zou & Hyland, 2019; Zou & Hyland, 2020), research on how we teach genres has almost exclusively targeted academic writing. Genre pedagogy was of course designed around communicating research-derived knowledge to a closed expert discourse community (Swales, 1990). Conversely, teaching outreach genres requires teaching how to recontextualise research-derived knowledge and practices in a way that is accessible and appealing to non-members of the disciplinary discourse community that 'traditional' genre pedagogy assumes, It is useful to distinguish here between reformulation and recontextualisation. Reformulation is a purely linguistic process, a kind of redrafting that does not alter the disciplinary content" (Gotti, 2014, p. 19) but does involve redrafting linguistic forms to make content easier to process. Recontextualisation involves reshaping or changing the content, such as the addition of an anecdote or vignette to draw readers into a topic. Importantly, recontextualisation entails learners not only using a certain linguistic or generic feature in a new writing task but using it metacognitively, "with a keen awareness of the rhetorical context that facilitates its appropriate use" (Cheng, 2007, p. 303).

This challenges us to consider how teachers can leverage their genre pedagogy knowledge to develop tasks that a) promote an understanding of academic genre conventions; b) promote an understanding of how variation, creativity, and play are facilitative of writing development (Tardy, 2021); and c) scaffold metacognition (Negretti & McGrath, 2018). As with other tasks aimed at research writing, such tasks should equip students with a conceptual framework that they can use in various academic writing contexts (Cheng, 2018). However, this raises the question of what types of tasks might help students develop the skills necessary to switch comfortably between academic and outreach genres—Author have termed "communication agility".

Our aim was therefore to develop a 'multi-genre' task sequence (hereafter referred to simply as a 'task') that promotes recontextualisation *across* knowledge domains (academia/society) and explore the effects of that task through text analysis and interviews.

We ask:

- 1. To what extent does the task build genre-specific knowledge and genre awareness?
- 2. To what extent does the task foster transfer, reformulation and recontextualisation?

Our contribution is as follows: First, our study provides an example of a theoretically grounded task that begins to address the challenges doctoral writers face when moving from academic writing to outreach, thereby contributing to writing pedagogy development. Second, we contribute to the growing evidence base that tasks that scaffold metacognition and familiarise students with concepts from genre pedagogy (audience, purpose, rhetorical moves) promote the development of genre-specific knowledge and the genre awareness necessary to recontextualise research across contexts.

2. Theoretical and conceptual framework

Task is integral to genre pedagogy (Swales, 1990; Tardy, 2009; Swales & Feak, 2023). We define task as a "creative work undertaken that is both the culmination and application of a set of distinct, sequenced, goal-directed activities aimed at rhetorical consciousness raising, the acquisition of genre skills, and meaning-making and preparation for an anticipated or emerging socio-rhetorical writing situation" (Swales & Feak, 2023, p. 10). In our study, we prepare students through a task for two socio-rhetorical writing situations concurrently to examine whether this is conducive to the development of genre specific knowledge and genre awareness. We term this task, which engages students in transferring and adapting knowledge between two different genres, a *multi-genre* task. Crucially, the focus of the task is *not* to teach two different genres, but rather to foster students' awareness of how to adapt their writing to different audiences.

The task is embedded within Swales, 1990 genre pedagogy, which "provides students with tools for understanding texts as genres, for analysing those genres, and for using this insight in their writing" (Tardy, 2019, p. 24). Genres are communicative acts requiring both specific genre knowledge—formal, rhetorical, process, content (Tardy, 2009)—and genre awareness. Awareness is understood as not specific to a single genre but rather as an "explicit or conscious understanding" (Tardy, 2016, p. 143) of genres. This metacognitive nature of genre awareness functions as a vital learning bridge, enabling students to move from genre-specific knowledge to a broader understanding of how genres work, i.e., their genre knowledge (Tardy, Sommer-Farias, and Gevers (2020). Importantly, given its metacognitive nature, genre awareness allows authors to reformulate and recontextualise their writing across situations: deliberately make adaptations in terms of language, content, structure, rhetorical argumentation and so forth with "keen awareness" (Cheng, 2007, p. 303) of contextual dimensions such as purpose and audience. The skills underlying recontextualisation may be promoted by asking students to re-write their texts for different readers, and importantly, prompting them to reflect on and discuss the reasoning behind these changes to foster "rhetorical consciousness raising" (Swales, 1990, p. 219). However, evidence of this potential is missing.

Teaching genre awareness entails drawing students' attention to variation across and within genres and guiding them to consciously adapt their writing to different contexts (Tardy, 2009). How best to achieve this requires further investigation as typical move analysis tasks (an essential tool in genre pedagogy) often orient towards the teaching of specific genre conventions, rather than the development of genre awareness, namely students' development of the understanding of how to adapt writing to different situations, readers, and purposes (Tardy et al., 2020). A further challenge is that findings related to the development of genre knowledge, whether focused on genre-specific knowledge, genre awareness, reformulation and/or recontextualisation, tend to be limited to within academic writing or professional writing settings. What is therefore needed is an understanding of how genre knowledge development travels across contexts—academic to outreach or outreach to academic (cf. Negretti et al., 2022), a process that requires transfer.

While recontextualision and reformulation are concepts rooted in genre studies and rhetoric, the broader term "transfer" is rooted in educational psychology. Like recontextualisation, transfer is the "conscious or intuitive process of applying and reshaping learned writing knowledge in new and potentially unfamiliar writing situations" (DePalma & Ringer, 2011, p.141). While recontextualisation and transfer are linked and often co-occur, transfer is a broader concept that involves any instance where knowledge, skills, or strategies learned in one situation are applied or used in another. For example, a writing strategy such as planning or free writing may be transferred from one writing situation to another. As will be seen in our data, a student applying the rhetorical moves of an abstract in the drafting of a blog post is also an instance of transfer. However, as previously stated, much writing research to date has focused on transfer across academic genres and how it occurs (e.g., Kobayashi & Rinnert, 2013), rather than across contexts and how it is taught. For instance, James (2009) has shown that writing knowledge is transferable if students' perceptions of task similarities or differences are explicitly scaffolded, and Sasaki, Baba, Nitta, and Matsuda (2020) observed that transfer of audience awareness in novice writers is facilitated by perceived similarity of genres. Transfer has also been tied to metacognitive knowledge of writing: Reiff and Bawarshi's (2011) longitudinal study suggests metacognition as the catalyser of transfer (cf. Driscoll, Paszek, Gorzelsky, Hayes, & Jones, 2019), and Kessler (2021) underscored how metacognitive strategies facilitated transfer but only if students have previous familiarity with the genre. These three key constructs are defined and exemplified in Table 1.

Table 1Constructs.

