

# A Critical Review of Genre-Based EAP Studies in the Context of Disciplinary Changes

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# Abstract

This paper critically examines genre-based studies in English for Academic Purpose (EAP) within the context of disciplinary changes. While genre-based investigations in various disciplines provide valuable insights into RA writing, they may inadvertently perpetuate essentialist views on research writing. The study highlights the need to bridge the gap between genre-based RA investigations and the evolving demands of interdisciplinary research. By reviewing the relevance and effectiveness of previous studies, the paper identifies trends, gaps, and challenges, offering recommendations to align genre-based research with the dynamic landscape of academic disciplines. The discussion also delves into the transformative nature of disciplines, challenging traditional boundaries and impacting research writing practices. Finally, the paper suggests a future path for genre-based investigations, emphasizing a shift from circumscribed move-step analyses to a more comprehensive understanding of student's real needs in research writing practices across disciplines.

#### **Keywords**

Genre-Based, Disciplinary Changes, Critical View, EAP

# **1. Introduction**

In the realm of English for Academic Purpose (EAP), genre-based investigation into research articles (RAs) is largely on Genre Analysis proposed by Swales (1990). The definition of genre is a class of communicative events, the member of which share some set of communication purposes which are recognized by the members in the discourse community (Swales, 1990). The shared purposes shape the schematic structure of the discourse and influence the linguistic and style choices. The rationale of genre that is shared further assumes that the similarities observed in rhetorical pattern and lexical choices are conventionalized in discourse community. Therefore, the conventionalized discourse pattern of a certain discourse community, for instance, the genre-based investigation of rhetorical pattern of RAs can be effectively to identify the expected structure in RAs and used as an instruction of academic writing by EAP (Lim, 2011; Basturkmen, 2012).

RAs of the disciplines would be one of the most prominent genres in the research world that it is the central genre of knowledge production (Yang & Allison, 2003), in terms of consolidating and sharing disciplinary and making advancement (Hyland, 2005). The significance RA in research world and genre analysis as a powerful tool motivates the enthusiasm on the generic structure of RAs in many disciplines, such as engineering (Ye, 2019; Kanoksilapatham, 2015), Agricultural Sciences (Rubio, 2011), Law (Tessuto, 2015), Forestry (Joseph & Lim, 2019), Management (Cheng, 2021), and Applied Linguistics (Yang & Allison, 2003; Liu & Buckingham, 2018; Ash'ari et al., 2023). These genre-based investigations of RAs in disciplines as abovementioned have largely build up our knowledge of RA writing in terms of rhetorical pattern in difference sections and the expectations from corresponding discourse communities, serving as a background or reference point for novice researchers. Those disciplines-based genre investigations are undoubtedly productive but invite an essentialist trap on research writing (Kaufhold & McGrath, 2019) that the epistemological characteristics of disciplines and related social backgrounds are tied in a very direct way. As genre scholars often claim that the variation observed in textual differences can be considered distinguishing features among academic disciplines (Kanoksilapatham, 2015), and the rhetorical organization and linguistic choices by disciplinary expert reflect the expectations and requirements of the discourse community (Lim, 2011).

In fact, such a monocausal view of a highly complex writing practice in a narrowed discipline sense could be misunderstanding and distorting the practice of writing which is a complex social activity (Bazerman, 2011). Recently, scholars under the ever-changing research landscape may find the demand to staddle and even move out the epistemology, methodology and theories of disciplinary boundaries (Kaufhold & McGrath, 2019). In this context, there seems a gap between a genre-based RA investigation and writing demands that the genre-based studies of a RA view the discipline as conventionalized or fixed, while the scholars in the field often find the need to cross over the limits that unintentionally and unexpectedly challenge the conventionalized disciplinary writing, as this is also indicated in study of Kaufhold and McGrath (2019). Moreover, the complexity of modern world, such as climate change and economic inequality may necessitate more interdisciplinary research and writing. It is still unknown how our current EAP research satisfied the disciplinary and social changes. To fill in this gap, this study aims to critically review previous genre-based EAP studies, with a specific focus on their relevance and effectiveness in addressing disciplinary variance. Secondly, this research will also discuss disciplinary changes and

review its influence on research writing, identify trends, gaps, and challenges in the application of genre-based approaches within the dynamic context of evolving academic disciplines. This study also seeks to offer recommendations for refining genre-based EAP research particularly for pedagogy purposes to better align with the changing demands and expectations within diverse academic disciplines.

