

A COMPARATIVE STUDY OF RHETORICAL MOVES IN INTRODUCTION SECTIONS OF INTERNATIONAL JOURNAL ARTICLES

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Abstract

Like abstracts as part of research articles, introduction section rhetorical moves are important for the writers, especially the novice ones to follow in research writing. Therefore, the rhetorical moves of this sub-genre need to be introduced to them. It is more important when the rhetorical moves are based on their discourse communities. This study tries to explore the rhetorical moves of introduction sections of international journal articles (IJRA). This study is a descriptive research using genre approach for the analysis. It takes the IJRAs of three discourse communities (DC): Education, Technology, and Biology. Each DC consists of 10 sub-genres of introduction sections so that the total number of DC sub genres is 30 IJRAs. All these sub-genres are analyzed using the Creating a Research Space (CARS) that is presented on tables. They are analyzed, discussed, and finally inferred for providing the generalization of the results. The results showed that not all the authors are complied with the rhetorical moves as the measurement used in this study. Among the three discourse communities: Education, Technology, and Biology, only Technology discourse community that is complied with the rhetorical moves of introduction section. This study recommends that the authors should follow the rhetorical moves of introduction section as used in this study rather than just writing this section at random. Further research can be done by including more discourse communities to get more generalizable results.

Keywords: Applied linguistics, genre analysis, CARS, discourse community, rhetorical moves.

Introduction

Writing an introduction section requires understanding the moves in this section especially those who want to write an article for research journal publication. So far, many academicians, researchers, and university faculties have been globally involved in publishing their research products in the international research journals (Haq & Rehman 2021). As it is argued in more rigorously, that research is an organized and systematic approach to discover answers to questions. Based on the questions that always initiate the researchers to explore using their language, it is of course necessary to be well acknowledged with the language expression. When dealing with the

language expression, Sarwat, Et.al (2021) stated that the researchers as the authors to express their language scientifically require a certain method. They advocated that academic language expression requires a method of putting together words to make context. Therefore, it is a method that is considered a conversational medium. With this medium, the researchers can communicate their ideas and notions together with emotions, attitudes, and perception which are related to their main objective of their research. Based on the arguments above, it is necessary for all the researchers, academicians, and university faculties to have knowledge regarding the method of expressing ideas in research journal articles.

For the purpose above, the present researchers, in this occasion, attempt to discover the rhetorical moves of introduction sections of the international journal articles. The researchers find it essential to have a comparative study of rhetorical moves of introduction section due to the importance of this section in any research articles published in the international journals. This introduction section will lead the readers—the editors and reviewers—to provide judgment whether the research articles are publishable or not in terms of the novelty or the new contribution to the knowledge and theories, as based on the language expression they use. Therefore, introduction section is the key to success for the authors to submit their articles for international journal publication.¹ The present researchers are interested in exploring the rhetorical moves of these introduction sections so that the results can be beneficial for the researchers, academicians, and the university faculties for their purpose of publishing their research products.

Studies on rhetorical moves of research articles (RAs) for writing styles or genres have been paid attention by the linguists since years ago. All can be done solely by analyzing certain texts written by a certain discourse community such as Biology, Technology, Economics, Business and other specific discourses as done by Hayland (1992) and Djuwari (2009; 2017). Like Hayland and Djuwari, Poorhadi (2017) and Sabbah (2018) also conducted a research and the result of the analysis was used to design syllabus for ESP classes. Moreover, a recent study has also been done in Malaysia on the Postgraduate students on Information Technological Tools by Jeyaraj (2020). This research was done but by interviewing the postgraduate students for getting their purposes to study. Therefore, the needs analysis for understanding the purpose of the study is also done by doing a research based on genre analysis and the needs analysis to get the language specificity. Even mostly, the exploration is for providing the readers, especially the authors to have knowledge of expressing their language based on the specific expressions by the discourse communities related to their fields of science or disciplines of sciences. Comparative studies on the same efforts can be done by comparing different texts of different discourse communities as done by the previous researchers mentioned above. The results of this analysis have contributed to the development of knowledge related to writing styles or genres.