Construct	Definition	Example
Reformulation	A linguistic process in which a sentence is rewritten without changing the original content.	An abstract states "data were analysed for key themes". A student rewrites this in their blog post as follows: "We looked at interview answers and tried to find similarities and differences in what participants talked about."
Recontextualisation	A rhetorical process in which content is added, reshaped or removed with the conscious intent to adapt the text for new reader and situation. This can entail some reformulation.	A research article begins with statistics about rates of lung cancer among smokers to establish territory. A student begins their blog post on the topic with a vignette: "When my grandad used to laugh, it was always followed by long bouts of coughing".
Transfer	A psychological process in which students draw on knowledge or skills learned in one context and apply them in a new context.	A student has learned to use stance and engagement markers such as self-mentions, hedges and boosters to convey stance and connect with the reader in writing a research paper. They apply this knowledge when writing a blog post.

To summarise, we know that genre pedagogy equips students with a conceptual framework that they can use in academic writing contexts (Cheng, 2018). We also have indications of what learning conditions are facilitative of transfer. However, how tasks rooted in genre pedagogy can be designed to promote transfer and the genre awareness needed to navigate across academic and outreach genres remains an open question.

3. Research design

This qualitative study investigates the outcomes of a multi-genre task and doctoral writers' learning. The task was developed by the authors and is rooted in the concepts set out in the previous section. The task involves working with two genres simultaneously: a research article abstract (academic) and a blog post (outreach). A blog post was chosen as it is an authentic example of what <u>Kuteeva and Mauranen</u> (2018, p. 2) term a "hybrid genre" in which scientific knowledge is recontextualized for non-specialist audiences. This hybridity is a result of recontextualisation processes, "from combining elements of public and private discourses, popularized discourse, and different genres of specialist discourse".

The task was trialled in two different contexts. In the UK, teaching took place in an elective one-day writing workshop for social science doctoral students. In Sweden, the task was embedded in one of the sessions of a well-established 8-week compulsory writing course for STEM doctoral students.

3.1. The task sequence

The task (Appendix A) drew loosely on the genre-based teaching and learning cycle (Rose & Martin, 2012) (see Figure 1).

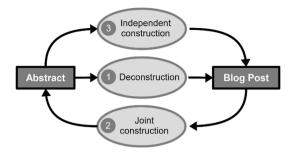


Figure 1. Overview of the task sequence.

The first activity is typical of genre analysis in that it involves the deconstruction of the genre and identification of rhetorical and textual features. The goal was to emphasise genre-specific knowledge and from there foster genre awareness. Students collaboratively analysed an abstract, discussed the intended audience, identified the five prototypical rhetorical moves (see Appendix A) and identified features that struck them as academic in register. Thus, key rhetorical concepts from genre pedagogy were introduced and prototypical features of a familiar academic genre established.

The second phase focused on reformulation (i.e. re-writing a task for a different audience and reflecting on lexical and grammatical changes made) (Swales, 1990), recontextualisation (deploying genre features in a new context with attention to appropriacy given that context) and transfer (applying and reshaping learned writing knowledge). Once the audience, purpose and prototypical features were identified through collaborative analysis and teacher-led discussion, students were provided with a blog post and in pairs wrote an abstract based on the post's content. They were scaffolded by the following prompts: a) Begin by highlighting the relevant content in the blog that you will need for the abstract (think about Moves 1–5); b) reflect on whether you have all the information you need for your abstract. Is anything missing? If so, what additional content do you require? What purpose will that additional content serve? Make some notes; c) Using the content you have underlined in the blog, write Move 1 for the abstract (in other words, provide a sentence or two as background for the study that you are writing about); d) now write the remainder of the abstract.

Prompt (a) brought to students' attention that the 5 abstract moves are present in the blog post. Prompt (b) activated rhetorical knowledge and metacognitive genre awareness, asking students to relate questions around content to the purpose and audience of the blog. For example, students noted that the vague language and lack of detail pertaining to method in the blog would be less acceptable to an academic audience that values rigour. Prompts (c/d) asked students to (re)construct the abstract. This direction of travel (outreach to academic), while perhaps inauthentic, was chosen for the early stages as academic writing is more familiar to students and more subject to genre constraints. Once the abstract was written, students were asked to reflect on and discuss, first in pairs and then as a group, their content and language choices and to motivate these choices in terms of author purpose and reader expectations, helping them tie their choices to their rhetorical knowledge of the genre. This prompt is crucial to generate genre awareness, as it requires students to verbalise and assess their knowledge and is consistent with metacognitive training tasks (Serra & Metcalfe, 2009; Negretti & McGrath, 2018).

Next, students were asked to compare and discuss three texts: the blog post, the abstract they wrote from the blog post, and the authentic research article abstract written by the blog post authors (the blog post was a popularisation of a published research article). Scaffolding the analysis of similarities and differences between genres is important for transfer (James, 2009); therefore, students were prompted to notice differences and similarities in content and style between the abstracts and blog posts, such as reader references, conversational/informal discourse and questions (see Appendix A for full list). These prompts were compiled based on genre analyses of blog posts published in the literature (e.g. Hyland, 2010; Luzón, 2013) and an informal analysis of the blog posts and abstracts we worked with.

The final stage was independent construction: drawing on insights gained, students independently wrote an abstract based around their own PhD projects and a blog post, starting with the abstract and then rewriting it as a blog post. Students were provided with the following prompts: How will you draw the reader into the topic? (Move 1); Where and how will you introduce your study? (Move 2); How much do you need to say about your method? (Move 3); How specific will you be about your findings? How will you make your findings relevant to your audience? (Move 4); How will you make the contribution of your findings relevant to your audience – how will you convince them that this matters? (Move 5); Also consider what other content you want to include that isn't captured by the abstract "moves", and how you will adapt your language to appeal to the blog reader. These prompts were designed to scaffold metacognition about their own writing and genre awareness, prompting students to access and verbalise their genre-specific knowledge and how to use it in making decisions about their own writing (Authors). In the UK, this was done during the workshop and finalised as homework. In Sweden, this part was assigned as homework due to class time constraints.

3.2. Methods

Ethical approval was obtained from the university committees in the two countries before data collection, and informed consent obtained. Data was collected and anonymised by two assistants. The data set comprises the participants' responses

to the task (an academic abstract and a corresponding blog post) and a semi-structured interview (see Appendix B). The two cohorts read different blog posts and related abstracts as stimuli so that the materials were adapted to the STEM/social science orientation of the students.

The participants were nine doctoral students: four in Sweden (S1-4) researching topics in STEM and five in the UK (UK1 – 5) researching topics in the social sciences, all at various points in their programme and with a range of L1 and L2 backgrounds. Few (if any) had experience of writing blog posts, although all had some experience with academic genres. We provide no further details about the participants to maintain anonymity. This includes their English L1/L2 status and specialisms as these are not deemed relevant to our research questions.

3.2.1. Data analysis

Analysis of the textual data proceeded as follows. First, each author coded one participant's blog post and abstract, annotating for rhetorical moves and structure. To generate the preliminary description of the moves, we used the structure for abstracts and blog posts presented to the students in the deconstruction phase (Move 1: Background; Move 2: Purpose; Move 3: Methods; Move 4: Findings; Move 5: Significance). In addition, we coded the blog posts inductively for features that suggested a rhetorical orientation towards a non-academic audience. After this independent coding, the authors held a debriefing meeting to share analytic memos and compare coding. This produced a coding template that integrated our overlapping data analysis. The template was used in round two to analyse the remaining posts (Author 1 analysed the UK data, Author 2 the Swedish data. Author 3 was coding controller, analysing both data sets). As the data set was small, the very few issues arising from the analysis were discussed, negotiated and resolved by the authors. After round two, a second debriefing meeting was held and themes agreed.

