

THINKING ALLOWED

Learning a specialized register: An English for Specific Purposes research agenda

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Abstract

Increased work connectivity and study mobility over national boundaries in recent decades has led to a shift in the kind of English as a Second Language (ESL) instruction implemented in many educational institutions. Instruction to develop learners' general English language proficiency may appear as a time-consuming and abstract endeavour. Instead, many institutions implement English for Specific Purposes (ESP), including English for Academic Purposes (EAP) type instruction. In ESP, the aim is to help students develop the specialized academic and work-related linguistic registers they need to function in target settings where English is used as a medium of instruction or in businesses and workplace communication. A great deal of ESP research has now been conducted to build linguistic descriptions of specialized registers. Rather less research has focused on the learning of such specialized registers. This article identifies areas for a research agenda to develop an understanding of learning a specialized register. It sets out two sites for enquiry, namely, learning in a target workplace or disciplinary study setting and learning in instructed ESP, and four topics for enquiry, namely, processes of learning, conditions for learning, learning trajectories, and transfer of learning. Example tasks are suggested for research into learning in target settings.

1. Introduction

Conventionally, the aim of English as a Second Language (ESL) instruction has often been construed as the development of a general and broad English language proficiency. More recently, the aim is often seen as the development of work- or study-related linguistic registers that will enable learners to operate in their targeted work or academic situation. Through learning such specialized registers, it is hoped that learners will be able to transition seamlessly into situations where English is used as a medium of instruction or as a language through which businesses operate and workplaces conduct transactions. An example of this is the rapid global increase in English Medium Instruction (EMI), especially in tertiary level education, that has occurred in the last two decades. With so many more students now studying disciplines, such as Finance or Health Sciences, through the medium of English, although it is not the first language (L1) of any or many students in the class, it seems important that knowledge is developed on how students come to learn the English they require for disciplinary study. No longer should research into learning focus on general English alone. Rather, the scope of research should be extended to learning specialized registers because it is specialized registers that many institutions now target for instruction and that learners seek to acquire.

Developing an understanding of the learning of specialized registers is particularly important for the field of English for Specific Purposes (ESP). ESP is now an established and mature field of research and teaching. It has a well-developed literature and dedicated journals, such as *English for Specific Purposes* and the *Journal of English for Academic Purposes*. As a scholar working in this field for

over two decades, I have had the opportunity to reflect on both the strengths of the research literature and its limitations. I have argued in earlier publications (Basturkmen, 2021) that it is a field where most research has focused on linguistic inquiry. See, for example, linguistic inquiry into artists' statements (Swales, 2016), e-commerce webchat exchanges (Xu & Lockwood, 2021), and case reports in engineering studies (Parkinson et al., 2022). Linguistic inquiry has been an important and worthy research endeavour as ESP practitioners can draw on the linguistic descriptions provided by the research in developing teaching materials and pedagogy.

Previously, I argued (Basturkmen, 2021) that the topics of ESP teaching and learning of specialized registers should receive more research interest, and that these topics should not only be add-ons or relegated to applications sections at the ends of linguistic inquiries. My observation of ESP literature in the last few years suggests that quite a lot of publications now include a strong focus on teaching. An example of the latter is a recent volume on the topic of vocabulary and ESP research (Coxhead, 2018). The volume details various strands of ESP lexical research, such as word list research, but it also includes a chapter on the possibilities for focusing on specialized vocabulary in ESP curriculum development and materials design. A further example is a chapter length treatment of pedagogy in the recent volume that introduces English for research publication purposes (Flowerdew & Habibe, 2022), a sub specialism in English for Academic Purposes (EAP). The chapter deals with methodologies for teaching and modes of teaching delivery, and highlights the limited research on teacher development for this sub specialism. See also recent work detailing a teaching intervention for practicing nurses (Pun, 2023), the development of a critical-pragmatic teaching methodology for EAP (Du, 2022), and the evaluation of ESP teaching materials for hotel receptionists (Wattanawong, 2022). On occasion, reports describing the introduction of ESP teaching innovations comment on learning (Bullock, 2022; Dressen-Hammouda, 2022; O'Byrne & Wette, 2020).

