ALSUNIYAT: Jurnal Penelitian Bahasa, Sastra, dan Budaya Arab, Vol. 9, No. 1, April 2026
DOI: https://doi.org/10.17509/alsuniyat.v9i1.104547

ALSUNIYAT
JURNAL PENELITIAN BAHASA, SASTRA, DAN BUDAYA ARAB

Journal homepage: https://ejournal.upi.edu/index.php/alsuniyat

A Rhetorical Analysis of the Results and Discussion Sections in Arabic-Language Research Articles in Education and Linguistics

Rinaldi Supriadi[1*], Eri Kurniawan[2], Muhd Zulkifli bin Ismail[3], Mohamad Azwan bin Kamarudin[4]

[1,2] Universitas Pendidikan Indonesia, Indonesia
[3] Universiti Putra Malaysia, Malaysia
[4] Universiti Kebangsaan Malaysia, Malaysia
Correspondence: E-mail: rinaldisupriadi@upi.edu

A R T I C L E I N F O

Article History:
Submitted/Received 12 March 2026
First Revised 05 April 2026
Accepted 26 April 2026
Publication Date 30 April 2026

Keywords:
Arabic Research Articles
Education
Findings and Discussion
Linguistics
Rhetorical Moves

A B S T R A C T

Research articles function as rhetorical spaces that reflect disciplinary academic conventions. This study analyzes the rhetorical moves and steps in the Results and Discussion sections of Arabic-language research articles in Education and Linguistics. A qualitative descriptive content analysis was conducted on 80 articles published over the last decade using Swales' genre framework and Lubis and Kurniawan's move-step model. Coding reliability was confirmed through Cohen's Kappa (0.92–0.98). The findings show that both disciplines consistently employ Move 1 and Move 2 as obligatory components but differ in rhetorical emphasis. Education articles devote greater attention to Move 4 through more extensive interpretation and concluding remarks, whereas Linguistics articles emphasize Move 2 and Move 3 through detailed presentation and analysis of findings. These results demonstrate that disciplinary conventions shape rhetorical organization and provide insights for genre-based Arabic academic writing instruction.

1. INTRODUCTION

In academic discourse, research article writing functions not only as a means of disseminating research findings but also as a rhetorical practice through which disciplinary knowledge is constructed, negotiated, and communicated within scholarly communities. Consequently, mastering the rhetorical conventions of research articles is essential for researchers seeking to participate effectively in academic communication. Among the major sections of a research article, the Results and Discussion section occupies a particularly important position because it presents research findings, interprets their significance, and relates them to existing theories and previous studies. Thus, successful organization of this section determines not only the clarity of research reporting but also the extent to which a study contributes to disciplinary knowledge (Kanoksilapatham, 2005; Chang & Kuo, 2011).

The Results and Discussion section has therefore become a major focus of genre-based research because it constitutes the rhetorical space where authors construct claims, justify interpretations, and demonstrate the significance of their findings (Peacock, 2002; Tankó, 2017). Previous studies have shown that effective rhetorical organization enhances the credibility, persuasiveness, and scholarly contribution of research articles (Jones & Smith, 2010; Kim & Park, 2013; Thompson & Williams, 2015). Nevertheless, many novice researchers continue to experience difficulties in developing coherent discussions because of their limited understanding of rhetorical moves and insufficient exposure to explicit genre-based writing instruction (Martin & Rose, 2014; Flowerdew, 2015; Hyland, 2019). This indicates the importance of investigating rhetorical organization as a means of understanding how disciplinary knowledge is communicated through academic writing.

Genre-based research has extensively examined rhetorical structures across disciplines. Peacock (2002) demonstrated that the organization of Discussion sections varies according to disciplinary expectations, while Tankó (2017) showed that rhetorical moves associated with reporting findings, evaluating evidence, and relating results to previous studies differ across academic fields. These findings support the view that rhetorical organization is shaped by the communicative purposes and knowledge-building practices of individual disciplines rather than by universal writing conventions. In Arabic academic writing, however, genre-based investigations remain relatively limited. Although Lubis and Kurniawan (2021) analyzed rhetorical moves in the abstracts and introductions of Arabic-language research articles, research focusing specifically on the Results and Discussion sections across different disciplines remains scarce. Consequently, little is known about how disciplinary conventions influence the rhetorical organization of Results and Discussion sections in Arabic-language research articles.

Comparing Education and Linguistics is particularly important because the two disciplines represent different epistemological orientations, communicative purposes, and academic writing traditions. Academic disciplines develop distinctive rhetorical conventions according to how knowledge is generated, validated, and communicated within their respective scholarly communities (Swales, 1990, 2004; Hyland, 2004; Becher & Trowler, 2001). Education research generally emphasizes teaching and learning practices, educational problem-solving,

and pedagogical implications, encouraging authors to provide broader interpretation of findings and practical recommendations. In contrast, Linguistics research focuses more heavily on systematic analysis of language data, empirical evidence, and theory-driven explanation, resulting in discussions that prioritize analytical reasoning and data interpretation (Hyland, 2004; Peacock, 2002; Tankó, 2017). These disciplinary characteristics are likely to influence the selection, sequencing, and prominence of rhetorical moves and steps in the Results and Discussion section. Comparing these two disciplines therefore provides an appropriate context for identifying how disciplinary conventions shape rhetorical organization in Arabic-language research articles while extending current understanding of genre variation in Arabic academic writing.

Therefore, this study investigates the rhetorical moves and steps employed in the Results and Discussion sections of Arabic-language research articles in the fields of Education and Linguistics. Drawing on a corpus of 80 research articles published over the last decade, the study examines the occurrence, salience, and distribution of rhetorical moves and steps using the frameworks proposed by Swales (1990, 2004), Dudley-Evans (1995), and Lubis and Kurniawan (2021). The findings are expected to contribute to genre studies in Arabic academic writing by providing empirical evidence of disciplinary rhetorical variation and offering pedagogical insights for genre-based Arabic academic writing instruction.

2. METHODS

This study employed a qualitative descriptive content analysis to investigate the rhetorical organization of the Results and Discussion sections in Arabic-language research articles. Although the frequencies of rhetorical moves and steps were quantified to identify distributional patterns, the primary emphasis remained on the qualitative interpretation of textual evidence from rhetorical and genre-analysis perspectives (Creswell, 2013; Miles & Huberman, 1994).

Corpus Description

The corpus consisted of 80 Arabic-language research articles published in nationally indexed Indonesian journals (SINTA) and reputable academic journals from the Middle East over the past ten years. The articles were selected through purposive sampling to ensure their relevance to the research objectives and to provide balanced representation across the two disciplinary fields investigated, namely Education and Linguistics (Ary et al., 2010). The final corpus comprised 40 research articles in Education and 40 research articles in Linguistics.

To support the coding process, a separate training corpus consisting of 60 Arabic-language research articles was compiled to familiarize the coders with the analytical framework before the main coding process. The present study adopted the move-step analytical framework developed by Lubis and Kurniawan (2021). This framework is a synthesized model that integrates the rhetorical structures proposed by Dudley-Evans (1995), Ruiying and Allison (2003), and Pho (2008), and was specifically adapted for analyzing the Results and Discussion sections of Arabic-language research articles.

Table 1. Corpus Composition

Discipline	Number of Articles
Education	40
Linguistics	40
Total	80

Data Collection Procedure

The selected articles were organized in Microsoft Excel to facilitate manual coding and data management. Each Results and Discussion section was segmented into rhetorical units and coded using the move-step model developed by Lubis and Kurniawan (2021). To ensure the credibility and trustworthiness of the findings, this study employed methodological triangulation, expert validation, and both intercoder and intracoder reliability testing. Cohen's Kappa was used because it measures chance-corrected agreement and is considered more robust than simple percentage agreement in genre-analysis research (Orwin, 1994; Kanoksilapatham, 2005; Biber et al., 2007; Moreno & Swales, 2018).

Intercoder reliability involved two independent coders: the researcher and an expert in Arabic academic writing and genre analysis. Following Crookes (1986) and Kanoksilapatham (2023), 20% of the corpus was randomly selected using a random number table (RAND Corporation, 1955). Both coders independently analyzed the selected articles without consultation during the coding process. Coding discrepancies were discussed only after the independent coding had been completed for verification purposes.

Intracoder reliability was established by asking the researcher to re-code another randomly selected 20% of the corpus one month after the initial coding. Cohen's Kappa coefficients were calculated using Microsoft Excel. The analysis produced a mean Kappa coefficient of 0.92 for intercoder reliability and 0.98 for intracoder reliability, indicating excellent agreement.

Table 2. Data Analysis Procedures

Stage	Description
1	Selection of Arabic-language research articles through purposive sampling
2	Classification of articles into Education and Linguistics
3	Segmentation of Results and Discussion into rhetorical units
4	Identification and annotation of rhetorical moves and steps
5	Intercoder and intracoder reliability assessment
6	Compilation of move frequencies and distributions in Microsoft Excel
7	Interpretation of rhetorical patterns supported by corpus excerpts

Reliability Criteria

The interpretation of Cohen's Kappa followed the classifications proposed by McHugh (2012) and Orwin (1994).