As the effectiveness and efficiency, there have been several studies done on the sub-genres of the research articles (RAs). For example, a certain discourse community was done by Swales (2014) on Biology in its sub-genre that is abstracts of the RAs on Biology. She also conducted this research on the sub-genre of introduction. Other researchers— when referring to the comparative analysis— the sub-genre of introductions was also done by Najjar (1989) Taylor and Chen (1991) which was related to the introduction of RAs with Brazilian Portuguese as the object of analysis. It was found that the introduction section was to follow a pattern different from the generic knowledge of the code that is CARS model (Create-A-Research-Space" model). However, Introduction in English was found to follow it closely. They used the data from the documents taken from research articles. Some used 20 articles (Hyland 1992)

others used about 40 articles (Djuwari 2009). Unlike in Malaysia, the postgraduate students were interviewed, while other previous studies, the researchers used the documents for the data to be analyzed. These documents are based on their specific discourse communities such as Biology and social sciences.

As based on the previous studies and the literatures described above, the present researchers try to do the research on a comparative study of rhetorical move especially in the introduction sections of international research journal articles. This is done to provide more knowledge and skills for the researchers, academicians, and university faculties, especially for those who are the novice writers. The researchers, in this present study, want to explore how the authors of different discourse communities such as Education, Technology, and Biology express their language in the introduction section: rhetorical moves.

Theoretical framework

It has been noted by the researchers in linguistics, analyzing the research articles (RAs) is recently often based on the theories of genre approach. This approach includes rhetorical analysis using genre concept, genre-based approach, and the knowledge of language acquisition in genre studies. When the study is related to introduction section, the researchers have to create the rhetorical moves of this section in general based on genre approach, and then they can use that rhetorical move for the data analysis.

Rhetorical Analysis Using Genre Analysis

In analyzing scientific texts, researchers often use genre analysis. This analysis emphasizes the texts written by several authors based on certain disciplines. This collection of people with their respective fields is called the discourse community (White, J. W. (2019). Each discourse community has its own language characteristics, not only the choice of words or diction, sentence patterns, and vocabulary but also the way of presenting ideas in scientific writing. This difference causes difficulties for readers or writers if they are not familiar with the jargon, diction, and sentence patterns. All of that will lead to the term rhetorical move.

Rhetorical move is the main discussion in in genre analysis. This prevailing topic has received serious attention in applied linguistics. For example, when researchers theoretically refer to the references, they can refer to the Sydney school of linguistics. In this school of linguistics, which is based on corpus linguistics as well, researchers have paid a great deal with research articles (RAs). In practice, for example in language teaching, Dudley (1995) argues that by having knowledge of genres in a particular RAS, learners can benefit from the results of this genre analysis. When dealing with ESP class students, according to Dudley, the basic philosophy of the genre approach is always absolutely consistent with the ESP approach. This is the generic rhetorical move of certain discourse community as the main discussion for all research on research articles (RAs).

With the genre approach, novice students or writers are assumed to have a focus on knowledge of a particular genre. This is part of a shortcut strategy for them to improve their proficiency in a relatively limited time to learn new knowledge about writing. For that reason, acquiring genre knowledge also helps the writers to increase their awareness of the conventions of writing. For the same reason, they can produce texts by following conventions as certain discourse communities do. Therefore, genre analysis emerges as a very efficient and effective approach to becoming not only a well-formed and but also structured writer according to native speakers.

It is promising that knowledge of the research article (RAs) organization, setting, form, and rhetorical moves of a given discourse community can systematically lead to knowledge of the subject matter (Rao, 2019). Based on this argument, it can be applied that the rhetorical move as a macro textual element of written products is highly valued. In his occasion, Rao (2019) stated that the genres approach is an effective way to improve writing skills. In general, genre approach is effective and efficient for providing the learners, especially the novice writers with knowledge and skill of writing research articles relevant to the specific discourse community: their discipline of subject or science,

It can be emphasized again that rhetorical moves within the genre are considered an important element. These elements become mandatory when the text has to be accepted as a given RAs which are applied by a particular discourse community. More specifically, certain discourse community RA rhetorical moves, including introductory sub-genres, are of great importance to novice writers. However, for those who are experts, knowledge of such rhetorical moves can also give them understanding more varieties of writing styles.

Genre-Based Approach

It has been the fact, recently, that genre-based approach has been prevailingly used by the linguists for exploring the rhetorical moves of written texts. More importantly, as the academic activities are mostly dominated by the research articles (RAs), the researchers have also conducted some studies to reveal the generic structure of such RAs. The common field known as the basic knowledge related to this effort was the approach of teaching English for Specific Purposes (ESP). In this study, ESP was and has been focused on the registers and patterns of linguistic realizations such as the typical vocabulary and the styles of written expressions in typical fields of sciences. The results of such studies can also be used for making policies in teaching foreign language for second language learners.