To date, inquiry into ESP learning has mainly been on the topic of learning needs. Research on this topic seeks to identify the language skills, knowledge, and learners' current levels vis a vis the levels required for effective participation in the target setting. The information gleaned can be used to inform the design of ESP curricula (Basturkmen, 2018). Considerable advances have been made in the research methodologies used to identify learning needs (Serafini et al., 2015), and the topic continues to attract research interest (Arias-Contreras & Moore, 2022; Huang & Yu, 2023).

But what of research into the learning of specialized registers? Here, ESP literature is incipient rather than well-developed. Topics have included affective factors and learner characteristics, such as motivation and willingness to communicate, but like much ESP research in general, the literature generally consists of case studies in one context (Woodrow, 2022). See recent examples in EAP, such as Ren and Zhu (2023) and Yang (2023). Theoretical discussion of learning specialized registers is very limited. There has been some discussion of conditions for learning (Basturkmen, 2006) and of constructivist approaches to ESP pedagogy in which learners engage in scaffolded, practical, problem-solving tasks. The teacher scaffolds, or supports, the learners with what they are not able yet to do or for which they lack linguistic knowledge, and then strategically reduces support for the learners as they progress towards independent production (Gollin-Kies et al., 2015). There is a dearth of empirical research on learning, especially in target rather than instructed settings. Yet, target settings are the destination for ESP learners, and some language teachers or consultants work in such settings. The development of a research agenda targeting ESP learning is almost non-existent, although see Lafford (2013) on learning Spanish for specific purposes.

The lacunae identified above lead to the present article, which proposes two sites for research into learning specialized registers (target and instructional settings) and four topics areas for research (see Table 1). Section 2 suggests research tasks for target settings sites and outlines research methodologies for them. I believe that the challenges associated with inquiry into learning (Woodrow, 2022) have hindered the development of research in this area. Methods for ESP linguistic inquiries, such as genre- and corpus-based studies of text, are now well-established and familiar to many ESP researchers. Methodologies for inquiry into learning, such as the use of stimulated recall, techniques for eliciting learners' implicit rather than explicit linguistic knowledge, or other procedures from the field of Second Language Acquisition (SLA) may be relatively unfamiliar to researchers in ESP.

Table 1. A framework for ESP research into learning specialized registers

	Learning processes	Learning conditions	Learning trajectories	Learning transfer
Target setting				
Instructed ESP				

In this article, RESEARCH INTO LEARNING refers to an inquiry aimed at developing an understanding of how learners come to acquire specialized registers, such as the use of English in a workplace or disciplinary study setting. REGISTERS here refer to language patterns, that is, the grammar, vocabulary, and discourse that are characteristic of texts in specialist fields (Biber & Conrad, 2019). Genres are one type of discourse pattern. ENGLISH FOR ACADEMIC PURPOSES refers to both ENGLISH FOR GENERAL ACADEMIC PURPOSES (EGAP) and ENGLISH FOR SPECIFIC ACADEMIC PURPOSES (ESAP), such as Medical English or English for Engineering. The existence of variation in academic English across disciplines and thus the linguistic target of learning for those studying a discipline is well established in ESP (Hyland, 2016; Wang & Hu, 2023).

Table 1 presents a framework for research. Topic areas are shown in the first row and sites for research in the left-hand column. The latter include learning in the target setting, such as a disciplinary study, professional or workplace setting, and learning in instructed ESP, such as an ESP course or through using ESP materials. To illustrate, Li et al. (2022) investigated the development of syntactic complexity in Chinese university students' argumentative writing across proficiency levels in EAP classes (learning trajectory/instructed ESP). Rajendram and Shi (2022) investigated whether participation in COMMUNITIES OF PRACTICE (Wenger, 1998) in EAP instruction aided the academic language acquisition of graduate students at a Canadian university (condition for learning/instructed ESP). Hill et al. (2020) sought to ascertain the extent that engineering students transferred learning from instruction in their ESAP academic writing course in a Hong Kong university to their production of an engineering technical report task in the ESAP course assessment scheme (transfer/instructed ESP) and to subsequent writing tasks in engineering studies (transfer/target setting).

2. Research tasks

2.1 Task 1

To identify the kinds of language support that novices receive in the first year of work.