## 2. Genre-Based EAP Studies

The Genre-based investigation into RAs is largely grounded in the two-layer text analytical framework, move and step, proposed by Swales (1990). In this framework, moves serve as rhetorical units that fulfill coherent communicative functions within the texts, which give the units of text "a uniform orientation and signal the content of discourse in it" (Moreno & Swales, 2018; Nwogu, 1991). While steps constitute the lower level of rhetorical units, perceived as indispensable for advancing the text, they work together, either individually or in various combinations, to achieve the move and, ultimately, fulfill the communicative purposes of the genre (Moreno & Swales, 2018; Biber et al., 2007). Under this framework, the annotation of the moves/steps of the RAs often involves a combined top-down and bottom-up approach. This approach is used to identify the move/step based on the propositional meaning of the text unit(s) and linguistic clues to classify the move/steps, then validate the classifications through inter coder reliability test, and finalize the rhetorical structure with move/step frequencies (Peacock, 2002; Rubio, 2011; Kanoksilapatham, 2015; Yang & Allison, 2003; Liu & Buckingham, 2018; Ash'ari et al., 2023; Joseph & Lim, 2019).

Table 1 illustrates the schematic structures of the Discussion Section in one science and three social science disciplines. At first glance, there are some apparent differences between disciplines in terms of the number of moves and steps, the categorization of steps into moves, and the nomenclature of the moves and steps. For example, there are in total 7 moves observed in Yang & Allison's (2003) study, and four in Tessuto (2015), and three in Kanoksilapatham (2015), and 7 moves in Loi et al. (2016). Does that mean there are more rhetorical moves in Education than in Engineering and Applied Linguistic RAs? Or the rhetorical structure in Applied Linguistics is more complex than the other two? Or Engineering Discussion section is more likely to report results than others? The answer to these questions is obviously not, as the three frameworks indicate in Table 1, the study by Loi et al. (2016) is only on a move base while the other two are on a two-layer move and step basis. It is the genre scholar's decision how preciously they would like or need to present the structure of the RA section. Moreover, the research purposes rather than the disciplinary variance also influence the annotated rhetorical structure. Although the three studies are pedagogy-driven, the study of Loi et al. (2016) focuses on a cross-language comparative basis between Malay and English. The significant variance in structure at

Empirical Law	Engineering	Education
Tessuto (2015)	Kanoksilapatham (2015)	Loi et al. (2016)
Providing background knowledge	Reviewing the present study	Information Move
Restating aims, methodology, theory, concepts	Consolidating results	Finding
Presenting claims, generalizations, research gaps	Reporting results	(Un)expected outcome
<b>Reinforcing results</b>	Explaining results	Deduction
Interpreting/evaluating relevant, (un)expected findings	Summarizing results	Reference to previous research
Comparing findings with previous literature	Interpreting results	Explanation
Evaluating the study	Comparing results	Significance of the study
Indicating significance, advantage of research	Exemplifying results	Implication of the study
Indicating limitations	Claiming values of results	Limitation
Deductions from the research	Stating limitations and future research	Recommendation
Drawing implications		
Recommending further research		

Table 1. Schematic structures of the discussion section across disciplines.

higher move levels effectively illustrates cross-language differences, while analyzing nuances at the step level could be too much information in a single paper and may distract the reader's attention from the focus of the study. The study of **Tessuto (2015)** aims to explain the epistemological differences exposed by the scale of theoretical and empirical writing tasks, a standalone "Deductions from the research" that may better highlight the empirical difference than a merged "Stating limitations and future research" in Kanoksilapatham (2015). In a similar vein, the difference would be most noticeable in how results are presented in the three sub-engineering disciplines. Finally, the variance of the first move, for example, "providing background knowledge", "reviewing the present study", and "information move", is, in fact, similar if we investigate the explanations or examples given, the information content, or the basis of categorization.