As the ESP approach was and has been done also concerned with the typical characteristics of texts, genre-based approach focuses on the rhetorical moves. For example, Zhao (2019) suggested that there are at least four distinct competences, though systematically related areas that an ESP learner needs to develop in order to get over his or her lack of confidence in handling specialist discourse. According to Zhao (2019) the learners in ESP have already possessed a reasonably adequate competence of their general every day functions. However, they are still requested to develop four areas such as; a) Understanding of the specialist code, b) Familiarity with the dynamics of specialist genres, which includes the rhetorical forms and content, c) Specific contexts they respond to and the conventions they tend to use in their responses, and finally, d) A proficiency in the manipulation of specialist genres to respond to the exigencies of unfamiliar and novel situations.

Based on the above rationalization, it is essential for anyone especially the non-native speakers of English to acquire the knowledge of the code. This code is related to such as the acquisition of genre knowledge associated with the specialist culture, sensitivity to cognitive structuring of specialist genres. From this knowledge, they are expected to be able to exploit generic knowledge of a repertoire of specialist genres so that they can be knowledgeable with the discourse of the RAs in a specific field of science. The most common term is the discourse community that the RAS are adopted in the language realizations.

Four Stages of Language Acquisitions in Genre Studies

There are four requirements that should underlie genre analysis. The first is knowledge of code. The second is the genre of knowledge. The third is cognitive structure, and the fourth is the exploitation of knowledge of genre.

The first is the knowledge of code. When related to the knowledge of code, researchers are obliged to understand the code (linguistic codes) as a prerequisite for developing communicative skills in special or even daily discourse. In this connection, it is arguable that many English programs as a second language (ESL) programs have their focus on the learning process to understand this code of linguistics. They think that this knowledge of code is essential. The ESL program like this is more of an English approach for specific purposes (ESP).

ESP is an English program which requires near-perfect competence in acquiring the code of the language in use. So do all teachers in the ESP program, they also hold such beliefs. The process of further teaching and learning of ESL is always dealt with ongoing remedial teaching. Unfortunately, they always find themselves with unsatisfactory consequences. However, with the ESP programs, the learners can learn efficiently by understanding the knowledge of code specific to the discipline (de Vroe, et al., 2021). They can also reach their learning goals faster. That is why, basically, specific knowledge of code for a particular discourse community will make it easier for students to achieve the goals of learning a second foreign language (ESL). Again, it is essential to analyze the generic pattern referring to rhetorical moves using genre approach for certain discourse community.

The analysis of discourse and genre in professional and academic contexts in the last two decades has shown much better results. The students get the right knowledge of code according to their field. They quickly acquire applied knowledge related to lexico-grammatical, semantic-pragmatic and discourse in specialist genres. In this regard, Sabbah (2018) describes the grammatical syllabus that has been defined as one which consists of a list of grammatical items selected and graded in terms of simplicity and complexity. They are selected, in the sense that they have the common and frequently used. By doing this, the students can exploit them for both speaking and writing related to their subject matter: discipline of science..

The second is knowledge of genre. This knowledge is related to genre knowledge. In order to engage in specialist communicative events, one must acquaint oneself not only with the communicative aims of a particular discourse community, but also with the goal-oriented communicative aims associated with the use of a particular genre. Therefore, the purpose of learning is very important. This goal is related to the discipline of science. The closer it is to the language of the discipline, the easier it is for students to learn. In essence, this kind of genre knowledge is a form of cognition that cannot be separated from the procedural and social knowledge of professional writers. Basically, students must acquire genre knowledge, procedural knowledge (which includes knowledge of tools and their use as well as the methods of their discipline and interpretive framework), and social knowledge (in the sense of familiarity with rhetorical and conceptual contexts) to become more informed apprentices. .

The third is cognitive structure which is related to sensitivity to cognitive structures. Having understood the goals of specialist communities and to some extent internalized some of the conventions associated with the specialist genres used by them, the learner then needs to become familiar with the ways in which language is typically used to achieve these communicative goals and objectives (Rachayon, 2020). In addition, students need to take advantage of these conventions in response to changing socio-cognitive demands in certain

professional contexts or certain new situations and goals. This can be developed by sensitizing learners not only to generic form and content in genre-specific texts but also to their emerging responses to changes in social practice.