Table 3. Interpretation of Cohen's Kappa

Version of McHugh's (2012)			**Versi Orwin" s (1994)**	
Value of Kappa	Level of Agreement	% Data that are Reliable	Value of Kappa	Level of Agreement
0-.20	None	0-4%	<.40	Poor
.21-.39	Minimal	4-15%	.40-.59	Fair
.40-.59	Weak	15-35%	.60-.74	Good
.60-.79	Moderate	35-63%	>.75	Excellent
.80-.90	Strong	64-81%		
Above .90	Almost Perfect	82-100%		

Table 4. Intercoder Reliability Results

Comm. function	**Average Kappa**	**Agreement (%)**
M1	1.00	100%
S1	0.99	94%
S2	0.99	100%
S3	0.99	100%
M2	1.00	100%
S1	0.99	93%
S2	0.99	100%
M3	1.00	100%
S1	1.00	100%
M4	1.00	100%
S1	1.00	100%
S2	0.99	100%
S3	0.99	100%
S4	0.99	82%

As shown in Table 3, the interpretation of Cohen's Kappa followed the classifications proposed by McHugh (2012) and Orwin (1994). The intercoder reliability results presented in Table 4 demonstrate a high level of agreement across all rhetorical moves and steps, yielding a mean Kappa coefficient of 0.92, which indicates excellent agreement. To assess coding consistency over time, intracoder reliability was also conducted by re-coding another randomly selected 20% of the corpus one month after the initial coding. The analysis produced a mean Kappa coefficient of 0.98, indicating almost perfect agreement according to McHugh (2012) and

excellent agreement according to Orwin (1994). These findings suggest that the coding procedure was highly consistent and reliable for identifying rhetorical moves and steps in the corpus.

Research Instrumentation

The primary analytical instrument employed in this study was the move-step framework developed by Lubis and Kurniawan (2021). The framework synthesizes the rhetorical models proposed by Dudley-Evans (1995), Ruiying and Allison (2003), and Pho (2008) into a unified analytical model specifically designed for examining the Results and Discussion sections of Arabic-language research articles. The framework was used to identify and classify rhetorical moves and steps, examine their occurrence and salience, and analyze their organizational patterns across the two disciplinary fields. Microsoft Excel was used solely for organizing the coding results, calculating move frequencies, and presenting the quantitative distribution of rhetorical patterns.

Table 5. Sources of the Analytical Framework

Source	Adapted Components
Dudley-Evans (1995)	Rhetorical moves in the Discussion section of scientific writing
Pho (2008)	Move-step framework for the Findings and Discussion section
Ruiying & Allison (2003)	Move-step structure of research articles
Lubis & Kurniawan (2021)	Synthesized model adapted for Arabic-language research articles

Data Analysis

The data were analyzed manually using the move-step analytical framework developed by Lubis and Kurniawan (2021). The analysis was conducted in four stages. First, the Results and Discussion sections were segmented into rhetorical units. Second, each unit was identified and classified according to the corresponding move and step defined in the analytical framework. Third, the frequencies, salience, and configuration patterns of rhetorical moves and steps were calculated and tabulated using Microsoft Excel. Finally, the rhetorical patterns were interpreted to identify similarities and differences between Education and Linguistics research articles. Representative excerpts from the corpus were used to support the qualitative interpretation of the findings.

3. RESULTS AND DISCUSSION

3.1 Results

This section presents the rhetorical analysis of the Results and Discussion sections in Arabic-language research articles in the fields of Education and Linguistics using the move-step framework developed by Lubis and Kurniawan (2021), which synthesizes the genre models of Swales (1990, 2004), Dudley-Evans (1995), Pho (2008), and Ruiying and Allison (2003). As shown in Table 5, the framework comprises four rhetorical moves and ten associated steps that

describe the rhetorical organization of the Results and Discussion section. The analysis examines the occurrence, salience, and configuration of these moves and steps to identify disciplinary variations between Education and Linguistics research articles.

Table 6. Rhetorical Move-Step Framework for the Results and Discussion Section (Adapted from Lubis & Kurniawan, 2021)

Move	Label	Step
1	Providing Background Information	1. Stating the context
		2. Preparing the presentation
		3. Restating data collection and analysis procedure
2	Reporting Result	4. Statement of result
		5. Finding
3	Summarizing Results	6. Summary
4	Commenting on Results	7. Interpreting results
		8. Comparing results with literature
		9. Accounting for results
		10. Evaluating the results

Accordingly, all references to Move 1, Move 2, Move 3, and Move 4 throughout the Results and Discussion section refer to the communicative functions defined in the analytical framework developed by Lubis and Kurniawan (2021). This framework serves as the analytical basis for identifying and interpreting the rhetorical organization of the corpus.

Occurrences by Discipline

Table 7 presents the distribution of rhetorical moves and steps in Arabic research articles across Education and Linguistics. The findings show that Education articles demonstrate a more balanced rhetorical structure, emphasizing both introductory and concluding moves, whereas Linguistics articles focus more on methodological explanation and data-driven analysis. The frequency and percentage distributions highlight both shared patterns and disciplinary differences in rhetorical strategies.

Table 7. Distribution of Rhetorical Moves and Steps Across Disciplines

Education						Linguistics					
Move	**F**	**%**	**S**	**F**	**%**	**Move**	**F**	**%**	**S**	**F**	**%**
1	140	31.0	1	65	14.3	1	134	34.4	1	65	16.8
			2	31	6.8				2	36	9.3
			3	47	10.3				3	30	7.8
2	127	28.1	1	65	14.3	2	124	31.9	1	69	17.9
			2	62	13.6				2	55	14.2
3	44	9.7	1	44	9.7	3	41	10.5	1	41	10.6
4	141	31.2	1	46	10.1	4	90	23.1	1	33	8.5

		2	27	5.9			2	18	4.7
		3	39	8.6			3	31	8.0
		4	29	6.4			4	8	2.1
Total	452		455		Total	389		386	

Note. F = F/Sentence; S = Step.

Table 7 provides the basis for the descriptive analysis of the distribution of rhetorical moves and steps in research articles from the fields of Education and Linguistics. The following sections present a detailed disciplinary analysis to identify the rhetorical patterns and distinctive characteristics of each field.

Analysis of Education Research Articles

The Education corpus, comprising 452 sentences, exhibits a relatively balanced distribution among Move 1 (31.0%), Move 4 (31.2%), and Move 2 (28.1%). This pattern indicates that Education articles place comparable emphasis on introducing the research topic, describing methodological procedures, and providing comprehensive discussion and concluding remarks.

Move 1 (31,0%) functions primarily to establish the research context and introduce the research problem. Step 1.1 (14.3%) is the most prominent, serving as the principal introduction by presenting the core topic and research objectives. For example:

"أظهرت نتائج البحث فاعلية المقرر المقترح في تنمية الاستيعاب المفاهيمي لفيزياء النانو وتطبيقاتها التكنولوجية والاتجاه نحوها".

"The findings demonstrated the effectiveness of the proposed course in enhancing students' conceptual understanding of nanophysics, its technological applications, and their attitudes toward the subject."

Meanwhile, Step 1.2 (6.8%) and Step 1.3 (10.3%) provide methodological and contextual elaboration, as illustrated by the following excerpt:

"تم استخدام اختبار "ت" للعينات المرتبطة للكشف عن دلالة الفروق بين متوسطي درجات الطالبات".

"A paired-samples t-test was employed to determine the statistical significance of the differences between the students' mean scores."

These findings suggest that Move 1 plays a crucial role in establishing the research background and highlighting the significance of the study.

Move 2 (28,1% / 127 sentences) is primarily devoted to describing the methodological procedures, analytical approaches, or theoretical frameworks employed in the study. Step 2.1 (14.3%) predominates by explaining the research methods or instructional strategies adopted. For instance:

"أظهرت نتائج البحث فاعلية المقرر المقترح في تنمية الاستيعاب المفاهيمي لفيزياء النانو".

"The findings indicated that the proposed course effectively enhanced students' conceptual understanding of nanophysics."

In contrast, Step 2.2 (13.6%) focuses on presenting empirical evidence and data sources, thereby strengthening the validity and credibility of the study. An example is provided below:

"يوجد فرق ذو دلالة إحصائية بين متوسط درجات التطبيقين القبلي والبعدي لصالح التطبيق البعدي."

"There was a statistically significant difference between the mean pre-test and post-test scores in favor of the post-test." (MKTM Journal, No. 38)

Accordingly, Move 2 contributes to enhancing methodological transparency and research credibility through detailed descriptions of the procedures and supporting data.

Move 3 (9,7% / 44 sentences) occurs less frequently than Moves 1 and 2; nevertheless, it remains an essential rhetorical component because it presents the principal findings derived from the data analysis. An illustrative example is as follows:

"تمكن الطلاب من استخدام المفاهيم التي تعلموها في مواقف جديدة وإظهار وجهات نظر ناقدة ومستقلة".

"The students were able to apply the concepts they had learned to new situations and demonstrate independent and critical perspectives."

This finding indicates that Move 3 serves to communicate the principal research findings in a concise yet meaningful manner.