Secondly, another line of arguments about disciplinary differences is the move/step frequencies observed in the part-genre. Table 2 illustrates the frequencies of two steps: "Drawing implications", and "Recommending further research" in two different disciplines Empirical law (Tessuto, 2015), and Forestry (Joseph & Lim, 2019) which are practical-oriented fields. Nonetheless the "applied" emphasis in the two disciplines, less than half of the Law RAs contain implication

Move/step	Move/step frequency	Move/step frequency
	Empirical Law	Forestry
Deductions from the research		
Drawing implications	43%	81.7%
Recommending further research	57%	66.7%

Table 2. Move/step frequency differences of two disciplines.

steps. Does that mean the Empirical law is less applied than the Forestry? The study by Tessuto (2015) was on a whole RA basis, the dataset indicates nearly 83% of RAs ended with a Conclusion section, in which 69% of them contain the implication step. A similar rhetorical pattern has been observed in Applied Linguistic RAs in which the absence of "Drawing pedagogic implications" in the Discussion section is due to the relegation of this step in the following sections. In other words, the lower frequency of a step in a certain section may just indicate the selected corpus, either randomly or not, could be influenced by the macrostructure of the RA, whether it is standardized IMRD(C), or include "Literature Review", "Background information", "Limitation", and "Recommendation". In this perspective, the conclusion of rhetorical patterns in a section may tentatively reflect the structure of the selected sample, not the discipline variance.

Finally, the genre-based investigation often values the identification of new steps in an RA section and explains the new step(s) as the current writing trend in the discipline. In a recent genre-based study of Applied Linguistics under the annotation framework of Yang & Allison (2003), scholars claimed two new steps, that is "Exemplification" and "Clarification" in Commenting on Results Move (Ash'ari et al., 2023). The two new steps observed were also identified in a cross-disciplinary and cross-language study by Moreno & Swales (2018), who named them "Exemplifying what has been stated in a previous proposition", and "Clarifying what has been stated in a previous proposition" and categorize them as functional rather than rhetorical moves. They explained that the two steps were perceived as a service to the neighboring move/step without contributing to moving the text forward to achieve the communicative purpose of the genre (Moreno & Swales, 2018). The assertion of new or different steps may actually be attributed to the genre scholar's conceptualization of move and step rather than disciplinary differences.

Although the assertion of new steps may not be as "new" as the scholars expected, it may indeed indicate the current writing trend. The "Exemplification" if we assume it is rhetorical rather than functional, has been observed in the Engineering corpus as indicated by **Table 1**, as "Exemplifying results" (Kanoksilapatham, 2015). Similarly, in the cross-disciplinary study of 6 social science fields in the Introduction section, the once prototypical science step, such as "Explaining a mathematical model" was observed in two social science disciplines, Political Science, and Psychology (Lu et al., 2021). The researchers further ex-

plained that the appearance of one science step in social science is due to the influence of interdisciplinarity that computation modeling, data analytics, and AI have been increasingly employed in social science research. Given that the framework of Yang & Allison was proposed in 2003, based on a selected corpus from 1996 and 1997, while the study of Ash'ari et al. (2023) was based on a more recent corpus, from 2017 to 2020, therefore, a diachronic genre-based RA investigation could be valuable for EAP instructions in the context of interdisciplinarity. Genre analysis is both descriptive and analytical, a diachronic investigation could identify the changing rhetorical trends and explore the underlying principles of a genre in the context of discipline dynamism that satisfy the evolving needs of writers of their academic communication practice within or even beyond the discipline.

## 3. Disciplinary Changes

According to the definition by Trowler et al. (2012: p. 9), discipline is a "reservoirs of knowledge resources shaping regularized behavioral practices, sets of discourses, ways of thinking, procedures... These provide structured dispositions for disciplinary practitioners who reshape them in different practice clusters into localized repertoires..." In this definition, discipline is viewed from a social practice perspective that the metaphorical word "reservoir" is a manifestation of the knowledge resources from various disciplines that recontextualized by practitioners and the research circumstance. He further argues the static and nomothetic models of discipline fail to meet the challenges in higher education and social needs while interdisciplinarity that crosses over the disciplinary boundaries free knowledge production and transfer in ways more aligned with real needs (Trowler et al., 2012).

Over the past decades, the landscape of academic research perhaps has witnessed a tremendous shift. In the research realm of Discipline, scholars increasingly focus on the merging process of multidisciplinary, interdisciplinary, and transdisciplinary fields (Barry & Born, 2013). Some once crossed disciplines studies, such as Communication which includes language, politics, history, medical health, and so on has become a widely accepted and established discipline (Craig, 2012). The manifestation of embracing interdisciplinary also can be found in the name of academic departments, such as the Health Policy and Management Department at Columbia University, and the Management Science & Engineering Department at Stanford University. Also, the title of some prestigious journals, such as *Science and Engineering Ethics, Research in Science and Technological Education*, with their Aim and Scope section highlight their multi- and/or inter-disciplinary appetite.