Learning processes and conditions

To date, relatively little is known of how novices learn specialized registers in naturalistic settings, such as in a workplace context (Woydack & Lockwood, 2020). Yet, it can be assumed that, by and large, novices do eventually acquire the specialized register they require in such contexts. Relatively few would receive targeted ESP instruction and most acquire the register to some extent while on the job. Graduate law students on workplace traineeships in Finland described ways they developed their English in the workplace setting through teamwork on language-based tasks. During teamwork, the trainees received feedback from peers and experienced colleagues, and learning was seen to occur “independently of any language teaching institutions, in a context that acts as a scaffold” (Lehtonen, 2018, p. 136). Research to better understand what happens in situ is of potential interest to ESP practitioners as well as researchers. Should research findings indicate that novices are regularly and effectively scaffolded into learning workplace registers within the workplace setting, for example through the efforts of supervisors or experienced colleagues, this has implications for any ESP instruction offered prior to or alongside workplace experience.

Task 1 aims to identify what kind of language patterns and forms supervisors or experienced colleagues in the workplace do and can explain to novices. We might speculate that certain language patterns or forms, such as the organization of a professional genre, would be more apparent and open to

explanation by experienced colleagues than certain other kinds of features, such as pragmatics and subtle or indirect forms of spoken expression. However, these are speculations and in this inquiry the researcher sets out to confirm or disconfirm any such speculations. If novices are supported in the workplace with genre organization or if the genre does not appear to be problematic for novices in the workplace, does ESP instruction need to target the genre?

In Task 1, novices are interviewed about the kinds of support provided in the first year of their work experience and their views as to its efficacy. An alternative, or supplemental method, is to ask the novices to keep learning journals in which they record any language-focused interactions or interventions provided by their supervisors and experienced colleagues. They also record their perspectives of what they learnt from such interactions and interventions, as well as the modes of delivery, such as the supervisor provided a sample text/genre or critical feedback on the choice of expression used by the novice in interacting with a client.

This research would contribute to current knowledge in two ways. Findings can inform decisions about areas of the specialized register to be prioritized in ESP instruction. Areas already addressed in the target setting might be accorded a lower priority than areas that are not addressed. Research findings across studies indicative that supervisors and experienced peers do assume a role in providing language support would contribute to understanding of how novices acquire specialized registers in target settings.

2.2 Task 2

To identify the kinds of language support students receive in disciplinary study.

Learning processes and conditions

Language support that may already exist in disciplinary study settings has not been widely discussed by the EAP teaching community, and an assumption might be made that only language teachers provide language support. An argument can be made that EAP practitioners can best provide language support when they are aware of the kinds of support students new to disciplinary study receive within their disciplinary studies. Research is needed to identify the extent and ways that students are scaffolded linguistically during disciplinary study.

This task focuses on a pedagogic setting, where there is likely to be a wider range of forms of language support than in a workplace setting, which was the topic of Task 1. Research Task 2 aims to identify the range of forms of language support provided in a disciplinary study setting. The types of language support might be varied and could include activities undertaken by disciplinary lecturers, dissertation supervisors or tutors employed within the disciplinary setting, materials provided to students in the setting that include some focus on language, or student group learning activities, such as project or case work. Students may, for example, discuss the choice of linguistic expression or ways to organize the project or case report. In one university INFORMATION SYSTEMS programme, advanced graduate students wrote model project reports for use by professors who were teaching the undergraduate project course, a course in which students were required to work in teams to develop software solutions and write reports on these solutions for a real-life or imagined client (Miller & Pessoa, 2018).

Some of my recent research examined the extent language became the topic of discussion incidentally during interaction in EMI classrooms (Basturkmen & Hong, 2023; Hong & Basturkmen, 2020). Classroom observations showed that the disciplinary lecturers regularly took brief time-outs from the main lecture content to deal with vocabulary points, seemingly to facilitate their students' acquisition of disciplinary vocabulary. An earlier study (Basturkmen et al., 2014) investigated disciplinary supervisors' feedback on student dissertation drafts. Although the supervisors reported that they did not consider language support as their role, analysis of the drafts showed that a high proportion of their feedback comments concerned language issues, which suggested that their feedback functioned partly as a form of language support.