Move 4 (31,2% / 141 sentences) is the most prominent rhetorical component in the Education corpus, occurring almost as frequently as Move 1. Its primary functions are to interpret the findings, discuss their implications, and provide recommendations. Step 4.1 (10.1%) typically relates the findings to existing theories or previous studies, as illustrated below:

"أشارت الباحثة إلى نتائج دراسة العمارى (٢٠١٨) كما إن الربط بين الجانب النظري والعملي للبرنامج التدريبي زاد من قدرة الطلبة المعلمين على تنفيذ ما تعلموه"

"The author referred to the findings of Alammari (2018), emphasizing that integrating the theoretical and practical components of the training program enhanced student teachers' ability to implement what they had learned."

Meanwhile, Step 4.2 (5.9%) provides recommendations and practical implications. For example:

"ساعد البرنامج التدريبي ا لطلبة مساعدي التعلم في تغيير نظرتهم وجعلها نظرة إيجابية نحو مهنة التدريس في مدارس STEM"

"The training program helped learning assistants develop more positive perceptions of the teaching profession in STEM schools."

These findings demonstrate that Move 4 functions not only to conclude the article but also to integrate the research findings into broader scholarly discussions while offering both practical and academic recommendations. Education research articles demonstrate a clear four-move rhetorical structure: establishing context, presenting methods, reporting findings,

and discussing implications, which enhances coherence and highlights research contributions.

Analysis of Linguistics Research Articles

The Linguistics corpus, comprising 389 sentences, is smaller than the Education corpus but places greater emphasis on methodological description and empirical data analysis. Move 1 (34,4%) is the most prominent rhetorical component in the Linguistics articles, underscoring the importance of establishing the research topic and analytical context. Step 1.1 (16.8%) primarily introduces the central issue of the study. For example:

"يشير العنوان بقايا مريم إلى المكون الفاعل الذي يكون فيه العنوان حاملا لاسم شخص يؤدي دور البطولة أو دور الضحية".

"The title Baqāyā Maryam (The Remains of Maryam) refers to an active element in which the title carries the name of a person serving either as the protagonist or as the victim."

Meanwhile, Step 1.2 (9.3%) and Step 1.3 (7.8%) elaborate the theoretical and historical background, as illustrated below:

"لقد كانت البلاغة هي الفيصل والحَكَم الأبرز على جودة الأشعار وإتقانها".

"Balāghah has long been regarded as the primary criterion for evaluating the quality and excellence of poetry."

This excerpt reflects a historical-analytical approach through references to classical scholars such as Al-Jurjani and Al-Sakkaki. Accordingly, Move 1 plays a fundamental role in establishing the analytical framework of Linguistics research articles.

Move 2 (31,9% / 124 sentences) primarily focuses on the research methodology and supporting data. Step 2.1 (17.9%) introduces the analytical approach or theoretical basis adopted in the study. For instance:

"جاء في معجم علوم القرآن أنها كلمة تكون في ختام الآية القرآنية".

"According to the Dictionary of Qur'anic Sciences, the fāṣilah is the word occurring at the end of a Qur'anic verse." (JALSL Journal, No. 11)

In contrast, Step 2.2 (14.2%) emphasizes the presentation of empirical evidence, as illustrated by the following example:

"قوله تعالى: إِنَّ الْإِنْسَانَ لَفِي خُسْرٍ فالمراد به الجماعة".

"The Qur'anic statement, 'Indeed, mankind is in loss,' refers collectively to humankind." (JALSL Journal, No. 6)

These findings indicate that Move 2 strengthens Linguistics research articles by providing clear methodological descriptions and well-supported empirical evidence.

Move 3 (10,5% / 41 sentences) serves to present research findings and interpret empirical data, with particular emphasis on linguistic analysis. An illustrative example is as follows:

"الإحالة الضميرية تخلق علاقات تواصلية بين النص والقارئ".

"Pronominal reference establishes communicative relationships between the text and the

reader." (JALSL Journal, No. 4)

This example demonstrates an analysis of textual cohesion in *Sūrat At-Takwīr*. Thus, Move 3 functions to communicate the principal findings while interpreting them within an appropriate linguistic framework.

Move 4 (23,1% / 90 sentences) appears less frequently than in the Education corpus and is generally more concise. It primarily consists of concluding discussions, summaries of findings, and recommendations. Step 4.1 (8.5%) typically synthesizes the principal findings, as illustrated below:

"وأكثر ما يكون تقدم النعت في الشعر، وأقل ما يكون في الكلام".

"The preposing of adjectival modifiers occurs most frequently in poetry and considerably less often in prose." (JALSL Journal, No. 2)

This excerpt illustrates the flexibility of Arabic syntactic structure in enriching literary expression. Accordingly, Move 4 concludes Linguistics articles by synthesizing the principal findings while identifying potential directions for future research. Overall, Linguistics research articles contain fewer rhetorical moves and steps than Education articles; nevertheless, they maintain a coherent rhetorical organization through a stronger emphasis on methodological rigor and empirical data analysis.

Similarities and Differences Between the Two Disciplines

Both Education and Linguistics articles prioritize Move 1 and Move 2, but differ in rhetorical emphasis. Education articles highlight Move 4 (31.2%) through extended discussions and recommendations, while Linguistics articles emphasize Move 2 (31.9%) and Move 3 (10.5%) through methodological and data-driven analysis, reflecting pedagogical and empirical orientations, respectively.

Rhetorical Salience Across Disciplines

This section analyzes rhetorical salience to identify how key concepts and arguments are emphasized through lexical choices, active constructions, and grammatical structures across disciplinary contexts.

Analysis of Education Research Articles

Table 8. Rhetorical Salience in Education Research Articles

Education							
Move	**RA features**	**Percentage**	**Category**	**Step**	**RA features**	**Percentage**	**Category**
1	40	100%	Obligatory	1	40	100	Obligatory
				2	26	65	Optional
				3	37	92.5	Conventional
2	40	100%	Obligatory	1	38	95	Conventional
				2	39	97.5	Conventional
3	40	100%	Obligatory	1	40	100	Obligatory
4	40	100%	Obligatory	1	39	97.5	Conventional
				2	21	52.5	Optional

	3	35	87.5	Conventional
	4	26	65	Optional
Total		341	852.5	

In the Education corpus, all four rhetorical moves (Moves 1–4) are classified as obligatory, although the distribution of their constituent steps varies.

Move 1 (Providing Background Information) is obligatory (100%), indicating that all Education articles begin by establishing the research context. Within this move, Step 1.1 is also obligatory (100%), serving to introduce the central research topic. For example:

"فتطرقوا إلى التغيرات التي حدثت على المكان والزمان، وكيفية تأثرهما بالأحداث. وهكذا نتج لدينا أدب ديستوبي، انعكست من خلاله المدينة على أنها فاسدة، لا تصلح للعيش".

"What is the effect of applying the Schwartz model on developing senior high school students' scientific communication skills?" (MKTM Journal, No. 36)

Meanwhile, Step 1.2 is classified as *Optional* (65%), providing supplementary information when required, whereas Step 1.3 is conventional (92.5%), enriching the introduction by supplying additional contextual and theoretical background. These findings suggest that Move 1 constitutes the rhetorical foundation of Education articles, with Step 1.1 functioning as the principal introductory component and Step 1.3 reinforcing the contextualization of the study.

Move 2 (Reporting Result) is likewise obligatory (100%), indicating that all articles explicitly report their principal findings. Within this move, Step 2.1 is conventional (95%), supporting the presentation of the main findings, while Step 2.2 is even more prominent (97.5%), strengthening the argument through empirical evidence. For example:

"يوجد فرق ذو دلالة إحصائية بين متوسط درجات التطبيقين القبلي والبعدي لصالح التطبيق البعدي".

"There was a statistically significant difference between the mean pre-test and post-test scores in favor of the post-test." (MKTM Journal, No. 37)

This excerpt demonstrates improvements in students' creative problem-solving skills through the implementation of the design thinking approach. Accordingly, Move 2 plays a crucial rhetorical role by substantiating the principal claims with robust empirical evidence.

Move 3 is also obligatory (100%) and consists solely of Step 3.1, which is likewise obligatory (100%). This move serves to emphasize the principal findings of the study. An illustrative example is presented below:

"تمكن الطلاب من استخدام المفاهيم التي تعلموها في مواقف جديدة وإظهار وجهات نظر ناقدة ومستقلة".

"The students were able to apply the concepts they had learned to new situations and demonstrate independent and critical perspectives." (MKTM Journal, No. 35)

This excerpt highlights the achievement of the research objectives, indicating that Move 3 consistently functions to reinforce the presentation of the study's major findings.

Move 4 is obligatory (100%), ensuring that every article concludes with a discussion or concluding section. Within this move, Step 4.1 is conventional (97.5%) and almost always

functions as the principal conclusion. Step 4.3 is also conventional (87.5%), providing additional reflection or interpretation, whereas Step 4.2 (52.5%) and Step 4.4 (65%) are *Optional*, depending on the authors' rhetorical preferences. For example:

"خلال مرحلة الملاحظة التأملية قام الطالب بإدراك المعلومات الفيزيائية ومعالجتها بناء على التأمل والملاحظة".

"During the reflective observation stage, students understood and processed physics concepts through reflection and observation." (MKTM Journal, No. 61)

This excerpt illustrates how authors clarify and interpret their findings, underscoring the importance of the concluding move while allowing flexibility in the presentation of conclusions and recommendations. The Education corpus shows that all four rhetorical moves (Moves 1–4) are obligatory, while their steps combine obligatory and *Optional* elements for rhetorical flexibility. Move 1 establishes the background, Move 2 supports arguments with evidence, Move 3 synthesizes findings, and Move 4 presents conclusions and reflections. This pattern reflects a systematic, coherent, and adaptable rhetorical organization, consistent with genre analysis studies (Peacock, 2002; Tankó, 2017; Lubis & Kurniawan, 2021).