Despite the wide embracing of interdisciplinarity, there is a huge challenge for every practitioner in the research world who may encounter "troublesome knowledge", high levels of uncertainty and risk of crossing boundaries, the anxiety from boundaryless, and a marked change of discourse used (Trowler et al., 2012; Land, 2012). This could be even more challenging for EAP practitioners. Through a semi-structured interview and research-based writing, a recent investigation into discipline and academic writing observed that discipline was no longer in the foreground of research, instead, many other factors, such as scholar's research motivation to embrace the interdisciplinarity, journal policies if it encourages cross-disciplinary research or not, and the research circumstance that the researcher is in a collaborative team or not decide and reshape the research writing (Kaufhold & McGrath, 2019). The rationale of the discipline-based approach that the discoursal decisions are influenced by the inquiry patterns and knowledge constructions of their disciplines (Hyland, 1999, 2005) is under attack. The fluidity and elasticity of discipline nowadays may reasonably raise questions concerning the feasibility of implementing the results of disciplinary reheated linguistic choice.

#### 4. Future Path for Genre-Based Investigations

As argued at the beginning of genre analysis, the genre serves as a metalanguage that helps students raise a set of basic disciplinary writing codes but should be used cautiously (Swales, 1990). He further used six metaphorical terms to refine genre as a frame, standard, biological species, families, institutions, and speech acts (Swales, 2004). Under the metaphorical framework, genre is a set of discourse act guides our appropriate social and rhetorical practice, like living species, slowly evolving, forming part of larger networks (Swales, 2004). In this sense, the understanding of genre is not eternal, it is viewed as a constantly changing discourse practice in response to social changes. As Swales (2019) more recently openly argued "circumscribed move-step analyses" have been over-explored. The move/step annotation framework is a powerful descriptive tool, however, as EAP practitioners, we need to investigate the real differences that might go beyond textual evidence that gain pedagogy insights into their research writing (Swales, 2019). As evidenced in a case study of two postgraduate students' research writing experience, successful EAP instructions today need to shift from pedagogic genres to research topic-oriented writing and help students establish coherent arguments under the discipline jungles (Kaufhold, 2017). For EAP practitioners, this means, that when students are equipped with certain genre knowledge as a general, understanding of the research writing needs, including their degree and status of interdisciplinary research, the likelihood of reading and writing assistant about other theories or methodologies (Lillis & Tuck, 2016). This is, however, to some extent, a request for EAP practitioners to go beyond our own territory and boundaries and become interdisciplinary.

#### **5.** Conclusion

The genre-based investigation into RAs within the realm of EAP has been a cornerstone in understanding the communicative events that shape scholarly discourse. Grounded in Swales' two-layer text analytical framework of moves and steps, scholars have extensively explored the rhetorical patterns and linguistic choices within RAs, particularly in various disciplines. However, the conventionalized view that associates specific rhetorical structures with disciplinary boundaries has faced criticism for its essentialist approach. By reviewing and comparing past genre-based investigations, this study revealed that the rhetoric structure of the RA may suggest some basic writing pattern in the corresponding sections of the RA, serving as a metalanguage for novice writers. However, the disciplinary-based assumption in terms of differences in move/step and their frequencies could be problematic under the interdisciplinary context. The rhetoric pattern of RA and its sections are influenced by specific corpus selected for analysis and research purpose, challenging the notion of rigid disciplinary writing patterns.

The examination of disciplinary changes highlighted the dynamic nature of academic research, with a growing emphasis on interdisciplinary and transdisciplinary approaches. The challenge for EAP practitioners is evident, as the conventional rationale of discipline-based approaches faces scrutiny in a landscape where interdisciplinary factors, motivations, and research circumstances play pivotal roles in shaping research writing. While move-step analyses remain powerful descriptive tools, EAP practitioners are urged to move beyond circumscribed analyses and delve into real differences that transcend textual evidence. A shift towards research topic-oriented writing is proposed, wherein students are equipped not only with genre knowledge but also an understanding of the interdisciplinary nature of contemporary research. This necessitates practitioners to transcend their disciplinary boundaries and adopt an interdisciplinary perspective in guiding students through the complex terrain of academic writing. In doing so, genre-based EAP research can better align with the changing demands and expectations within diverse academic disciplines.

## **Conflicts of Interest**

The author declares no conflicts of interest regarding the publication of this paper.

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