In the task, the researcher seeks to identify the forms of language support provided in a disciplinary study setting. The primary data sources are observations, such as recorded classes or supervisory meetings, and/or documentary evidence, such as analysis of teaching materials or feedback on students' written work. To analyse the data, the researcher would devise a coding scheme. To illustrate, in the study of supervisors' feedback reported above (Basturkmen et al., 2014), each feedback comment was coded as focused on content or on linguistic issues, such as language expression. Observational data such as these provide a direct window onto practices. Self-report type data, as described above, can be problematic as participants may have limited awareness of the type or extent of attention to language in their practices or interactions. This limited awareness may be due to the often incidental and transitory nature of the attention and the fact that language development is not the goal of disciplinary teaching.

If the researcher wishes to also assess evidence of learning from the language support provided, careful consideration of the type of data to collect is needed. Students in a disciplinary study setting would likely have varying funds of linguistic knowledge. A disciplinary lecturer may correct a linguistic expression produced by one student in the class who lacks familiarity with the form of expression, but other students may already be familiar with the expression. Individualized tests of learning were devised by Hong (2021) in a study to assess the extent of student learning from incidental attention to language issues in EMI classroom interaction.

Findings from Task 2 would contribute to knowledge in ESP in much the same way as the first research task above, that is, in developing the field's understanding of the naturalistic learning of specialized registers. In addition, as this research task aims to identify the range of linguistic support provided, findings may unearth previously little-known forms of support, such as the model reports written by graduate students (Miller & Pessoa, 2018). Potentially, findings may prompt a reconsideration of EAP's role within wider institutional contexts, and a possible shift towards a view of EAP as one part of a network of sources of language support. EAP has considered how its practitioners may share their expertise with disciplinary lecturers (Tibbets & Chapman, 2023). The information flow could go in the opposite direction as well – information about how disciplinary teachers deal with language issues that arise in the context of their teaching may provide insights to the EAP teaching community.

2.3 Task 3

To identify novices' self-help strategies for learning a specialized register.

To investigate the kinds of language issues novices resolve over time in the target setting.

Learning processes and conditions, trajectory of learning

We would anticipate that novices to a workplace or disciplinary study context would to some extent take it upon themselves to further their ability to use the specialized register. They may, for example, develop strategies to enable them to process texts, notice linguistic features routinely used, and monitor and regulate their learning and social strategies to work closely with knowledgeable peers. One possible future role for ESP instruction might be to help learners develop such strategies, rather than restrict the teaching role to the direct provision of information on the specialized register. However, to date, understanding of such self-help strategies is limited.

In the task, the researcher conducts a series of job-shadowing observations of new personnel in a specific workplace role, such as receptionists in hotel settings, with the aim of identifying the kinds of strategies novices use for learning language for work tasks. Examples of such tasks in a hotel reception setting might include dealing with email inquiries or checking out guests. During observations, the researcher identifies instances when the novices obtain support from experienced colleagues or draw on specific resources, such as training documents or exemplars, to support their learning of the register and any actions they take to consolidate their learning, such as making notes of useful expressions that they see others use. The researcher could also note any developments or lack of development in the novices' language use during the period of observation and/or collect documents, such as any writing the novices produced in carrying out the tasks. Following the observations, the novices

can be interviewed to gain insights into their explanations of their strategy choices and to unearth any strategies that would not be evident through observation.

Findings from the task would be used to develop an inventory of strategies for learning specialized registers in target settings, which could be used in research in other workplace or disciplinary study contexts. Findings of a widespread use of self-learning strategies across contexts could be used to support initiatives for strategy training in ESP. Findings of a lack of language development might suggest the kinds of linguistic issues that tend to remain problematic, that is, issues that are not resolved over time in the target setting. Information about these issues could inform decisions for ESP course content. These might be prioritized in an ESP course.

2.4 Task 4

To develop an understanding of how novices acquire genres in the target setting.

Learning processes and conditions, trajectory of learning

Tasks 1, 2, and 3 above were inquiries into the learning of a specialized register in general. Task 4 is an inquiry into the learning of one specific genre or type of spoken event from the specialized register. Research into genre learning in instructed ESP, although limited (Cheng, 2006), has begun to receive more research interest of late. See, for example, Wang (2017). The ESP genre approach is based on the idea that genres can be taught in writing classrooms using a combination of consciousness-raising activities and text production activities. Some scholars in the RHETORICAL GENRE STUDIES tradition argue that because genres are highly complex and situation specific, and are constantly evolving, they are best acquired in real-world contexts (Hyon, 2017).