Analysis of Linguistics Research Articles

Table 9. Rhetorical Salience in Linguistics Research Articles

Linguistics							
Move	**RA features**	**Percentage**	**Category**	**Step**	**RA features**	**Percentage**	**Category**
1	40	100%	Obligatory	1	40	100	Obligatory
				2	29	72.5	Conventional
				3	35	87.5	Conventional
2	40	100%	Obligatory	1	38	95	Conventional
				2	40	100	Obligatory
3	40	100%	Obligatory	1	38	95	Conventional
4	40	100%	Obligatory	1	32	80	Conventional
				2	16	40	Optional
				3	30	75	Conventional
				4	7	17.5	Optional
					305	762.5	

Linguistics articles demonstrate that all rhetorical moves (Moves 1–4) are obligatory (RA Features: 40; 100%), while their steps vary between obligatory, conventional, and *Optional* categories, reflecting rhetorical flexibility in developing academic arguments (Lubis & Kurniawan, 2021). The distribution of 305 RA Features with a cumulative score of 762.5% supports Peacock (2002) and Tankó (2017) regarding the role of rhetorical flexibility in academic discourse.

Move 1 in Linguistics articles is obligatory (100%), indicating that establishing the research background is consistently present. Step 1.1 is also obligatory (100%) as the fundamental introductory element, whereas Step 1.2 (72.5%) and Step 1.3 (87.5%) are

conventional steps that enrich the research context. An example of Step 1.1 is illustrated in the following excerpt:

"هو في اللغة استفعال من الخدمة.. فيكون إطلاق لفظ الشهر على معنى الهلال وعود الضمير على معنى الزمان".

"In linguistic terms, the expression refers to a derivation from the concept of service request, where the term 'month' is used to indicate the crescent moon and the reference of the pronoun returns to the meaning of time." (JALSL Journal, No. 7)

This excerpt demonstrates the significance of terminology in Arabic linguistic literature and its historical development from the pre-Islamic period to the modern era. Therefore, Move 1 not only introduces the central topic but is also frequently reinforced by Steps 1.2 and 1.3 to provide additional contextual and theoretical explanations.

Move 2 in Linguistics articles is obligatory (100%), with Step 2.2 functioning as the obligatory core element (100%) of *Reporting Results*, while Step 2.1 is conventional (95%) and serves to strengthen the analytical discussion. An example is presented below:

"أصبح التعبير الدال على مرض السرطان من مثل: كتلة غريبة، ورم، انتفاخات".

"The expression referring to cancer has increasingly been replaced by more neutral terms such as 'strange lump,' 'tumor,' or 'swelling.'" (JALSL Journal, No. 10)

This excerpt indicates that contextual, cultural, and social functions of language influence semantic shifts.

Move 3 in Linguistics articles is obligatory (100%), with Step 3.1 appearing almost consistently (95%) as the primary strategy for providing additional arguments and analytical support. For example:

"الإحالة الضميرية تخلق علاقات تواصلية بين النص والقارئ".

"Pronominal reference establishes communicative relationships between the text and the reader." (JALSL Journal, No. 4)

This excerpt highlights the role of cohesion, particularly in the analysis of *Sūrat At-Takwīr*. Thus, Move 3 contributes to enriching Linguistics articles by providing consistent analytical arguments that support the interpretation of linguistic phenomena.

Move 4 in Linguistics articles is fully obligatory (100%), indicating that a concluding section is always present, although its internal steps demonstrate greater flexibility. Step 4.1 is conventional (80%) and functions as the primary concluding component, while Step 4.3 (75%) provides additional support and reflection. Meanwhile, Step 4.2 (40%) and Step 4.4 (17.5%) occur only *optional*ly, depending on the rhetorical needs of the authors. An example of Step 4.1 is presented below:

"فالحديث الشريف يُنزل منزلة كلام هذا العربي"

"The Prophetic Hadith is placed at the same level as the speech of this Arab speaker." (JALSL Journal, No. 1)

This excerpt illustrates an interpretation concerning the rejection of some scholars toward Hadith as a linguistic source because it was considered not fully representative of standard Arabic usage. Therefore, Move 4 emphasizes the importance of rhetorical closure, with Step 4.1 functioning as the central component of the conclusion.

Similarities and Differences

Linguistics articles employ all rhetorical moves as obligatory (100%), similar to Education articles, indicating that the four major components are essential (Lubis & Kurniawan, 2021). Conventional steps, including Step 1.3 (87.5%), Step 2.1 (95%), and Step 4.1 (80%), reinforce rhetorical organization, while *Optional* steps appear only in specific contexts. Compared with Education articles, Linguistics articles exhibit a more formal structure with fewer *Optional* steps, emphasizing obligatory components such as Step 2.2 and Step 3.1 as key rhetorical mechanisms. This pattern reflects a balance between consistency and flexibility in constructing clear and effective academic arguments.

Rhetorical Patterns Across Disciplines

This section examines Move and Step configurations in Arabic research articles across Education and Linguistics, ranging from one-step to four-step patterns (1S–4Ss). The analysis highlights how step combinations construct academic arguments and reflect disciplinary complexity and writing conventions.

Table 10. Rhetorical Patterns Across Disciplines

Education				**Linguistics**			
Move	**Config.**	**Pattern**	**Total**	***Move***	**Config.**	**Pattern**	**Total**
M1	1S	1	1	M1	1S	1	2
	2Ss	1,2	17		2Ss	1,2	26
		1,3	28			1,3	26
		2,3	15			2,3	17
	3Ss	1,2,3	17		3Ss	1,2,3	23
M2	1S	1	3	M2	1S	1	2
	2Ss	1,2	37		2Ss	1,2	38
M3	1S	1	32	M3	1S	1	38
M4	1S	1	1	M4	1S	1	5
	2Ss	1,2	21		2Ss	1,2	11
		1,3	25			1,3	26
		1,4	17			1,4	6
		2,3	19			2,3	10
		2,4	14			2,4	4
		3,4	17			3,4	6
	3Ss	1,2,3	18		3Ss	1,2,3	14
		1,2,4	13			1,2,4	4
		1,3,4	24			1,3,4	6
		2,3,4	13			2,3,4	4

4Ss	1,2,3,4	13	4Ss	1,2,3,4	4

Analysis of Education Research Articles

Move 1 in Education articles is dominated by two-step patterns (2Ss), occurring 45 times, particularly the 1,3 combination (28 occurrences), followed by single-step patterns (15 occurrences) and three-step patterns (1,2,3) (17 occurrences). An illustrative example is presented below:

تدريس الوحدة فى ضوء الأنشطة الاستقصائية القائمة على مدخل STEM جمع بين مميزات كل من التدريس الاستقصائي ومدخل"_".STEM استخدام مصادر تعلم متنوعة بين شبكة الانترنت والفيديوهات التعليمية، والصور والأشكال التوضيحية ورسوم المحاكاة".

"Teaching the unit through inquiry-based activities using the STEM approach combined the advantages of both inquiry-based teaching and the STEM approach. The study also employed various learning resources, including internet sources, instructional videos, images, illustrations, and simulation materials." (MKTM Journal, No. 34)

This excerpt demonstrates that the 1,3 pattern strengthens the introductory section by providing additional contextual information, thereby supporting the effectiveness of the STEM-based instructional approach.

Move 2 in Education articles is predominantly realized through two-step patterns (2Ss), occurring 69 times, particularly the 1,2 combination (37 occurrences) and 2,4 combination (32 occurrences). Meanwhile, single-step patterns appear 15 times, and three-step patterns (1,2,3) occur 17 times. For example:

"قيمة (ت) = ١١،٨٨٤، قيمة مربع إيتا = ٠،٨٢، حجم الأثر = ٢،٠٧."- "يوجد فرق ذو دلالة إحصائية عند مستوى دلالة ≤ ٠،٠٥ بين متوسطي درجات طلاب المجموعة التجريبية لصالح التطبيق البعدي".

"The t-value = 11.884, the eta squared value = 0.82, and the effect size = 2.07. There was a statistically significant difference at the significance level of ≥ 0.05 between the mean scores of the experimental group in favor of the post-test." (MKTM Journal, No. 40)

This excerpt illustrates how the 1,2 pattern systematically presents numerical findings and empirical evidence to strengthen the development of the main argument.

Move 3 in Education articles is dominated by two-step patterns (2Ss), appearing 47 times, particularly the 1,2 combination (32 occurrences) and 2,3 combination (15 occurrences). Single-step patterns occur 15 times, while three-step patterns (1,2,3) appear 17 times.

"جميع قيم حجم الأثر كانت كبيرة مما يدل على فاعلية النموذج المستخدم".

"All effect size values were large, indicating the effectiveness of the model used." (MKTM Journal, No. 36)

This excerpt demonstrates how Move 3 functions to summarize research findings and reinforce the central argument through concise evaluative statements.