For the interview data, Authors 1 and 2 read the data independently and then discussed initial observations. These were: a) students reported a range of metacognitive insights; b) there was evidence of transfer; c) there was a connection between genre specific knowledge and genre awareness; and d) this connection motivated participants' choices in the recontextualisation process. We then returned to the data collaboratively to develop emergent themes, reach data saturation and verify our analysis through coding and theming (Heigham & Crocker, 2009).

4. Results

4.1. Textual data: abstracts and blogs

We begin with the results of our textual analysis of the blog posts and abstracts to give a flavour of how the task prompted students to recontextualise their knowledge across contexts. We present these findings qualitatively and contextually rather than quantitatively. While we refer to quantity where relevant, we are not conducting corpus analysis: we have not counted instances of, for example, pronouns. Our aim is not to categorise changes in textual conventions arising from reformulation or recontextualisation processes (for this see the seminal work of Myers (1991, 2003). Rather, our aim is to understand how the design of such a genre pedagogy task facilitates creativity and agency in doctoral students' writing. Indeed, in this section, we do not evaluate the quality of the students' abstracts/blog posts but rather provide a backdrop for the insights participants gained into writing for different audiences.

4.1.1. Register shifts: lexical and grammatical choices

In all posts, we found evidence of reformulation in terms of a shift from prototypical academic language in the abstracts to a less formal register. We describe this register as informal/hybrid since some of the features used by the students, when accounting for co-text, are oriented to writing for non-academic audiences but would not necessarily be classed as informal in register (e.g. "in the quest for sustainable agriculture"). Other examples are clearly informal (e.g. "here's the thing").

Perhaps not surprisingly (see 2014), many students chose to reduce the number of disciplinary-specific terms in their blog posts. Compare for example the abstract and blog post below:

S4 Move 1 abstract	Move 1 Blog post
Energy and agri-food systems are inextricably linked to each other in meeting SDG 2 for ending hunger and SDG 7 for access to affordable clean energy.	In the quest for sustainable agriculture, the role of energy, particularly in irrigation, cannot be overstated. Agriculture remains the lifeline of rural areas, with irrigation being one of the most energy-intensive activities within this sector. The advent of solar-powered pumps heralds a new era of efficiency and sustainability, especially in regions near the equator where solar resources are abundant.

Nonetheless, disciplinary-specific vocabulary was sometimes retained, but tended to be less densely packed when compared with the abstract and/or glossed or supported by hyperlinks. For example, UK3 includes multiple hyperlinks in this method description: "My research will utilise photovoice data collection methods while following a social constructionism perspective with a longitudinal salutogenic approach."

While instances of disciplinary terminology were somewhat reduced in the blog posts, instances of idiomatic language (and a more conversational tone) were more frequent. For example, in the Swedish data we found "this revelation opens the door"; "[...] go hand in hand"; and "powered by the relentless energy of the sun" (S4); "We need to take care", "By being more careful about ... we can help keep our rivers clean and safe for everyone" (S2); "a natural part of our everyday life" and "We hope that the model can help" (S3). In the UK data, this shift from formal to informal was much more pronounced, particularly in Move 1. Examples are: "a decent work-life balance", "here's the thing", "throw a real curve ball" (UK5) and "an even bigger deal" (UK3).

As already mentioned, in other parts of the blog posts, often after the research project had been unpacked, terminology was retained, perhaps to build ethos or because the students struggled to render key concepts and research processes in less formal language. Examples include: "horizontal gene transfer" (S2); "of I/I-water and I/I-water measures were monetized" (S3); and "lifelong psychopathology from disorganised attachment" (UK3).

In terms of grammatical adaptations, students tended to use passive mode and/or abstract rhetors in the abstracts. In the blog posts, active sentences with the authors themselves or their research teams as agents were common, although passives were retained in some instances:

UK3 Abstract	Blog Post				
This study will contribute to tackling the poor mental health of xxx and access to mental health services through exploring	My research is much needed in order to understand the needs of xxx and ensure that these needs are met.				
S1 Abstract	Blog post				
Photoluminescence measurements exhibit threshold pump power densities down to 2 MW/cm².	The group of WBO achieved deep-UV VCSELs by developing				

All blog posts written by the UK students contained at least one, and in some cases, multiple questions addressed to the reader and/or rhetorical questions, presumably as an engagement device (Hyland, 2005). Note, this device was prominent in the UK stimulus. Examples are as follows: "[...] do we notice it? Do we constantly crave the movement "(UK1); "What do you think of when you hear the word '[name of disease]'? (UK2); "And what is your school doing to address this issue?" (UK5)

In the Swedish data, students adopted different signposting/engagement strategies such as bullet points to summarise what the researchers did (S1), or a question/answer structure to organize the blog (S2 and S3). This also may have been an effect of the sample blog post not using questions, which suggests that genre models influence the output.

There were also many examples of reader inclusive pronouns across both data sets which seemed to entice the reader and build solidarity. For example: "we enjoy exploring" and "little do we know how" (UK1); "we often assume" and "we hope that this treatment will lead to a cure" (UK2); "antibiotic resistance in our rivers" and "our health and the health of the ecosystem" (S4). Students in the UK sample also addressed the reader directly. For example, UK1 asks: "What do you think of when you hear the word [name of disease]?" and UK3 states: "All of these are emotions you may feel."

4.1.2. Rhetorical organisation, storytelling and 'unpacking'

All the blog posts were longer than the abstracts. (The mean length of abstracts was 188 words. UK blog posts were 506 words, while in Sweden, 326.). This length differential seemed to occur for three reasons. Most prominent was the extent to which Move 1 (background) was unpacked in the blog posts. In the UK data, Move 1 mean length in the abstracts was 61.8 words; at 360.8, the mean for Move 1 in the blog posts is considerably longer. (It should be noted that UK5 is an outlier in that the entirety of the blog post was coded as M1) (see Table 2).

Move length and mean.

Participant	Abstrac	Abstract - Rhetorical Moves					Blog - Rhetorical Moves					
	M1	M2	М3	M4	M5	Tot	M1	M2	М3	M4	M5	Tot
S1	0	19	58	64	28	169	130	29	24	67	36	286
S2	38	16	58	105	68	285	189	0	0	84	67	340
S3	34	11	52	57	19	173	147	22	0	81	36	286
S4	44	7	14	35	24	124	102	28	144	50	68	392
Mean	29	13	45	62	35	188	142	20	42	70	52	326
UK1	64	24	13	0	0	101	273	122	0	0	72	467
UK2	49	34	61	18	0	162	395	40	33	0	49	517
UK3	17	51	57	21	38	184	402	43	51	0	37	533
UK4	50	69	45	40	0	204	222	52	77	106	43	500
UK5	129	26	78	0	54	287	512	0	0	0	0	512
Mean	62	41	51	16	18	188	361	51	32	21	40	506

The length is indicative of the glossing and unpacking that non-academic readers were deemed to require, but also of the more active, story-telling quality of the narrative in the blogs. This recontextualisation strategy recalls journalistic scenario construction (see e.g. Moirand, 2003). Compare, for example:

S2 Abstract	Blog post
The contamination of the Rio [NAME] and Rio [NAME] rivers in [NAME] city by sewage and industrial waste poses a significant risk	The [NAME] and [NAME] river begin in Andean glaciers that top 20,000-foot peaks and roll down over Bolivia's plains toward the vast expanse of Lake Titicaca. Along the way they passes straight through one of the fastest-growing cities in South America: [NAME].