Research into genre learning in target settings has been limited. However, one notable study (Parks, 2001), investigated the on-the-job learning of written care plans, a key genre in nursing. The study (op. cit.) investigated how a group of nurses in Quebec, who had first acquired the genre in their L1 (French) training, progressed in writing care plans in English when they transitioned to working in an English medium hospital. The study found that although writing difficulties emerged during the progression, the nurses were scaffolded in their learning of this genre by their colleagues and were exposed to models of the genre written by experienced colleagues.

For Task 4, the researcher identifies a specific genre of importance in the target setting. See, for example, Parks' (2001) study of care plans in a hospital nursing context. Samples of the genre written by the learners are collected for analysis. These include samples from the learners at both entry and later stages of work experience. The samples are analysed for evidence of a learning progression. The samples can be benchmarked against samples written by experienced members of the workplace. Learners are also asked to keep a journal to record any difficulties that emerged in learning the genre and their experiences of learning, such as ways that experienced peers or mentors supported their learning of the genre.

Findings from Task 4 can be used for discussion of whether genres can be taught in ESP writing classrooms or are best learnt in real-world contexts. Findings might indicate that on-the-job genre learning is limited, even over time, or they might show good learning progression. Research over multiple sites and genres showing limited or difficult genre learning could be drawn on to argue for the creation of on-site roles for language consultants or the provision of genre-focused language teaching materials for on-site use.

2.5 Task 5

To assess the extent of transfer from instructed ESP to the target setting.

Transfer

ESP instruction generally strives to prepare or support learners for the language demands of their target settings. ESP courses strive to equip learners with communication skills that they will be able to

apply to different tasks in real-world settings (Hill et al., 2020). More information is needed, however, about the extent learning from ESP instruction is transferred to the target setting. Learners may reconstruct their learning from the instructed setting when they come to operate in the target setting. The term *ADAPTIVE TRANSFER* (Depalma & Ringer, 2013) has been posited to refer to the fact that learners can combine, re-use, and reshape acquired knowledge. One ESP study (Cheng, 2007) described, for example, how a learner recontextualized acquired genre awareness when faced with a new rhetorical context. The notion of adaptive transfer implies that learners can reconstruct acquired knowledge and not just apply it (Huhta et al., 2024).

One potential difficulty of research into transfer concerns the time lag between the instruction and when learners are asked to assess its value or transferral. Respondents can only realistically be asked to make such an assessment when they have a stretch of experience working or studying in the target setting. By this time, their recall of the instruction they received is likely to be fading. Questions used in the interview or questionnaire can be abstract. The value of data gathered under such constraints is questionable. Can respondents really remember much about the instruction? How meaningfully can they respond to abstract questions about learning experiences? A review of learning transfer research in EAP (James, 2014) found that some studies asked respondents about past EAP instruction in general but not about learning in an actual EAP course.

Methodological improvements are seen in some studies. To investigate learning transfer from an English for engineering (ESAP) course, Hill et al. (2020) tracked engineering students over an academic year and combined data types and sources – students' self-identified learning transfer outcomes elicited in interviews and researcher-identified outcomes based on analysis of the students' written assignments in both their ESAP and engineering courses. Delayed as well as immediate post-course questionnaires were used to investigate students' views of the value and their continued application of the data-driven learning targeted in their corpus-based ESP instruction (Jablonkai & Čebon, 2021). Interviews and questionnaires were used to investigate learners' views of the value and their continued application of learning from an aviation cabin services ESP programme, with the questionnaire and interview administered to graduates five months and one year after the programme completion, respectively (D. Atay, personal communication, 12 July 2023). For a report of the programme, see Mede et al. (2018). All three studies here elicited learners' views or practice of continued application of learning from specific ESP courses and were conducted within a reasonable timeframe after completion.