More recently, Zhao (2019) has found that the use of nominal in advertising, scientific academic genres, and legislation differs significantly in terms of their form, distribution, and discourse values. These and similar findings of this nature indicate that just as certain lexical items have specialist meanings in specific professional genres, a number of syntactic forms may also carry genre-specific restricted values in addition to their general meanings codified in grammar books. Therefore, it is imperative that the specialist learner become aware of restricted aspects of linguistic code in addition to the general competence he or she requires in the language. Genre-based grammatical explanations raise learners' awareness of the rationale of the text-genre that they are required to read and write. Rather than simply learning to read and produce a piece of text as a computer does, students should develop a sensitivity to the conventions in order to ensure the pragmatic success of the text in the appropriate academic or the professional context (Rachayon, 2020). In the ESP approach, it is also stated as the genre-centered approach as in ESP; the teachers should focus on students' attention on subject matter they are studying, relying on the rhetorical action and on the organizational and linguistic means of its accomplishment. In such an effort, as suggested by de Vroe, et al., (2021) modality and lexical analysis, e.g., verbs, preposition, conjunction, and the like are also important to be recognized. More importantly, this analysis deals with the generic rhetorical moves in the RAs.

The fourth is the exploitation of knowledge of genre in the third requirement above. Using these three kinds of knowledge, students can exploit them for the application of writing or communication both verbally and in writing. Only after learners have developed some acquaintance or, better yet, expertise at the level discussed above, can they confidently interpret, use, or even take liberties with specialist discourse. The first three stages mentioned above mostly involve understanding conventions, while this last stage involves utilizing and liberating with conventions to achieve pragmatic success in specific professional contexts.

Basically, the four kinds of knowledge above must be given to students or the novice writers who are learning a second foreign language so that they can more quickly acquire the ability to communicate both orally and especially in writing. Scientific writings produced by students who have obtained the four abilities above are in accordance with their discourse community: the field of science. Here, researchers must also be able to analyze the research data in the form of scientific texts based on or in accordance with their respective discourse communities. At the end of their research, they are expected to find a unique or generic code that fits their respective discourse community: their skill of writing.

Rhetorical Moves of Introduction

It has been admitted that knowledge of organization, arrangement, form, and rhetorical moves of RAS of certain discourse communities can systematically lead to knowledge of subject matter Dudley (1995) and Gosden (2001). In reference to this argument, it can be implied that rhetorical moves as the macro-textual elements of writing products are highly valued. Like Gosden, another proponent, Dudley (2001), also stated that a genre approach is an effective means of increasing writing proficiency. Therefore, genre approach can provide the authors with knowledge of writing using the appropriate rhetorical moves and knowledge about the subject matter for writing suited to the discourse community they want to get involved in

It is asserted that the moves in genre are considered important elements. These elements are obligatory when the text is to be acceptable as the given RAs applied by a certain discourse community. In more specific manner, rhetorical moves of the RAs of certain discourse communities, including the sub-genre of introduction are essential for the novice writers. However, for those who are experts, such knowledge of rhetorical move provides them with understanding more varieties of writing styles.

Rhetorical Moves of Introduction

Dudley (2001) mentions that Swales' model for article introductions, as he found, suggests that there are four basic moves in Introduction of writing such as the following:

Table 1: Rhetorical Moves of Introduction Section of the RAs

Moves	Rhetorical Moves
1	Establishing the Field
2	Summarizing Previous Research
3	Preparing for Present Research (often by identifying a gap in previous research)
4	Introducing the Present Research

Source: Safnil (2013) and Djuwari (2009 & 2017), Swales (2014) and Habibi (2008),

These four moves are the examples of knowledge to be learned because they are present in the majority of the introduction sections that have been analyzed so far. That is a logical sequence of moves in which, once a choice has been made to follow a certain route, the writer is obliged to follow with a certain sequence of moves, rather than in a random way.

Having knowledge of such rhetorical moves (introduction of research articles) above, any writers can benefit from these elements for writing purposes related to introduction of research articles. Without understanding of such rhetorical moves, it is impossible for the writers to be able to write appropriately for the discourse community as intended in such unique language organization. In addition, it is stated that such rhetorical moves are found in some introductions of research articles. In general, such knowledge can be implemented, and then, as Bhatia (1987) suggested, exploited for being dynamic. That is the intention of genre knowledge that the writers are still optionally (without ignoring the obligatory) to be creative in writing.

Objectives of the study

This study attempts to do a comparative study by exploring the rhetorical moves of introduction sections of the international research journal articles, especially on the introduction section. It will explore the different discourse communities of Education, Technology, and Biology. By exploring the rhetorical moves of different discourse communities, this study will provide benefits for the researchers, academicians, and university faculties with knowledge and skill of expressing the language academically in the introduction sections that are very important for publishing judgment by the editors and reviewers. First, it tries to find out how the rhetorical moves of the research articles of Education, Technology, and Biology. This study will reveal how the rhetorical moves of the introduction section of the research articles are expressed. .