Students realised Move 1 in the introduction in a variety of ways, but all can be interpreted as attempts to draw the readers into the world of the research topic. In some cases, students transferred the strategy of underscoring currency and importance from academic writing. For example, UK1 tries to persuade readers of the importance of the work and to generate interest by highlighting research gaps ("But little do we know how"; "process is still unknown"), indicating that something is interesting ("very interesting phenomena"), or important ("Such emerging insights of [...] will undoubtedly contribute to greatly expanding research in aesthetics"). This strategy was also found in the Swedish data. S3 highlights the importance of the topic ("essential part of our infrastructure") and S4 underscores both currency and importance ("remains a lifeline"; "heralds a new era"). Perhaps more creatively, UK2 tries to put readers into the shoes of someone newly diagnosed with a specific disease by using questions ("What do you think of when you hear the word '[disease]'? Would you feel scared, relieved?") and the imperative is used ("imagine this") to draw readers in. The author also talks about her personal experience to achieve this same goal ("I met one lady who felt ..."). At the end the author also draws readers in by highlighting how any reader could have a diagnosis, tapping into readers fears, perhaps. UK3 in Move 1 introduces emotive ideas and language (fear, cold, hunger, confusion, distrust) to presumably prompt an emotional response. UK4 5 tries to arouse curiosity by introducing a disciplinary term and challenging readers to think about what it means, while another student highlights the real-world application of the research, thereby combining Move 1 and Move 5 in the opening sentence.

In terms of the other moves, three of the five UK participants wrote longer methods descriptions (M3) in the abstracts, and in the remaining two blog posts, M3 was omitted. For moves 4 and 5, however, we traced differences in the two groups. The UK students had not yet collected data and therefore had no findings to report. Their post 'fizzled out' somewhat after Moves 2 or 3. The Swedish students, on the other hand, write article-based doctorates and were able to realise Moves 4 and 5 by placing focus on the real-world implications of their work, re-framing their contribution from technical to practical terms. In this effort, Move 4 (findings) was often compressed, while Move 5 (implications) was unpacked and tended to underscore the long-term impact of the research. For example, S4 below:

S4 Abstract Blog post

(M4). The findings of the xxx energy requirements revealed a significant daily surplus of 45 %, largely due to abundant rainfall received year-round and showing that sole focus on xxx does not suffice to attract xxx investments.

(M5) Therefore, our study provides insights into energy demand assessment for xxx topic, its excess energy valuation and opportunities for future system design enhancements.

(M4) resulted in the quantification of the xxx energy demand and the demand profile throughout the year. The findings revealed a substantial excess of energy, primarily due to the region's climatic conditions, leading to a pivotal realization: xxx engineered solely for xxx might not always be economically feasible.

(M5) Hence, since there is also potential for community-based xxx, this revelation opens the door to a more integrated approach, where xxx are not just tailored for xxx but are designed to serve broader community needs. Such an integrated system design beckons further exploration, promising a future where sustainable agriculture and community development go hand in hand, powered by the relentless energy of the sun.

4.2. Interview data

Interviews were conducted shortly after the course/workshop by a research assistant. The aim was to understand students' reasoning behind the rhetorical choices they made in composing their genres. Overall, the participants had a positive view of the multi-genre task. All but one stated that the task enhanced their understanding of academic and outreach genres. Participants appreciated the opportunity to explore an outreach genre in which they communicate outside of academia, and thought the task supported them in learning to communicate with such audiences.

Three themes were identified: a) the task helped students to develop and connect genre specific knowledge and genre awareness, with a focus on perceptions of audience expectations, b) the task scaffolded deliberate practice of transfer and recontextualisation, and c) the task promoted an overall metacognitive awareness about their own research writing.

4.2.1. Connecting genres: genre specific knowledge and genre awareness

Participants' genre specific knowledge (i.e. knowledge of the conventions, rhetorical features, audience and purpose of a given genre) emerged clearly from the interview data, but importantly, participants were able to integrate their emergent knowledge about these genres into a broader understanding of how genres connect (genre awareness). Some students commented on how the task illuminated the differences between the genres:

- 1. "... a clearer picture of the differences between academic writing and non-academic writing" (UK5)
- 2. "I think it's definitely enhanced me in both types of writing about your research. And it's important to have those tasks complementing each other during the workshop." (UK1)

Note that the comparative element of the task was important for the students to develop both genre-specific knowledge and genre awareness:

3. "Sometimes there is tension between the academic approach and the non-academic [...]. So, I think it's actually helpful. It doesn't dilute my understanding of academic writing [genre specific knowledge]; it just reinforces my clarity on the distinction between academic writing and non-academic writing [genre awareness]." (UK4)

Others focused on differences between abstracts and blog posts (genre specific knowledge). For example, S1 noticed the different foci of the two genres and level of technicality. Re-writing for a non-academic audience actually enhanced genrespecific knowledge about abstracts:

4. "... to go from the abstract to the [blog] wasn't that easy[...] at that point, made me realise how technical is my abstract, how focused on results it is." (S1)

Similarly, UK1 noticed that greater flexibility and less formality were possible in the post:

5. "It's not just a big chunk of just your own description of your research, but it has to be also quite systematic, but in a much more easy or more flexible way, more informal way" (UK1)

In terms of genre specific knowledge, UK4 underscored the importance of appealing to the audience's curiosity, irrespective of the genre, but more so for the blog post.