In Task 5, the researcher interviews novices to a workplace or disciplinary study setting who had previously received or who are currently receiving ESP instruction. In the interviews, sample instructional materials from the ESP course are used as points of departure for discussion of the novices' recall of their transfer or application of instructed learning in the target setting. The materials could include language descriptions, such as lists of useful expressions, or a description of a genre or learning activities, such as role play scenarios. Such materials would provide concrete illustrations of the ESP instruction, which should stimulate the interviewees' recall of the instruction and applications in the target setting. Careful consideration needs to be given to the timing of the interviews, which should be held within a realistic time after the instruction.

The interview aims to investigate the novices' perceptions of the extent they have been able to transfer language patterns highlighted in prior or on-going ESP instruction in their workplace or disciplinary study setting. Prompts would ask about when and how the novices draw on the taught material, or reconstruct it for the new context, whether what was taught appears realistic in relation to target setting work or study experiences, as well as asking for suggestions for what might be targeted in ESP instruction in the future. Questions might also inquire into the kinds of linguistic issues interviewees feel they continue to face in their target setting for which instruction had not prepared them.

Findings from the research task can contribute to the growing body of evidence concerning the value of ESP instruction (Hill et al., 2020; Jablonkai & Čebon, 2021; Mede et al., 2018), offering evidence of the value of teaching specialized registers. ESP instruction may contain content

that is highly relevant to the learners' future work or study needs and the learners may be successful in acquiring that content in the instructed setting. However, what is learnt in the instructed setting is not necessarily transferred to the target workplace or academic setting. "Successful learning does not automatically lead to successful transfer" (James, 2014, p. 2). If transfer of learning is very limited or not evident, the rationale of ESP becomes questionable. General factors that may impede transfer have been identified in research in psychology, education, and human resources development (James, 2014). So, it is not the case that findings of limited transfer would necessarily be due to the content or quality of ESP instruction. However, without a body of empirical evidence of transfer of learning, claims of the value of teaching specialized registers remain speculative.

2.6 Task 6

To compare the long-term academic success of students from English for general and specific academic purposes instruction.

Learning conditions, transfer

EAP scholars tend to advocate for a disciplinary-specific orientation to EAP instruction. The argument has largely been based on linguistic grounds and with reference to research evidence of disciplinary variation in language use and genre practices that reflect differences in knowledge creation and distribution (Costley & Flowerdew, 2017; Gardner & Nesi, 2013; Hyland, 2016). However, general academic purposes, or multidisciplinary, classes would appear to be more prevalent than ESAP world-wide. In many situations, it is simply more convenient and cost-effective to have multidisciplinary EAP. Furthermore, learning alongside students from different disciplines may help learners become more aware of the characteristics of their own discipline (Charles & Pecorari, 2016).

Song (2006) investigated the academic performance of two groups of students enrolled in ESL courses that aimed to help them develop academic literacy in English at the same point of time in their first semester of study. One group received one semester of content-based instruction (broadly equivalent to ESAP), which included work on disciplinary assignments and topics and provided opportunities for the learners to participate in social and academic events, such as lectures by faculty or guests. The other group received non-content-linked academic literacy instruction. Song tracked the progress of the two groups through their academic records. Students receiving the content-based instruction were found to have better long-term academic success rates than those who received non-content-based instruction.

Task 6 is a suggestion for research to replicate Song (2006). It is a CONCEPTUAL REPLICATION (Porte & McManus, 2019, p. 85). The aim is to provide more information on the generalizability of the underlying premise of the original study (that students' long-term academic outcomes relate to the type of EAP instruction), but the site of the research would differ, and the instruction (general academic or disciplinary) would reflect current definitions of these constructs. In the task, the researcher adopts Song's (2006) method of tracking records to compare the success of students as they progress in their academic studies following specific or general academic literacy type instruction.

Findings from Task 6 could support the original study's findings and bolster arguments for disciplinary EAP, which has been based largely on linguistic grounds rather than links with students' long-term academic outcomes. Findings might, however, provide evidence to the contrary or be inconclusive.

2.7 Task 7

To develop the notions of explicit and implicit learning in ESP.

Learning processes

EAP instruction in the late twentieth century focused largely on study skills, such as academic reading and listening (Jordan, 1997). More recently, more focus in EAP is given to the development of

linguistic knowledge, especially knowledge of academic and disciplinary genres, vocabularies, and registers. With this shift, a good deal of emphasis is now given to drawing learners' attention to academic linguistic choices, including academic or disciplinary forms of expression, and ways genres are conventionally structured. Work-related ESP instruction too is often concerned with the teaching of written genres, such as curriculum vitae (Gimenez, 2023).