Methodology

In this present research, the researchers used a descriptive qualitative approach as the research design by using genre approach for underpinning the research theoretical basis. Therefore, it is a qualitative research and it can also be considered a content analysis analyzing the documents as the data for the research. The documents are taken from the RAs of international journals from different fields of science: Education, Technology, and Biology.

The documents of RAs are taken by purposive sampling based on the assumptions as the criteria. It is based on the assumptions such as, the RAS have been published in international journal and they are already online. They are assumed to have their academic level because they have been reviewed and edited as well as published for the readers such as academicians, researchers, and university faculties. Due to being published online and worldwide, these RAs are considered academically acceptable for research data to be analyzed. Each discourse community consists of 10 articles, thus, tonally 30 research articles (RAs) as the sub-genres for analysis. They are the sub-genres of introduction sections. These 30 RAS are Education, Technology, and Biology.

The procedure follows the steps as done by the previous researchers such as (1), the RAS of each discourse communities are analyzed using the instrument of CARS adopted from Swales (2014) and Habibi (2008), also by Hyland (2002) related to genre of abstract and also by Khany and Tazik (2010), Safnil (2013), and Djuwari (2017): rhetorical move exploration (in Table 1); (2) the rhetorical moves of the three discourse communities are presented and finally they are discussed and the inference can be done.

Findings and Discussion

This section of findings covers the results of analysis based on the moves of introduction sections from three discourse communities: education, technology, and biology. Each discourse is presented on a table and the frequency was counted to see the degree of the authors of each discourse community writing their research articles (RAs) for their introduction sections.

Findings

Discourse Community of Education

Among the three discourse communities e.g., education, technology, and biology, the moves of introduction can be found and they are presented in tables. Table 1 shows the findings of the rhetorical moves in the discourse community of education. Among the 10 journal articles, 10 articles have the move of establishing the field. Article numbers 1 to number 10 have got its move of establishing the field. The next is the move of summarizing the previous research. In this discourse community, there are 7 articles stated the move of summarizing the previous research. They are article number 1, 2, 3, 6, 7, 8, and 10. Unfortunately, 3 articles did not state their moves of summarizing the previous research. These articles are those of article number 4, 5, and 9. The third rhetorical move is that of preparing for Present Research. In this move, only article number 5 that does not state it while there are 9 articles do it. The fourth is rhetorical move of introducing the present research. The entire 10 articles analyzed have all moves as prescribed in the measurement (Moves of Introduction). These findings are presented in Table 2.

Table 2: Rhetorical Moves of Introduction in Education Discourse Community

Moves	Rhetorical Moves	1	2	3	4	5	6	7	8	9	10	TOTAL
1	Establishing the Field	X	x	X	x	x	x	x	x	x	x	10

2	Summarizing Previous Research	X	x	X			x	x	x		x	7
3	Preparing for Present Research (often by identifying a gap in previous research)	X	x	X	x		x	x		x	x	9
4	Introducing the Present Research	X	x	X	x	x	x	x	x	x	x	10

Discourse Community of Technology.

When looking at the discourse community of Technology, it shows that all the 10 authors wrote their introduction section with all the rhetorical move such as: (1) Establishing the Field, (2) Establishing the Field, (3) Preparing for Present Research (often by identifying a gap in previous research), and (4) Preparing for Present Research (often by identifying a gap in previous research). See Table 2.

Table 2: Rhetorical Moves of Introduction in Technology Discourse Community

Moves	Rhetorical Moves	1	2	3	4	5	6	7	8	9	10	TOTAL
1	Establishing the Field	X	X	X	X	X	X	X	X	X	X	10
2	Summarizing Previous Research	X	X	X	X	X	X	X	X	X	X	10
3	Preparing for Present Research (often by identifying a gap in previous research)	X	X	X	X	X	X	X	X	X	X	10
4	Introducing the Present Research	X	x	x	x	x	x	x	x	x	x	10

Discourse Community of Biology

The third discourse community is Biology. All of 10 authors stated rhetorical move 1 (Establishing the Field) and Move 2 (Summarizing Previous Research). However, one author did not state move 3 (Preparing for Present Research or often by identifying a gap in previous research). It is the author of article no 5. Next, in this discourse community, there are 4 authors that did not state move 4 (Introducing the Present Research). They are the authors of articles no: 2, 3, and 9. See Table 4.