6. "... it absolutely enhanced, for example the fact that the writing needs to be a bit engaging and not as dry, to pull in your audience [...] I think of that audience and how to grab them in a less academic and dry way. Just the task in itself ... it's enhanced and it's not confused my understanding". (UK4)

Finally, the emergence of genre awareness, its focus on audience and reader reactions, and the implication in terms of language, are clear in the quote below:

7. "... think about the audience and how they will react on the text, and what you're actually trying to say to them and what you want to communicate. And then language based on that and how you present things" (S3)

4.2.2. Transfer and recontextualisation

As the examples above illustrate, the task prompted students to think about presenting their work across contexts. Students reported a range of strategies for rewriting their texts, sometimes transferring metacognitive strategies (cf. Negretti et al., 2023) such as considering audience needs, or formal genre knowledge, such as move structure. S2 observes that while the audiences are different, similar structures can be applied to achieve text coherence; similarly, UK1 notes that while there are many differences between the genres, the abstract structure can be used to structure the blog:

- 8. "... given the public is different, the structure is very similar, because you need to have it in mind that the coherence of the reaction to that, is complication for the reader. So, the aspect that we use in the scientific publication also is possible to apply in this type of, other publication." (S2)
- 9. "It gives overview how we have to switch the brain from one to another and this exercise is actually helping to understand the differences in the writing, how we shape then similarities at the same time because we follow a similar structure that abstracts provide [...]" (UK1)

S4 remarked that working with the two genres equipped them with writing tools, irrespective of genre, and both UK5 and UK2 noted more generally that some aspects of academic writing are applicable when writing outreach genres, such as using rhetorical moves:

- 10. "Whereas the blog, I tried to hit that middle ground of still having those movements [moves]" (UK2)
- 11. "... that was the first time that I engaged in non-academic writing and still being able to include some criteria of academic writing in there ..." (UK5)

For these students, recontextualisation entailed deliberate, metacognitive adaptation in terms of content and language. Students leveraged their emergent genre-specific knowledge about the post and the abstract and relied on their developing genre awareness, particularly the focus on audience. The quotes below illustrate how reformulation and recontextualisation were deliberate, agentive, and creative. Students referred to the rhetorical and linguistic features discussed in Section 4.1 and rationalised their choices in relation to effects they wanted to achieve. The extracts below motivate students' adaptations in moving from their abstract to the post:

- 12. "... the blog I change a lot. The first text was not accessible at all. ... I used bullet points for the methodology ... then people can understand better. The text was also a bit long, meaning that I explained a lot" (S4)
- 13. "... mostly the background ... I would say that's one of the major differences, to introduce a background and also to say who we are, and what we demonstrated" (S1)

In the following extracts, language considerations are raised in connection to audience. The students were anticipating readers' thoughts and reactions and tailoring their writing accordingly. This involved strategies such as providing definitions (15), connecting to the 'real-world' (16), or establishing a reader relationship (17, 18):

- 15. "... for people that are not into the topic, could be very difficult to understand. So, I will try to use words and explain more, describe briefly what is this, what's the meaning of this word" (S2)
- 16. "I really tried to write the blog in a more popular scientific way, like to really explain [...] to connect it to reality in a way and [...] like use another language to make it more interesting for non-academics." (S3)
- 17. "I had to be more punchy when it came to the blog. So, I had to really outline the key points. And then it was more personalised ... I directly address the audience in a way that I normally wouldn't for a general conference abstract." (UK4)
- 18. "... but in the blog I think that the order could be a bit more flexible. In the abstract you have to be pretty precise. I would say it's just the language that's used is friendlier. I realised that in the blog it seems like you can communicate more with the readers" (UK5)

Whatever the strategy, the recontextualisation is framed by efforts to accommodate the reader. Crucially, these adaptations are not limited to linguistic adaptations (reformulation). Students also identified shifts in the rhetorical focus of the texts:

- 19. "The abstract is most related with research results, so plenty of numbers basically. And in respect to the blog post, I realise that is important to express your ideas using examples that everyone can know." (S1)
- 20. "I was thinking the focus, in what is the main result that I tried to communicate. I try to communicate this part. Because in your research, you have many results. But some results are very, in my perspective, more important to communicate." (S2)

Rhetorical decisions were agentive and metacognitive, focusing on audience needs in terms of rhetoric and content:

21. "... for the researchers, you want to show how you are creating your niche, and how you are occupying your niche. But for the non-researchers, they might not be interested in the research or the methodology [...]. But how do you convince them? You tell them or you use examples in their real life." (S4)

Note in examples 22 to 26 how the students leveraged both genre-specific knowledge and a more general awareness of genres as tied to audience expectations and purpose of the genre:

- 22. "I guess a scientific text, [...] we expect some type of structure or to have the information to organise in some specific way, there is kind of a tradition of how the information is represented and organised [...] for blog post, so trying to do it way more simple, not using technical words, examples that everyone knows, to have catchy sentences that may attract the audience." (S1)
- 23. "... in the blog it has a closer relationship with the reader because you're trying to use the language they also would easily understand and implement the knowledge I tried to communicate. And the structure, the same structure we follow, just we shift it out in different proportions. And for academic communities all this has to be very concise, very well evident, very sharp language. For the blog it's more personal, it's more relaxed and can be more creative." (UK1)
- 24. "With the non-expert you have to sort of position it on how it's relevant to them, you know, something they can relate to. Whereas in an academic sort of sense, in terms of like literature reviews or finding gaps you want quick facts almost, basically like an abstract, the key points, what's missing, what's novel, what are they adding to the whole academia ... whereas non-academic is, how does it relate to you, what impacts on your life or your interests, you know ..." (UK2)

- 25. "Writing an abstract [...]you have to really stick to your research and especially focus more on the process of the research as well, but the focus of the blog is something different, is about [...] the practical communication to the audience, because it's reasonable that a non-academic audience, it's not that important to them about how you're doing the methods and also all of the information probably is not even very effectively communicated as well because they don't have that background knowledge. So that's why the language used in blog has to be closer to like daily life." (UK5)
- 4.2.3. Metacognitive insights into their own research writing and themselves as researchers

Finally, the data suggested that the task helped students gain metacognitive insights into their own writing, their own research, and themselves as researchers. Both UK2 and UK4 noticed that the task prompted awareness of the importance of impact, and the potential difficulties this brings:

- 26. "... when you're trying to do the blog where you're actually talking about what's your real impact, I was stumped [...] so I think it highlighted the weaknesses in my writing generally but essentially impact being the main bit." (UK2)
- 28. "This journey on my PhD is understanding what being an academic is [...] How comfortable I feel with the convention in academia when it comes to writing as well. And for me, impact is so important." (UK4)

S1 and S2 found value in explaining their research to a non-academic audience as it tested their understanding of their own research:

- 29. "... [it] helps you to really realise if you are understanding, what you are doing. [...] when you are able to explain it or write it down in a simpler way, would imply that you understand what you are doing." (S1)
- 30. "You can explain something that anyone can understand. You also understand what you are in your mind. It's a good way to learn ..." (S2)

UK5, S4 and UK2 gained insights into what types of writing posed the greater challenges and a more accurate metacognitive knowledge of their own capacity to write academically.

- 31. "I realised I didn't expect that non-academic writing would become like a challenge to me. [...] that's quite surprising for me is that after the workshop I kind of realised that I can write better academically." (UK5)
- 32. "Before I was writing while reading other people's research, trying to conform to their, you know, to shape it as they did. But later on, I knew that every section of the paper has got this fundamental information, these fundamental sections. Now I can forecast right from my heart, acting on the information I have to give in that section." (S4)
- 33. "I think I definitely learned that there's a binary in my writing in terms of comfort zones ... I can reflect on situations fairly easily and I can write academic STEM type stuff really fairly easily, but there's a middle ground where working out what your impact is and explaining that to a lay audience or whatever the current term is, that's definitely where I need work." (UK2)

Finally, for some students, the task prompted a metacognitive reflection on their identity as academics and researchers:

34. "I think I've been on a journey ... when you're so deep in academia, even when you try to sound less academic, to a layperson you still sound academic. So, [...] there's been a lot of introspection ... this is helpful in terms of introspection and critical thinking, my metacognition. You know, what we think we don't know, we don't know. So, me sitting outside of myself and seeing how others view my work and what academic is and what academic isn't, I think that's been really important and valuable." (UK4)

5. Discussion

We investigated whether the multi-genre task built both genre-specific knowledge and genre awareness. Textual analysis revealed that the task prompted students to adapt their writing in terms of the content, formal elements, rhetorical features, and to a lesser extent, process (this was guided practice, so process was scaffolded). Interview data suggested that these adaptations were deliberate and tied to students' understanding of audience expectations. In other words, students were agentive in their writing choices. In this sense, the task was successful.