Move 4 in Education articles shows the highest level of rhetorical complexity, dominated by four-step patterns (1,2,3,4) occurring 24 times, followed by two-step patterns (1,2)

occurring 21 times and three-step patterns (1,2,3) occurring 17 times. Single-step patterns appear only 13 times.

"تطبيق الأنشطة التفاعلية ضمن المقرر الإلكتروني ساهم بشكل كبير في تحقيق نتائج إيجابية".
"ساهم التعلم المدمج في تعزيز قدرة الطلاب على توظيف المفاهيم العلمية في مواقف تعليمية جديدة".

"The implementation of interactive activities within the electronic course significantly contributed to achieving positive outcomes. Blended learning enhanced students' ability to apply scientific concepts in new educational contexts." (MKTM Journal, No. 43)

This excerpt demonstrates that complex Move 4 configurations are employed to construct comprehensive conclusions, emphasizing the effectiveness of blended learning in improving scientific literacy and cognitive performance.

Analysis of Linguistics Research Articles

Move 1 in Linguistics articles consists of 2 single-step patterns (1S), 43 two-step patterns (2Ss), and 23 three-step patterns (3Ss). The dominant configuration is the 1,2 pattern (26 occurrences), in which an additional elaborative component follows the obligatory step.

"يشير العنوان بقايا مريم إلى المكون الفاعل الذي يكون فيه العنوان حاملا لاسم شخص يؤدي دور البطولة أو دور الضحية." — "وقد خلت الرواية من العناوين الداخلية، ليشكل العنوان الرئيس عنوانا لكل صفحة فيها، وتكونت من مئتين وثمان وأربعين صفحة صورت أيام غزة ولياليها الفسفورية".

"The title Baqāyā Maryam refers to an active element in which the title carries the name of a person who plays the role of either a protagonist or a victim. The novel contains no internal titles; instead, the main title serves as the title for each page, consisting of 248 pages depicting the fluorescent days and nights of Gaza." (JALSL Journal, No. 18)

The dominance of the 1,2 pattern indicates that Linguistics articles generally introduce the research topic directly and subsequently provide supplementary contextual information. Meanwhile, more complex configurations such as 2,3 and 1,2,3 are employed when additional analytical elaboration is required.

Move 2 consists of 6 single-step patterns (1S), 56 two-step patterns (2Ss), and 23 three-step patterns (3Ss). The dominant pattern is 1,2 (30 occurrences), indicating a sequential development of ideas, followed by 2,4 (26 occurrences), which emphasizes supplementary analytical elaboration.

"وطن من زجاج"، والتي حازت على جائزة القراءة في تونس... ودونت مأساة وطنية ورصدت الخراب والدمار الذي حل بوطنها أثر التناحرات السياسية." — "ملعونة وبنت حرام ١٩٩٠، كما قال عنها زميل الراوي بعد رؤيته الجثث الملقاة والمنكل بها".

"Homeland of Glass ... recorded a national tragedy resulting from political conflicts. The city is cursed and illegitimate, as stated by the narrator's colleague after witnessing the scattered and mutilated corpses." (JALSL Journal, No. 21)

The prevalence of the 1,2 pattern demonstrates a clear structure of idea development, while other configurations provide additional details to enrich linguistic interpretation.

Move 3 consists of 6 single-step patterns (1S), 37 two-step patterns (2Ss), and 17 three-

step patterns (3Ss). The dominant pattern is 1,2 (26 occurrences), demonstrating a direct strategy for presenting additional arguments. Meanwhile, 2,3 (11 occurrences) and 1,2,3 (17 occurrences) are employed for more comprehensive analytical arguments.

"فالمعاني المختلفة تجعل النص القرآني أكثر وضوحًا".

"The different meanings make the Qur'anic text clearer." (JALSL Journal, No. 8)

The authors conclude that variations in the meanings of particles in the Qur'an demonstrate the richness of Arabic linguistic expression. The dominance of the 1,2 pattern reflects a concise strategy for strengthening arguments, whereas three-step configurations provide greater analytical depth.

Move 4 consists of 6 single-step patterns (1S), 15 two-step patterns (2Ss) dominated by the 1,2 pattern, 10 three-step patterns (3Ss) represented by 1,2,3, and 16 four-step patterns (4Ss) represented by 1,2,3,4. The four-step configuration represents the strongest pattern, indicating a comprehensive and fully developed conclusion.

"جمعوا فيه القصص التاريخية والأحداث التي جمعت بين الحقيقة تارة والأساطير والخرافات تارة أخرى." — "كان المفسرون إذا احتاجوا شيئا عن بدء الخليقة والكون وأسرار الوجود يرجعون لأهل الكتاب الذي أسلموا ولهم أخبار كثيرة".

"They collected historical narratives and events that combined factual accounts at times with myths and legends at other times. When exegetes required information about the origin of creation, the universe, and the mysteries of existence, they referred to the People of the Book who had converted to Islam and possessed numerous accounts." (JALSL Journal, No. 32)

The narrative of Wahb ibn Munabbih integrates historical facts and legendary elements. The dominance of the 4Ss pattern enables Linguistics articles to conclude through detailed summaries, interpretations, and reflections, resulting in stronger rhetorical closure.

Similarities and Differences

Both disciplines predominantly employ the 1,2 configuration in Move 2, reflecting consistent rhetorical strategies for reporting findings. However, Education articles demonstrate greater complexity through three- and four-step patterns, especially in Move 4, while Linguistics articles favor more concise and formal structures. These differences reflect disciplinary orientations: Education emphasizes comprehensive explanations for pedagogical purposes, whereas Linguistics prioritizes concise analytical patterns aligned with language studies conventions (Swales, 1990; Bhatia, 1993; Lubis & Kurniawan, 2021).

Tense and Voice Across Disciplines

This section analyzes the distribution of tense (Past tense–Present tense) and voice (active–passive: *ma'lūm–majhūl*) in Education and Linguistics research articles to examine how verb choices contribute to academic rhetorical construction and reflect disciplinary tendencies.

Tense Distribution in Education and Linguistics Research Articles

Table 11. Tense Distribution Across Disciplines

First Language Background											
Education						Linguistics					
Move	**Step**	**Past tense**	**%**	**Present tense**	**%**	**Move**	**Step**	**Past tense**	**%**	**Present tense**	**%**
M1	S1	19	12.2	26	15.8	M1	S1	15	8.9	32	17.4
	S2	16	10.3	15	9.1		S2	16	9.5	18	9.8
	S3	35	22.4	5	3.0		S3	19	11.2	16	8.7
		70	44.9	46	27.9			50	29.6	66	35.9
M2	S1	26	16.7	21	12.7	M2	S1	31	18.3	22	12.0
	S2	22	14.1	22	13.3		S2	23	13.6	23	12.5
		48	30.8	43	26.1			54	32.0	45	24.5
M3	S1	25	16.0	14	8.5	M3	S1	19	11.2	26	14.1
		25	16.0	16	9.7			19	11.2	24	13.0
M4	S1	27	17.3	19	11.5	M4	S1	15	8.9	18	9.8
	S2	14	9.0	10	6.1		S2	12	7.1	7	3.8
	S3	18	11.5	15	9.1		S3	14	8.3	19	10.3
	S4	13	8.3	16	9.7		S4	5	3.0	5	2.7
		72	46.2	60	36.4			46	27.2	49	26.6
Total		156		165				169		184	

Table 11 presents the frequency and percentage distributions of rhetorical moves and steps in Education and Linguistics research articles, classified according to verb tense, namely Past tense, which refers to completed events, and Present tense, which expresses current or general statements and, in some contexts, future events. The analysis illustrates how tense selection contributes to the rhetorical organization of the Results and Discussion sections across the two disciplinary fields.

Tense Analysis in Education Research Articles

Move 1

In the Past tense category within Education articles, Move 1 represents the most dominant rhetorical component (44.9%), with Step 1.3 (22.4%) and Step 1.1 (12.2%) occurring most frequently. This pattern indicates that introductory sections using the past tense tend to emphasize informative background and contextual explanation before presenting the main research information. Such a tendency reflects the need for comprehensive contextualization in educational texts describing past events or completed research processes. In the Present tense category, Move 1 accounts for 27.9%, dominated by Step 1.3 (15%) and Step 1.1 (9.1%). This pattern indicates that texts employing the Present tense tend to move more directly toward the central information with less extensive introductory elaboration, corresponding to

the temporal orientation toward present or future contexts.

Move 2

Move 2 plays a significant role in Past tense-based Education texts, accounting for 30.8% of occurrences. Step 2.1 (16.7%) represents the dominant step, followed by Step 1.2 (14.1%). This distribution reflects a gradual development pattern in which the main argument is introduced and subsequently supported by additional evidence or explanation, resulting in a more comprehensive and systematic rhetorical structure. In Present tense texts, Move 2 appears slightly less frequently (26.1%) but remains an important rhetorical component. Step 2.2 (13.3%) is more dominant than Step 1.1 (12.7%), indicating greater emphasis on supporting arguments rather than direct elaboration of the main idea.

Move 3

Move 3 occurs with a frequency of 16%, indicating a considerable emphasis on presenting additional information and supporting interpretations. Step 3.1 is the dominant step, demonstrating a direct argumentative pattern that provides supporting context without excessive rhetorical complexity. In contrast, Move 3 in Present tense texts contributes only 9.7%. Although Step 3.1 remains dominant, its frequency is lower than in Past tense texts, indicating a more limited use of additional arguments.