Table 4: Rhetorical Moves of Introduction in Biology Discourse Community

Moves	Rhetorical Moves	1	2	3	4	5	6	7	8	9	10	TOTAL
1	Establishing the Field	X	X	X	X	X	X	X	X	X	X	10
2	Summarizing Previous Research	X	X	X	X	X	X	X	X	X	X	10
3	Preparing for Present Research (often by identifying a gap in previous research)	X	X	X	X		X	X		X	X	9
4	Introducing the Present Research	X			X	X	X	X	X			6

Discussion

Education Discourse Community

This discourse community shows that not all the authors are complied with the measurement of the rhetorical moves of introduction used in this study. More strikingly, the authors no 4, 5 and 9 did not fulfill their rhetorical moves of summarizing the previous research. Hence, this part is

essential for the readers and especially the reviewers for understanding the research topic being prepared at this moment. Although to a certain degree, the authors can be free to modify the rhetorical moves (Hyland, 1992), in the previous studies, this rhetorical moves are considered salient for both the authors and the reviewers (Djuwari, 2014; White, 2019, and Sarwat, 2021).

The author (no 5) did not write the rhetorical move of Preparing for the Present Research. It is used for identifying a gap in the previous research. This is crucial because this rhetorical move is important for the readers and the reviewers to see what topic and problem that will be discussed by the author (Nicholson et al, 2018). They used the term gap spotting that is important too. It can be judged that these three authors are not complied with the rhetorical moves as stipulated in the measurement of introduction section.

Technology Discourse Community

This discourse community is surprisingly found to be all complied with the rhetorical moves as the measurement used in this study for introduction section. From the 10 authors analyzed, all of them wrote any stage of the rhetorical moves 1 (Establishing the Field; 2 Summarizing Previous Research; 3, Preparing for present Research or Identifying a Gap in Previous Research; and 4, Introducing the Present Research . In this good uniform of the academic writing is based on the guidelines that have been stipulated by the publishers. In complying with this rhetorical moves is essential (Summers, 2019). This is also advisable for the authors so that the readers can map heir minds after reading the introductions (Hyland, 1992; Djuwari, 2014; and Summers, 2019). According to Summers (2019), identifying the gap of the previous studies is very important too. Yet, this discourse community has fulfilled it.

Biology discourse community

For this discourse community—Biology—, it has its own characteristics. Authors no 3, 4, 9 and 10 did not write their rhetorical move of Introducing the Present Research. Hence, this part is salient for the readers to see what the authors' plan to do the research about. Again, according to Summers (2019) it is not complied with a good guidelines of the journal publication because that rhetorical move in introduction is essential. Readers will not know exactly what the author wants to do the research about. Some proponents of genre-based analysis suggest that the authors of any research articles (RAs) adopt any linguistic code as well as the rhetorical moves practiced by any discourse communities. This is more efficient and effective when the writers, especially the novice ones when they want to write their research articles. For this issue, Dudley (1995) suggests that genre analysis as the approach for writing is important for the authors. This also should be based on English for specific purposes that focus on the subject-matter and their styles in their rhetorical moves (Bhatia, 1985). The authors of research articles can adopt the discourse community's rhetorical moves in the subject-matter they have got in touch with.

Conclusion

When all three discourse communities (Education, Technology, and Biology) have been analyzed, it shows that they have different characteristics in the way of writing their introduction sections. Among the 10 authors, 3 of them did not have their introduction section complied with rhetorical move of Summarizing the Previous Research as the Move no 2. This is important but these two authors representing Education discourse community did not write that move.

Unlike Education discourse community, Technology discourse community is found surprisingly to have been complied with the measurement used in this study. All of them (10

authors analyzed) have their rhetorical moves of introduction section completely. This can be judged that this journal and the authors are considered consistent with the guideline of reviewing and editorial writing mechanism.

Finally, the Biology discourse community is similarly to the Education discourse community though in quite different manner. This discourse community has 4 authors that are found to have failed in stating the rhetorical move of no 4 that is Introducing the Present Research. These four authors are the authors no 2, 3, 9, and 10. They did not have that move and it can be judged that these journal publishers and the editors and reviewers do not have strict regulation on submitting the articles for publication.

Limitation on this study may rest in the number of the research articles (RAs) and the discourse communities. It would be more interesting when further study can add more the number of articles and discourse communities. Another suggestion is for the publishers, they should be strict on especially the guidelines in the introduction section because it is salient for the readers to map their minds following the authors' both plan and the focus of the research.

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