We also asked to what extent the multi-genre task could foster transfer, reformulation and recontextualisation. Swales (1990) posited that one of the most important questions to address in genre research was "to what extent and under what conditions skills acquired with one genre are transferable to another" (p. 233), characterising this question as "a highly significant investigative issue" (p. 234). Our findings speak to this longstanding question. We found that genre-specific knowledge and genre awareness were at the core of students' efforts to reformulate and recontextualise their writing across contexts. The task required students to make deliberate, metacognitive choices around what rhetorical and linguistic

features were effective in both genres, and what writing strategies could be employed, as well as what needed to be done differently. In the textual data, some features of abstracts and students' knowledge of academic writing were transferred to the new context of blog writing, for instance, the move sequence, an example of interdiscursivity - the appropriation of the elements of one genre in another resulting in a mixed or hybrid genre (Deng, Laghari, & Gao, 2021).

In terms of adaptations, a striking example is our participants' unpacking of Move 1, framing their research with a story. This strategy is used by expert science communication writers as observed by Dahlstrom (2014). Participants' use of storytelling also recalls Negretti and colleagues' (2023) findings about the metacognitive strategies that scientists use when writing for non-academic audiences. They found that their participants envisioned their story and key message and planned the text around it, thereby using the story or narrative as a rhetorical tool to plan the argument (Fahnestock, 2020).

The interview data also points to our participants' rhetorical choices being metacognitive, conditional (Negretti, 2021) and creative/agentive (Negretti & McGrath, 2020), supporting for example Wei's (2020) argument that metacognitive awareness facilitates rhetorical transfer. But in addition, and somewhat unexpectedly, our findings showed that students seemed to become more metacognitive about themselves as research *writers*. Through this task, students questioned their own work, their contribution, their message, and often gained a heightened sense of what they were *doing* as academics-intraining and for whom. This suggests that the benefits of comparative analysis of different genres and the repeated recontextualisation practice may go beyond writing development.

Finally, our study provides several pedagogical insights. We begin with our multi-genre task, which was designed as a transfer-oriented pedagogical intervention to lead students to generate "creative work" (Swales & Feak, 2023). This creative work was scaffolded via working with two different genres—a traditional abstract and a blog post—and an integrated sequence of goal-directed activities to support rhetorical consciousness raising. Through this novel sequence, students engaged contrastive noticing and purposeful genre negotiation across communicative contexts. Participants gained insights into how genre awareness is a "portable", reasoning-based tool to apply in rhetorical problem-solving. Therefore, our task pushes the boundaries of genre pedagogy by exemplifying how we can do more than focus on textual reproduction of traditional academic genres and include tasks in writing instruction that emphasise rhetorical adaptability and transfer.

The reformulation and recontextualisation elements of the task provided opportunities for metacognitive reflection and strategic rhetorical decision-making, key elements of writing development. As the interviews revealed, these cognitively and rhetorically demanding elements prompted students to consider how to shape their content in response to different audiences, purposes, and genre conventions and in turn to deepen their genre awareness. Thus, we provide an example of how genre pedagogy can explicitly scaffold students to see genre awareness as a means of reasoning through the process of shaping and reshaping ideas across different rhetorical landscapes.

The opportunity for deliberate practice (Kellogg & Whiteford, 2009; Negretti, 2021) seemed to contribute to the development of this advanced writing expertise, as students became more finely tuned to their audiences' needs and preferences. When writing their blog posts, students leant heavily on the example stimulus, providing further evidence that genre pedagogy provides a frame for novice writers in the genre (Cheng, 2018). But this also underscores the importance of exposure to a range of textual examples; otherwise, genres that are in fact quite loose in terms of constraints risk being viewed as formulaic by the students.

Time and timing are also a factor here. Sufficient time needs to be allocated to working with the two genres concurrently to enable exposure to more examples of each genre. This is particularly important when it comes to the blog posts, as some students told us this task was the first they had experienced this genre. Timing was clearly an issue for the UK students, many of whom had not yet collected data, which rendered the task less authentic (cf. Ortega, 2012) since the idea was to popularise research findings. Therefore, the task may benefit from adaptation depending on the doctoral journey stage of participants.

6. Conclusion

The contribution of our study lies in the new insights gained from the novel integration of the teaching of academic writing and popular writing in the same task sequence. We respond to Tardy and colleagues' (2020) call for more research into how genre specific knowledge and genre awareness are interrelated and shed light on how these two concepts contribute to each other. Swales (1990) and Negretti (2021) both proposed that deliberate, guided comparison of different genres aimed at different audiences and reformulation could help students connect rhetorical strategies to considerations of audience and readers, i.e. develop genre awareness. In our data, this comparison of two genres connected to different audiences and contexts was key in the promotion of genre-specific knowledge. Similarities and differences between the abstract and the blog posts were enhanced by having to analyse and produce them *concurrently*. In turn, concurrent analysis and practice generated a broader awareness about how academic and non-academic genres interact, and what kind of considerations may be helpful when writing across them. Among these considerations, audience and reader's needs were paramount.

There are of course limitations. The participants comprise a small cohort of students at different stages of their doctorates and within different disciplines and learning contexts. A productive next step would be to trial this task sequence—and similar tasks— with larger cohorts and in different educational and language contexts and to explore the impact of characteristics such as disciplinary cultures, language background and prior familiarity with academic blogs on the students' engagement with such tasks. Some aspects of the task may also need to be revised in light of the potential evolution of

the blog post as a genre. Equally, similar tasks could be designed around different gernes. For example, depending on the discipline, a research article and patient information brochure or environmental flyer could be analysed concurrently, reformulated and recontextualised.

Ultimately, our study contributes to providing "more examples of how genre awareness and genre-specific knowledge contribute to each other (Tardy et al., 2020, p. 306.)" and underscores the potential of task as a means of conducting this research in instructed classroom settings.

CRediT authorship contribution statement

Lisa McGrath: Writing – review & editing, Writing – original draft, Methodology, Investigation, Formal analysis, Conceptualization. **Raffaella Negretti:** Writing – review & editing, Writing – original draft, Methodology, Formal analysis, Conceptualization. **Christine B. Feak:** Writing – review & editing, Methodology, Formal analysis, Conceptualization.

Declaration of generative AI and AI-assisted technologies in the writing process

During the preparation of this work, no AI tools were used.

Data availability

The authors do not have permission to share data.