Move 4

Move 4 in Past tense-based Education texts accounts for 17.3%, with Step 4.1 (9%) as the dominant step. This indicates an emphasis on straightforward and clearly structured conclusions. Meanwhile, Move 4 in Present tense texts appears less frequently (11.5%) and demonstrates a more balanced distribution among steps, suggesting a more varied and flexible concluding structure.

Tense Analysis in Linguistics Research Articles

Move 1

In Linguistics articles, Move 1 using Past tense accounts for 29.6%, with Step 1.3 (11.2%) as the dominant step. This pattern indicates that Past tense-based introductions provide additional informative background, similar to the pattern identified in Education articles. In contrast, Move 1 using Present tense is more dominant (35.9%), indicating greater emphasis on establishing the research topic. Step 1.1 (17.4%) appears most frequently, reflecting a more direct and explicit introductory strategy.

Move 2

Move 2 in Linguistics Past tense texts represents 32.0% of the total frequency, making it one of the most important rhetorical components. Step 2.1 (18.3%) is dominant, indicating a strong emphasis on the initial development of the main idea. Meanwhile, Move 2 in Present tense texts appears less frequently (24.5%) but remains significant. Step 2.2 (12.5%) is the dominant step, showing a pattern similar to Education Present tense texts.

Move 3 and Move 4

Linguistics texts using Past tense and Present tense demonstrate relatively similar distribution patterns in Move 3 and Move 4. However, Move 4 occurs more frequently in Present tense texts, indicating greater attention to conclusion-building and final interpretation

in this category.

Similarities and Differences in Tense Usage Across Education and Linguistics

Both Education and Linguistics articles using Past tense emphasize the importance of Move 1 as an introductory component and Move 2 as a mechanism for developing research ideas. However, Education Past tense texts demonstrate more extensive introductory explanation and elaboration, whereas Linguistics Past tense texts tend to employ simpler concluding structures. In the Present tense category, both disciplines exhibit a more concise rhetorical organization, with stronger orientation toward direct presentation of the central information.

Voice Analysis in Education and Linguistics Research Articles

Table 12. Voice Distribution Across Disciplines

Education						Linguistics					
M	**S**	**AV**	**P**	**PV**	**P**	**M**	**S**	**AV**	**P**	**PV**	**P**
M1	S1	35	16.6	11	16.9	M1	S1	39	14.3	4	8.3
	S2	22	10.4	10	15.4		S2	24	8.8	5	10.4
	S3	26	12.3	14	21.5		S3	24	8.8	4	8.3
		83	39.3	35	53.8			87	32.0	13	27.1
M2	S1	33	15.6	5	7.7	M2	S1	36	13.2	13	27.1
	S2	36	17.1	5	7.7		S2	34	12.5	9	18.8
		69	32.7	10	15.4			70	25.7	22	45.8
M3	S1	34	16.1	7	10.8	M3	S1	34	12.5	5	10.4
		34	16.1	7	10.8			34	12.5	5	10.4
M4	S1	36	17.1	5	7.7	M4	S1	28	10.3	5	10.4
	S2	19	9.0	2	3.1		S2	15	5.5	0	0
	S3	30	14.2	4	6.2		S3	30	11.0	2	4.2
	S4	25	11.8	2	3.1		S4	8	2.9	1	2.1
		110	52.1	13	20			81	29.8	8	16.7
Total		211		65				272		48	

Note:
M = Move
S = Step
P = Percentage
AV= Active Voice
PV= Passive Voice

Table 12 categorizes the data into two disciplinary domains (Education and Linguistics) and two grammatical voice categories (*Ma'lūm*/active voice and *Majhūl*/passive voice). The term Move represents the primary rhetorical structure, while step refers to the specific rhetorical strategies employed within each move. The distribution demonstrates variations in

rhetorical strategies according to disciplinary domains and grammatical voice categories.

Voice Analysis in Education Research Articles

Move 1

In the active voice, Move 1 accounts for 39.3% of the total frequency in the Ma'lum category, making it the most dominant rhetorical component. Step 1.1 at 16.6% is the most frequently employed, followed by Step 1.3 at 12.3 percent. This pattern indicates that Ma'lum structures in Education articles tend to employ explicit rhetorical strategies for establishing the research background and introducing the main topic. Conversely, in the passive voice, Move 1 is even more dominant in the *Majhūl* category, accounting for 53.8% of the total frequency. Here, Step 1.3 at 21.5% is the most frequently used, followed by Step 1.2 at 15.4%, indicating that passive constructions tend to provide more contextual elaboration in the introductory section.

Move 2

In the active voice, Move 2 accounts for 32.7%, making it the second most significant rhetorical component. Step 2.1 at 15.6% and Step 2.2 at 17.1% represent the dominant steps. This distribution indicates that Ma'lum structures emphasize systematic strategies for developing the main research ideas and presenting supporting evidence. In contrast, in the passive voice, Move 2 occurs less frequently in the *Majhūl* category, accounting for only 15.4% of the total frequency. The dominant step is Step 2.2 at 10%, suggesting that passive structures employ a more concise pattern in developing the Reporting Results function.

Move 3

In the active voice, Move 3 accounts for 16.1%, with Step 3.1 as the dominant component. This pattern indicates that Ma'lum structures continue to provide space for additional argumentative strategies in the Summarizing the Results function, although with lower frequency than Moves 1 and 2. In the passive voice, Move 3 appears less frequently in the *Majhūl* category at 10.8%, with Step 3.1 remaining dominant. This finding indicates that passive structures less frequently employ additional argumentative strategies in summarizing research results.

Move 4

In the active voice, Move 4 accounts for 17.1%, representing a relatively important rhetorical component. Step 4.1 at 9% is the dominant step, indicating a tendency toward relatively straightforward concluding patterns. In comparison, in the passive voice, Move 4 occurs much less frequently in the *Majhūl* category, accounting for only 7.7%, with a more balanced distribution among its constituent steps.

Voice Analysis in Linguistics Research Articles

Move 1 (Providing Background Information)

In the active voice, Move 1 accounts for 32.0%, making it the most significant rhetorical component in the Ma'lum category. Step 1.1 at 14.3% is the dominant step, followed by Step 1.3 at 8.8%, indicating an emphasis on explicit introduction and contextual establishment. Similarly, in the passive voice, Move 1 is dominant in the *Majhūl* category, accounting for 27.1%. The most frequently used step is Step 1.1 at 13%, demonstrating an introductory pattern

similar to that of the Ma'lum category.

Move 2 (Reporting Result)

In the active voice, Move 2 represents the most significant component in the Ma'lum category, accounting for 45.8%. Step 2.2 at 18.8% is the dominant step, indicating a strong emphasis on supporting strategies in developing the main research arguments. In contrast, in the passive voice, Move 2 occurs less frequently in the *Majhūl* category at 16.7%. The dominant step is Step 2.2 at 10.4%, demonstrating a simpler rhetorical pattern compared with Ma'lum structures.

Move 3 and Move 4

In the active voice, Move 3 appears less frequently at 12.5% and is dominated by Step 3.1, while Move 4 occurs at an even lower frequency of 10.3%. In the passive voice, Move 3 and Move 4 demonstrate similar frequencies in the *Majhūl* category at 10.4% each, indicating a more balanced rhetorical distribution between additional argumentation in Summarizing the Results and concluding functions.

Similarities and Differences in Voice Usage Across Education and Linguistics

The analysis shows that Move 1 is dominant in both disciplines, while Move 2 serves as a key component in developing research arguments. Education articles emphasize Move 1 and Move 4, particularly in *Majhūl* structures, whereas Linguistics articles prioritize Move 2, especially in *Ma'lūm* structures. These patterns reflect disciplinary differences: Education focuses on contextualization and rhetorical closure, while Linguistics emphasizes argument development and analytical elaboration. *Ma'lūm* structures exhibit greater rhetorical flexibility, whereas *Majhūl* structures tend to adopt more concise patterns aligned with specific communicative purposes.

3.2 Discussion

Discussion Based on Move Occurrence

The findings indicate that Move 1 (Providing Background Information) and Move 2 (Reporting Results) are the most frequently occurring rhetorical moves in the Results and Discussion sections of Arabic-language research articles, confirming their role as core rhetorical components for establishing research context and presenting empirical findings. This result is consistent with Swales' (1990) genre theory and previous genre studies, which identify reporting and commenting functions as essential across disciplines. Al-Shujairi et al. (2019) similarly found that reporting and explaining findings constitute the core rhetorical functions in Applied Linguistics and Medical Sciences, while Hussin and Nimehchisalem (2018) reported that reporting and commenting on results are obligatory in students' Results and Discussion chapters, whereas summarizing and evaluating results occur less frequently.

The findings further suggest that disciplinary conventions influence how these rhetorical moves are realized. Phongjit and Gampper (2023) observed that evaluative stance is predominantly expressed in Commenting on Results, although its realization varies across publication contexts. Similarly, Leila (2022) found that Commenting on Results is the dominant rhetorical function in both native and non-native research articles, differing mainly in the

strategies used to interpret and justify findings. Ruiying and Allison (2003) likewise highlighted the cyclical interaction between reporting and commenting on results, arguing that effective discussion sections integrate empirical evidence with interpretation rather than presenting findings in isolation. Overall, the present findings reinforce that rhetorical organization is shaped by disciplinary conventions and support the importance of genre-based instruction in Arabic academic writing (Swales, 1990; Lubis & Kurniawan, 2021).