It has become an almost uncontested assumption that form-based instruction will be provided, in which learners' conscious attention is drawn to linguistic choices, text structures, and genre patterns, yet the reason for this has not been the subject of much discussion in the field. Presumably, the underlying premise is that conscious attention, and thus the development of learners' explicit knowledge, will fast-track their acquisition of specialized registers. Suggestions for genre-based teaching almost invariably specify an explicit instructional approach, involving analysis of the genre's rhetorical structure and the kinds of grammatical and lexical choices associated with it. Interviews with in-session EAP teachers (Tibbets & Chapman, 2023) highlighted their prevailing view that genre instruction aims to raise learners' awareness of typical organization patterns.

Linguistic inquiry by nature produces descriptions of language that are highly explicit. To illustrate, linguistic inquiry into study genres revealed ways students typically structure their writing and the typical linguistic choices they draw on in writing explanation type texts (Gardner & Nesi, 2013). The information is very useful. For example, teachers can draw on the information when giving feedback to a learner who is struggling to produce an explanation text or who has questions about explanation type texts. However, might instruction also include opportunities for learners to develop tacit knowledge of this genre and learn through exposure as well as, or instead of, form-focused instruction on the genre structure and linguistic features? Such questions concerning implicit and explicit learning are not given much attention in the ESP literature.

Links could usefully be forged between ESP and the notion of explicit and implicit language knowledge in SLA literature. Ellis sums up the prevailing SLA view that indicates important roles for both implicit as well as explicit language learning and what this implies for instruction:

With regard to language pedagogy, there is now consensus in the acknowledgement of separable contributions of explicit and implicit language learning, and it is more usual to hear of the necessity of a balanced learning curriculum that provides opportunities for meaning-focused input, meaning-focused output, form-focused learning, and fluency development.

(Ellis, 2017, p. 118)

Task 7 is a suggestion for theoretical inquiry to develop the notions of implicit and explicit learning of specialized registers in ESP. The inquiry could wrestle with the question of when an explicit or implicit approach would be beneficial and identifying the distinctive contributions of implicit and explicit learning to the acquisition of specialized registers. For example, we might theorize that the learning of formulaic language, such as discipline-specific phrases (Green & Lambert, 2019), would occur largely implicitly whereas learning complex patterns, such as the rhetorical structure of genres, would require conscious attention. For discussion of research into implicit and explicit learning of simple and complex material, see Ellis (2017) and for discussion of formulaic and rule-based learning, see Ellis (2005).

Theory building on this topic would contribute to the ESP literature on teaching approaches. The literature here has very largely dwelt on explicit approaches to teaching and learning specialized registers and has had little to say or little interest in implicit approaches. There needs to be discussion in ESP about the roles of implicit and explicit learning in acquiring a specialized register. It is likely that tacit learning does play a role in learning specialized registers, and tacit learning should be considered more in discussions of ESP teaching approaches.

Table 2. Research tasks for target settings in relation to topic areas

	Learning processes	Learning conditions	Learning trajectories	Learning transfer
Target setting	Tasks 1, 2, 3 & 4	Tasks 1, 2, 3, 4 & 6	Task 3 & 4	Task 5 & 6

3. Conclusion

ESP has long been associated with linguistic inquiry to build descriptions of specialized registers that can be drawn on in teaching and learning. Linguistic inquiry has led ESP researchers to venture into target settings in quests to identify language needs, language use, and forms of communication. Research Tasks 1 through 6 suggested above forge a different track. They set out lines of inquiry into the learning of specialized registers and make suggestions for researchers to venture into target settings to explore the kinds of learning processes, conditions, and opportunities that may exist there, and to search for evidence of how learners apply learning from ESP instruction in the target setting. Task 7, a suggestion for theoretical inquiry, was not situated in either instructed or target settings, although inroads into conceptual understanding from such inquiry would likely be relevant to either setting type. [Table 2](#) shows the suggestions for empirical research (Research Tasks 1–6) in target settings in relation to topic areas.

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