Acknowledgments

We would like to thank our two research assistants, Molly Turrell and Mark Hollett, for their work on this project. The research was supported by the Sheffield Institute of Education Seed Corn Fund for International Collaboration.

Appendix A. The task sequence

- A) **Let's discuss (provide example of prototypical abstract in the discipline):** In what ways does this abstract meet your expectations of the genre? What is the author's purpose?
- B) In small groups, address the following questions:

Can you find the 5 moves?

5 typical rhetorical moves in abstracts.

- Move 1 Background/introduction/situation
- Move 2 Present research/purpose
- Move 3 Methods/materials/subjects/procedures
- Move 4 Results/findings
- Move 5 Discussion/conclusion/significance

What language in the abstract strikes you as typically academic in style?

- C) (in a group): You are going to write the abstract for a research article which will be published in an academic journal, based on the information provided in the blog post (see separate handout).
 - 1. Begin by highlighting the relevant content in the blog that you will need for the abstract (think about Moves 1–5).
 - 2. **Reflect:** Do you have all the information you need for your abstract? Is anything missing? If so, what additional content do you require? What purpose will that additional content serve? Make some notes.
 - 3. Using the content you have underlined in the blog, write Move 1 for the abstract (in other words, provide a sentence or two as background for the study that you are writing about).
 - 4. Now write the remainder of the abstract.
- D) Reflect on and discuss your content and style/language choices and try to motivate them in terms of author purpose and reader expectations. What changes did you make from what you underlined in the blog for the RA abstract? What did you have to change in terms of content and style/language? What motivated your changes, in terms of author purpose and reader expectations?
- E) Now compare the blog, the abstract you wrote and the real research article abstract (see handout). What do you notice in terms of differences in content and style between the two genres (the abstracts and the blog). Use the following grid to support you.

	Blog	The abstracts	Comments/observations/examples
Reader references (you/your)			
Inclusive pronouns (we/our)			
Questions			
Disciplinary-specific terminology			
Paragraphs			
Humour			
Positive evaluation of the research			
Personal opinions/reactions			
References to other research			
Conversational/informal discourse			
Practical applications of research			
"Real world" references			
"Research world" references			
Other			

- F) In these exercises, we recontextualised an ooutreach genre (a blog post) into an academic genre (an abstract). Now do the opposite: **write your abstract, and then rewrite it as a blog.** Consider:
 - How will you draw the reader in to the topic? (Move 1)
 - Where and how will you introduce your study? (Move 2)
 - How much do you need to say about your method? (Move 3)
 - How specific will you be about your findings? How will you make your findings relevant to your audience? (Move 4)
 - How will you make the contribution of your findings relevant to your audience how will you convince them that this matters? (Move 5)

Also consider what other content you want to include that isn't captured by the abstract "moves", and how you will adapt your language to appeal to the blog reader.

Appendix B. Interview questions

- 1) In the workshop, you did a couple of activities that asked you to analyze and/or write texts that communicate research to non-expert/non-academic readers. What is your perspective, overall, about including these types of activities in a workshop aiming to develop doctoral student writing? Do you feel that this type of task enhances or confuses your understanding of academic writing? Do you feel this type of task enhances or confuses your understanding of writing for non-academic audiences?
- 2) Let's talk specifically about the abstract/blog tasks: From the group activity in class (writing the abstract from the blog and comparing the blog and research abstract), what did you learn about writing abstracts, and about writing blogs? From the individual activity (abstract and blog writing task), what did you learn about writing abstracts vs. blogs or more popularized genres in general? Tell me about some of the changes you made from the abstract when writing the blog, and why you made them. Now you have completed these tasks, how would you summarize the differences between an abstract and a popular science blog? And between writing research genres for expert readers, and popularized genres for non-expert/academic readers?
- 3) Do you have anything else you would like to tell us? (in terms of the tasks, what you learnt about yourself as a writer, and writing for different audiences?)
- 4) Now you have taken part in the workshop, do you feel well-prepared to write for non-academic audiences? What else do you think you might need to know?
- 5) Do you have any questions?

References

Baram-Tsabari, A., & Lewenstein, B.v. (2017). Science communication training: what are we trying to teach? *International Journal of Science Education, Part B: Communication and Public Engagement, 7*(3), 285–300. https://doi.org/10.1080/21548455.2017.1303756

Cheng, A. (2018). Genre and Graduate Level Research Writing. University of Michigan Press. https://doi.org/10.3998/mpub.9558175

Cheng, A. (2007). Transferring generic features and recontextualizing genre awareness: understanding writing performance in the ESP genre-based literacy framework. English for Specific Purposes, 26(3), 287–307. https://doi.org/10.1016/j.esp.2006.12.002

Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with non-expert audiences. *Proceedings of the National Academy of Sciences*, 111(supplement_4), 13614–13620. https://doi.org/10.1073/pnas.1320645111

Deng, L., Laghari, T., & Gao, X. (2021). A genre-based exploration of intertextuality and interdiscursivity in advertorial discourse. *English for Specific Purposes*, 62, 30–42. https://doi.org/10.1016/j.esp.2020.11.003

DePalma, M.-J., & Ringer, J. M. (2011). Toward a theory of adaptive transfer: expanding disciplinary discussions of "transfer" in second-language writing and composition studies. *Journal of Second Language Writing*, 20(2), 134–147. https://doi.org/10.1073/pnas.1320645111

Driscoll, D. L., Paszek, J., Gorzelsky, G., Hayes, C. L., & Jones, E. (2019). Genre knowledge and writing development: results from the writing transfer project. Written Communication, 37(1), 69–103. https://doi.org/10.1177/0741088319882313

Fahnestock, J. (2020). Rhetoric of science: Enriching the discipline. In The state of rhetoric of science and technology (pp. 277-286). Routledge.

Gotti, M. (2014). Reformulation and recontextualization in popularization discourse. *Iberica: Revista de la Asociacion Europea de Lenguas para Fines Especificos*. (27), 15–34. https://revistaiberica.org/index.php/iberica/article/view/260.

Heigham, J., & Croker, R. (Eds.). (2009). Qualitative Research in Applied Linguistics: A Practical Introduction. Springer. https://doi.org/10.1057/9780230239517. Hyland, K. (2005). Stance and engagement: A model of interaction in academic discourse. Discourse studies, 7(2), 173–192.

Hyland, K. (2010). Constructing proximity: relating to readers in popular and professional science. *Journal of English for Academic Purposes*, 9(2), 116–127. https://doi.org/10.1016/j.jeap.2010.02.003

Inouye, K., & McAlpine, L. (2022). Writing across contexts: relationships between doctoral writing and workplace writing beyond the academy. In *Innovations in Education and Teaching International*. https://doi.org/10.1080/14703297.2022.2075431

James, M. A. (2009). "Far" transfer of learning outcomes from an ESL writing course: can the gap be bridged? *Journal of Second Language Writing*, 18, 69–84. https://doi.org/10.1016/j.jslw.2009.01.001

Kobayashi, H., & Rinnert, C. (2013). L1/L2/L3 writing development: longitudinal case study of a Japanese multicompetent writer. *Journal of Second Language Writing*, 22(1), 4–33. https://doi.org/10.1016/j.jslw.2012.11.001

Kellogg, R. T., & Whiteford, A. P. (2009). Training advanced writing skills: The case for deliberate practice. Educational Psychologist, 44(4), 250-266.