Discussion Based on Move Salience

The salience analysis indicates that Move 1 (Providing Background Information), Move 2 (Reporting Results), and Move 3 (Summarizing Results) function as obligatory rhetorical components, whereas Move 4 (Commenting on Results) is conventional rather than obligatory. This finding highlights the essential roles of the first three moves in establishing research context, presenting empirical findings, and summarizing results. In contrast, the lower salience of Move 4 reflects greater flexibility in interpreting and evaluating findings across disciplines. These results are consistent with previous genre studies showing that reporting and commenting on results constitute the core communicative purposes of Results and Discussion sections. Warsito et al. (2017), Loan and Pramoolsook (2015), Gao and Pramoolsook (2021), and Ulya (2022) similarly identified Reporting Results and Commenting on Results as obligatory rhetorical functions. In contrast, evaluative and concluding moves occur less consistently and are influenced by disciplinary conventions and publication contexts (Pandey, 2022).

The findings further demonstrate that rhetorical organization is inherently cyclical rather than linear, with authors frequently alternating between reporting findings and commenting on them to strengthen the coherence and persuasiveness of academic arguments. This cyclical interaction has been widely documented in genre studies (Dudley-Evans, 1995; Gao & Pramoolsook, 2021; Tikhonova, 2024), indicating that interpretation is closely integrated with the presentation of empirical evidence. Overall, the present findings reinforce that disciplinary conventions and publication practices shape rhetorical realization. While obligatory moves remain relatively stable across disciplines, conventional and optional moves vary according to disciplinary traditions, journal expectations, and rhetorical preferences, highlighting the importance of genre awareness in Arabic academic writing (Swales, 1990; Hyland, 2018; Ulya, 2022).

Discussion Based on Move-Step Patterns

The analysis of move-step patterns reveals that authors employ different step configurations to achieve specific communicative purposes in the Results and Discussion sections. Simpler configurations are predominantly associated with Move 1 (Providing Background Information) and Move 2 (Reporting Results), reflecting the need to establish research context and present empirical findings clearly and systematically. In contrast, Move 4 (Commenting on Results) exhibits the greatest structural complexity by combining multiple steps to interpret findings, relate them to previous studies, explain unexpected results, and evaluate their significance. This finding is consistent with previous genre studies showing that reporting and commenting on results constitute the core rhetorical functions of the Results and

Discussion section. Razali and Kim (2023) and Saz-Rubio (2019) likewise identified Reporting Results, Presenting Results, and Commenting on Results as obligatory rhetorical functions across disciplines, while Hyland (2018) emphasized that Commenting on Results provides the greatest rhetorical flexibility for adapting discussions to disciplinary and communicative expectations.

The complexity of move-step patterns further reflects disciplinary and cultural variation. Alotaibi and Arabi (2020) reported that Arabic and English research articles share similar rhetorical functions but differ in emphasis, with Arabic writers more frequently relating findings to previous studies and English writers placing greater emphasis on evaluation and methodological limitations. Similarly, Derakhshan and Nadi (2019) argued that writers' academic backgrounds influence rhetorical realization, although the overall move structure remains relatively stable. Overall, the present findings suggest that move-step configurations are strategically organized to fulfill discipline-specific communicative purposes, with simpler patterns supporting the presentation of findings and more elaborate configurations facilitating interpretation, evaluation, and argument construction. These findings reinforce the role of disciplinary conventions and genre expectations in shaping rhetorical organization and highlight the importance of explicit move-step instruction in Arabic academic writing (Swales, 1990; Hyland, 2018; Lubis & Kurniawan, 2021).

Discussion Based on Tense and Voice

The analysis of verb tense and voice demonstrates that grammatical choices contribute significantly to the realization of rhetorical functions in the Results and Discussion sections of Arabic-language research articles. Past tense (*fiʿil māḍī*) is predominantly employed in Move 1 (Providing Background Information) to present completed events, previous studies, and established research contexts, whereas Present tense (*fiʿil muḍāriʿ*) occurs more frequently in Move 3 (Summarizing Results) and Move 4 (Commenting on Results) to interpret findings, express generalizations, and discuss their current or future implications. A similar pattern is evident in voice selection. Passive voice (*majhūl*) is more common in Move 1, emphasizing research phenomena and established knowledge to create an objective tone. In contrast, Active voice (*maʿlūm*) predominates in Move 2 (Reporting Results) and Move 4, highlighting authors' interpretation and evaluation of research findings. These findings are consistent with Hyland (2018), who argues that passive constructions foreground research processes and evidence, whereas active constructions strengthen authors' rhetorical presence.

The findings further indicate that verb tense and voice function not merely as grammatical features but as rhetorical resources that support discipline-specific argumentation. Previous genre studies likewise demonstrate that reporting, interpreting, and evaluating findings are closely associated with appropriate linguistic choices (Afshar et al., 2018; Alharbi, 2016; Kurniawan & Lubis, 2020; Loi et al., 2016). Although these studies primarily examined rhetorical move structures, they similarly emphasize that effective rhetorical organization emerges from the interaction between move-step configurations and linguistic resources. Overall, the systematic distribution of Past tense, Present tense, Active voice, and Passive voice across rhetorical moves reinforces the close relationship between

linguistic realization and genre structure in Arabic academic writing, supporting the genre principles proposed by Swales (1990) and further elaborated by Hyland (2018).

4. CONCLUSION

The findings demonstrate that the rhetorical organization of the Results and Discussion sections in Arabic-language research articles is systematically structured through four rhetorical moves and their associated steps as defined in the analytical framework developed by Lubis and Kurniawan (2021). Move 1 (Providing Background Information) and Move 2 (Reporting Results) constitute the core rhetorical components in both disciplines. In contrast, disciplinary differences are reflected in the distribution and realization of Move 3 (Summarizing Results) and Move 4 (Commenting on Results). Education articles allocate greater rhetorical emphasis to Move 4 by providing more extensive interpretation, evaluation, and pedagogical implications. In contrast, Linguistics articles emphasize Move 2 through more detailed presentation and analysis of research findings. These differences indicate that disciplinary writing conventions shape the rhetorical organization of Arabic-language research articles. The study contributes to genre-based research on Arabic academic writing by providing empirical evidence of disciplinary rhetorical variation. It offers practical implications for teaching Arabic academic writing using the move-step analytical framework developed by Lubis and Kurniawan. Future research may extend this framework to other academic disciplines and larger corpora to further examine disciplinary variation in Arabic research writing.

5. REFERENCES

Afshar, H. S., Doosti, M., & Movassagh, H. (2018). A comparative study of generic structure of applied linguistics and chemistry research articles: The case of discussions. *Journal of Research in Applied Linguistics*, *9*(1), 28 – 56. https://doi.org/10.22055/rals.2018.13404

Alharbi, S. H. (2016). Schematic Structure of Discussion of Results Sections in the Field of Dentistry: A Comparison of International and Local English-Medium Journals. *Arab World English Journal*, *7*, 61–76. https://doi.org/10.2139/SSRN.2814814

Alotaibi, H. S., & Arabi, H. (2020). Taking authorial stance in Arabic research articles introductions. *International Journal of Arabic-English Studies*, *20*(2), 41–62. https://www.researchgate.net/profile/Hmoud-Alotaibi/publication/344458547_Taking_Authorial_Stance_in_Arabic_Research_Articles_Introductions/links/5f78486692851c14bca9f045/Taking-Authorial-Stance-in-Arabic-Research-Articles-Introductions.pdf

Al-Shujairi, Y. B. J., Tan, H., Abdullah, A. N., Nimehchisalem, V., & Imm, L. G. (2019). *Moving In The Right Direction In The Discussion Section Of Research Articles* (Vol. 6). https://www.semanticscholar.org/paper/d5284f8fd336431909260eecb9a9e5e27abf17cb

Basturkmen, H. (2009). Commenting on results in published research articles and master's dissertations in language teaching. *Journal of English for Academic Purposes, 8(4), 241–251.* https://doi.org/10.1016/j.jeap.2009.07.001

Basturkmen, H. (2012). A genre-based investigation of discussion sections of research articles in Dentistry and disciplinary variation. *Journal of English for Academic Purposes, 11(2), 134–144.* https://doi.org/10.1016/j.jeap.2011.10.004

Bhatia, V. K. (2002). *Applied genre analysis: Analytical advances and pedagogical procedures*. Dalam *Genre in the classroom: Multiple perspectives.* Lawrence Erlbaum Associates Publishers.

Brown, C. (2018). Philosophy of Science and Its Role in Research. *Philosophical Studies*, *25*(4), 112–125.

Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. pearson

Derakhshan, A., & Nadi, A. (2019). A Genre Analysis of Research Abstracts of Master of Arts Theses Written by TEFL Students from the University of Tehran and Islamic Azad University of Gorgan. *Applied Linguistics*, *12*, 41–67. https://doi.org/10.30495/JAL.2019.671913

Dudley-Evans, T. (1995). Common-core and specific approaches to the teaching of academic writing. *Academic writing in a second language: Essays on research and pedagogy*, 293–312.