Kessler, M. (2021). The longitudinal development of second language writers' metacognitive genre awareness. *Journal of Second Language Writing*, 53. https://doi.org/10.1016/j.jslw.2021.100832

Kuteeva, M., & Mauranen, A. (2018). Digital academic discourse: texts and contexts: introduction. Discourse, Context & Media, 24, 1–7. https://doi.org/10. 1016/j.dcm.2018.06.001

Luzón, M. J. (2012). "Your argument is wrong": a contribution to the study of evaluation in academic weblogs. Text & Talk, 32(2), 145–165. https://doi.org/10.1515/text-2012-0008

Luzón, M. J. (2013). Public communication of science in blogs: recontextualizing scientific discourse for a diversified audience. Written Communication, 30 (4), 428–457. https://doi.org/10.1177/0741088313493610

Mason, S., & Merga, M. (2021). Communicating research in academia and beyond: sources of self-efficacy for early career researchers. *Higher Education Research and Development*, 41(6), 2006–2019. https://doi.org/10.1080/07294360.2021.1945545

Mauranen, A. (2013). Hybridism, edutainment, and doubt: science blogging finding its feet. *Nordic Journal of English Studies*, 12(1), 7–36. https://doi.org/10. 17239/jowr-2023.15.02.04

McGrath, L. (2016). Open-access writing: An investigation into the online drafting and revision of a research article in pure mathematics. *English for Specific Purposes*, 43, 25–36. https://doi.org/10.1016/j.esp.2016.02.003.

McGrath, L., & Negretti, R. (2023). Introduction to the special issue: Innovation in L2 writing task design. Journal of Second Language Writing, 62. https://doi.org/10.1016/j.jslw.2023.101073.

Moirand, S. (2003). Communicative and cognitive dimensions of discourse on science in the French mass media. Discourse studies, 5(2), 175-206.

Myers, G. (1991). Lexical cohesion and specialized knowledge in science and popular science texts. *Discourse Processes*, 14, 1–26. https://doi.org/10.1080/ 01638539109544772

Myers, G. (2003). Discourse studies of scientific popularization: questioning the boundaries. *Discourse Studies*, 5, 265–279. https://doi.org/10.1177/1461445603005002006

Negretti, R. (2021). Searching for Metacognitive Generalities: Areas of Convergence in Learning to Write for Publication across Doctoral Students in Science and Engineering. Written Communication, 38(2), 167–207. https://doi.org/10.1177/0741088320984796.

Science and Engineering. Written Communication, 38(2), 167–207. https://doi.org/10.117//0741088320984796.

Negretti, R., & McGrath, L. (2018). Scaffolding genre knowledge and metacognition: Insights from an L2 doctoral research writing course. Journal of Second Language Writing, 40, 12–31. https://doi.org/10.1016/j.jslw.2017.12.002.

Negretti, R., & McGrath, L. (2020). English for specific playfulness? How doctoral students in Science, Technology, Engineering and Mathematics manipulate genre. English for Specific Purposes, 60, 26–39. https://doi.org/10.1016/j.esp.2020.04.004.

Negretti, R., Persson, M., & Sjöberg-Hawke, C. (2022). Science stories: Researchers' experiences of writing science communication and the implications for training future scientists. International Journal of Science Education – Part B, communication and public engagement, 12(3), 203–220. https://doi.org/10.1080/21548455.2022.2060530.

Negretti, R., Sjöberg-Hawke, C., Persson, M., & Cervin-Ellqvist, M. (2023). Thinking outside the box: senior scientists' metacognitive strategy knowledge (MSK) and self-regulation of writing for science communication. *Journal of Writing Research*, 15(2), 333–361. https://doi.org/10.17239/jowr-2023.15.02.

Ortega, L. (2012). Epilogue: exploring L2 writing–SLA interfaces. Journal of Second Language Writing, 21(4), 404–415. https://doi.org/10.1016/j.jslw.2012.09.

Pérez-Llantada, C. (2021). Research Genres Across Languages. Multilingual Communication Online. Cambridge: Cambridge University Press. https://doi.org/10.1017/9781108870528

Reiff, M. J., & Bawarshi, A. (2011). Tracing discursive resources: how students use prior genre knowledge to negotiate new writing contexts in first-year composition. Written Communication, 28(3), 312–337. https://doi.org/10.1177/0741088311410183

Rose, D., & Martin, J. N. (2012). Learning to Write, Reading to Learn: Genre, Knowledge and Pedagogy in the Sydney School. University of Toronto Press. https://doi.org/10.1075/fol.20.2.09mul

Sasaki, M., Baba, K., Nitta, R., & Matsuda, P. K. (2020). Exploring the effects of web-based communication tasks on the development and transferability of audience awareness in L2 writers. Australian Review of Applied Linguistics, 43(3), 277–301. https://doi.org/10.1075/aral.18035.sas

Serra, M. J., & Metcalfe, J. (2009). Effective implementation of metacognition. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), Handbook of Metacognition in Education (pp. 278–298). Mahwah, NJ: Erlbaum. https://doi.org/10.4324/9780203876428.

Swales, J. M. (1990). Genre Analysis. Cambridge University Press.

Swales, J. M., & Feak, C. B. (2023). Task evolution in English for Academic Purposes writing materials: The case of "Information Transfer" to "Critical Commentary. Journal of Second Language Writing, 61. https://doi.org/10.1016/j.jslw.2023.101017.

Tardy, C. M. (2009). Building Genre Knowledge. Parlor Press.

Tardy, C. M. (2016). Beyond convention: Genre innovation in academic writing. University of Michigan Press.

Tardy, C. M. (2019). Genre-Based Writing: what Every ESL Teacher Needs to Know. Ann Arbor: University of Michigan Press. https://doi.org/10.3998/mpub. 12764307

Tardy, C. M. (2021). The potential power of play in second language academic writing. *Journal of Second Language Writing*, 53. https://doi.org/10.1016/j.jslw. 2021.100833.

Tardy, C. M., Sommer-Farias, B., & Gevers, J. (2020). Teaching and researching genre knowledge: toward an enhanced theoretical framework. Written Communication, 37(3), 287–321. https://doi.org/10.1177/0741088320916554

Wei, X. (2020). Assessing the metacognitive awareness relevant to L1-to-L2 rhetorical transfer in L2 writing: the cases of Chinese EFL writers across proficiency levels. Assessing Writing, 44. https://doi.org/10.1016/j.asw.2020.100452

Zou, H., & Hyland, K. (2019). Reworking research: interactions in academic articles and blogs. Discourse Studies, 21(6), 713–733. https://doi.org/10.1177/1461445619866983

Zou, H. J., & Hyland, K. (2020). "Think about how fascinating this is": engagement in academic blogs across disciplines. *Journal of English for Academic Purposes*, 43. https://doi.org/10.1016/j.jeap.2019.100809

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