Flowerdew, J. (2015). John Swales's approach to pedagogy in Genre Analysis: A perspective from 25 years on. *Journal of English for Academic Purposes*, *19*, 102–112. https://doi.org/10.1016/j.jeap.2015.02.003

Gao, S., & Pramoolsook, I. (2021). Move-Step Structure Of The Results And Discussion Section Of Electronic Engineering Research Articles Written By Chinese And Thai Researchers. *Journal of Teaching English for Specific and Academic Purposes*, *9*(4), 725 – 739. https://doi.org/10.22190/JTESAP2104725G

Holmes, R. (1997). Genre analysis and the social sciences: An investigation of the structure of research article discussion sections in three disciplines. *English for Specific Purposes*, *16*(4), 321–337. https://doi.org/10.1016/S0889-4906(96)00038-5

Hussin, N. I. S. M., & Nimehchisalem, V. (2018a). *Organization and move structure in the results and discussion chapter in Malaysian undergraduates' final-year projects*. https://www.semanticscholar.org/paper/950e271407b2831241b8b7ecfa85b3b21de88dda

Hyland, K. (2004). *Disciplinary discourses, Michigan classics ed.: Social interactions in academic writing*. Ann Arbor: University of Michigan Press.

Hyland, K. (2019). *Academic discourse: English in a global context*. London: Bloomsbury Publishing.

Hyland, K. (2019). Second language writing. Cambridge: Cambridge University Press.

Jones, M. L., & Smith, P. (2010). *Analyzing scientific discourse: The role of rhetorical structure in academic texts*. Journal of English for Academic Purposes, 9(1), 45–58.

Kanoksilapatham, B. (2005). Rhetorical structure of biochemistry research articles. *English for Specific Purposes*, *24*(3), 269- 292. https://doi.org/10.1016/j.esp.2004.08.003

Kanoksilapatham, B. (2007). *2. Introduction to move analysis* (hlm. 23–41).

https://doi.org/10.1075/scl.28.04kan
Kanoksilapatham, B. (2023). Stand-Alone Conclusion Section in Open-Access Research Articles: Organizational Structure. *Journal of Language and Education*, *9*(3 (35)), 79-89. https://doi.org/10.17323/jle.2023.16907
Kennedy, G. (2014). *An introduction to corpus linguistics*. Routledge.
Kurniawan, E., & Haerunisa, Z. F. (2023). A comparative study of lexical bundles in accepted and rejected applied linguistic research article introductions. Studies in English Language and Education, 10(2), 628–648. https://doi.org/10.24815/siele.v10i2.28119
Kurniawan, E., & Lubis, A. H. (2020). A comparative move analysis on the qualitative and quantitative findings and discussion sections written by EFL undergraduate students. *Asian ESP Journal*, *16* (6.1), 137–162. https://www.scopus.com/inward/record.uri?eid=2-s2.0-85099913661&partnerID=40&md5=9dc96f30a2954cbcf1d39dce3d5aa2d0
Kurniawan, E., Nabilla, S. N., & Mauludini, Y. R. (2024). Introduction in social science research articles by Indonesian authors: A comparative move analysis. LLT Journal: A Journal on Language and Language Teaching, 27(1), 336–355. https://doi.org/10.24071/llt.v27i1.8191
Leila, A. (2022). Rhetorical structure of applied linguistics research article discussions: A comparative cross-cultural analysis. *Journal of Language and Education*. https://cyberleninka.ru/article/n/rhetorical-structure-of-applied-linguistics-research-article-discussions-a-comparative-cross-cultural-analysis
Loan, N. T. T., & Pramoolsook, I. (2015). Move analysis of results-discussion chapters in TESOL Master's theses written by Vietnamese students. *3L: Language, Linguistics, Literature*, *21*(2), 1 – 15. https://doi.org/10.17576/3l-2015-2102-01
Loi, C. K., Evans, M. S., Lim, J. M.-H., & Akkakoson, S. (2016). A Comparison Between Malay and English Research Article Discussions: A Move Analysis. *SAGE Open*, *6*(2). https://doi.org/10.1177/2158244016652925
Lubis, A. H. (2020). The argumentation structure of research article findings and discussion'sections written by English speaker novice writers: A case of Indonesian undergraduate students. *Asian Englishes*, *22*(2), 143-162. https://doi.org/10.1080/13488678.2019.1669300
Martin, J. R., & Rose, D. (2008). Procedures and procedural recounts. Genre relations: Mapping culture. London: Equinox.
McHugh, M. L. (2012). Interrater reliability: the kappa statistic. *Biochemia medica*, *22*(3), 276–282.
Pandey, G. P. (2022). Genre Analysis of Introductions of ELT Theses: Rhetorical Structures and Steps. *Nepal Journal of Multidisciplinary Research*, *5*(5), 31–44. https://doi.org/10.3126/njmr.v5i5.51802
Peacock, M. (2002). Communicative moves in the discussion section of research articles. *System*, *30*(4), 479–497. www.elsevier.com/locate/system
Pho, P. D. (2008). Research article abstracts in applied linguistics and educational technology: A

study of linguistic realizations of rhetorical structure and authorial stance. *Discourse Studies*, *10*(2), 231-250. https://doi.org/10.1177/1461445607087010

Phongjit, W., & Gampper, C. (2023). That- Stance Found in Discussion Sections in Applied Linguistics Research Articles. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.4497561

Razali, N. Z., & Kim, L. C. (2023). COMMUNICATIVE STRATEGIES USED IN TOURISM AND PHARMACOLOGY RESEARCH ARTICLE DISCUSSIONS. *Journal of Language and Communication*. https://doi.org/10.47836/jlc.10.01.01

RG, O. (1994). Evaluating coding decisions. *The handbook of research synthesis*.

Ruiying, Y., & Allison, D. (2003). Research articles in applied linguistics: Moving from results to conclusions. *English for Specific Purposes*, *22*(4), 365–385. https://doi.org/10.1016/S0889-4906(02)00026-1

Saz-Rubio, M. Del. (2019). A Contrastive Genre-Based Approach to the Rhetorical Structure and Use of Interactional Metadiscourse in the Results and Discussion Section of Food Science & Technology Research Articles. *Miscelánea: A Journal of English and American Studies*. https://doi.org/10.26754/ojs_misc/mj.20196337

Suherdi, D., Kurniawan, E., & Lubis, A. H. (2020). A genre analysis of research article findings and discussion sections written by Indonesian undergraduate EFL students. Indonesian Journal of Applied Linguistics, 10(1), 59-72. https://doi.org/10.17509/ijal.v10i1.24989

Suherdi, D., Kurniawan, E., & Lubis, A. H. (2021). Does cognition reflect performance: Rhetorical organization of journal article abstracts written by Indonesian authors. In F.A. Hamied (Ed.), Literacies, culture, and society towards industrial revolution (pp. 209-228). Nova Science Publishers.

Swales, J. M. (2004). *Research Genres*. Cambridge: Cambridge University Press. https://doi.org/10.1017/cbo9781139524827

Swales, J. M. (2014). Genre analysis: English in academic and research settings. Cambridge: Cambridge University Press, selected 45–47, 52–60. In *The Discourse Studies Reader: Main currents in theory and analysis* (pp. 306–316). John Benjamins Publishing Company.

Swales, J. M., & Feak, C. B. (2004). Academic writing for graduate students: Essential tasks and skills (Vol. 1). Ann Arbor, MI: University of Michigan Press.

Swales, J., & Najjar, H. (1987). The writing of research article introductions. *Written Communication*, *4*(2), 175–191. https://doi.org/10.1177/0741088387004002004

Tankó, G. (2017). Literary research article abstracts: An analysis of rhetorical moves and their linguistic realizations. Journal of English for Academic Purposes, 27, 42-55.

Thompson, G., & Williams, S. (2015). *Evaluative language in academic discourse: Managing stance and engagement*. Applied Linguistics, 36(2), 147–170.

Thompson, P. (2012). Thesis and dissertation writing. *The handbook of English for specific purposes*, 283-299

Thompson, R., Fisher, H. L., Dewa, L. H., Hussain, T., Kabba, Z., & Toledano, M. B. (2022). Adolescents' thoughts and feelings about the local and global environment: a qualitative interview study. *Child and Adolescent Mental Health*, *27*(1), 4–13.

https://doi.org/10.1111/camh.12520
Trowler, P., Saunders, M., & Bamber, V. (Eds.). (2012). *Tribes and territories in the 21st-century* (pp. 5–29). London: Routledge.
Ulya, S. (2022). Rhetorical moves variations of research article discussion sections published in reputable journals. *Premise: Journal of English Education and Applied …*. https://scholar.archive.org/work/46enldyqsbcind7jk3tzs6ieri/access/wayback/https://ojs.fkip.ummetro.ac.id/index.php/english/article/download/5615/pdf
Warsito, W., Arsyad, S., & Harahap, A. (2017a). Stating And Defending New Knowledge Claim: A Rhetorical Analysis On The Discussion Section Of English Master Thesis By Indonesian EFL Learners. *IJEE (Indonesian Journal of English Education)*, *4*(2), 188–207. https://doi.org/10.15408/ijee.v4i2.6746
Weber, M. (1978). *Economy and society: An outline of interpretive sociology* (Vol. 1). Berkeley, CA: University of California Press.