

Ideational Meaning of Material Process in EFL Students' Problem-Solving Text: A Frame of Systemic Functional Linguistics

Veronika Listi Ferdini Damopolii ^{1, 2*}, Eva Tuckyta Sari Sujatna ¹, Dadang Suganda ¹, and Rosaria Mita Amalia ¹

¹ Department of Literary Studies, Faculty of Cultural Sciences, Universitas Padjadjaran, Jatinangor 45363, Indonesia;

² Department of English Language and Literature, Faculty of Languages and Arts, Universitas Negeri Manado, Manado, 95618, Indonesia.

* Corresponding author: veronika22001@mail.unpad.ac.id.

ABSTRACT: The background of this research is centered on the writing text of students learning English as a Foreign Language (EFL) in Eastern Indonesia, where students face challenges in expressing their ideas because of the lack of effective teaching methods. This study aims to improve EFL students' problem-solving text writing and express their idea by helping them develop ideas grounded in their personal experiences. To achieve this, the research focuses on analysing ideational meaning through transitivity, participants, processes, and circumstances, in Systemic Functional Linguistics, to know students' ideas through writing. Qualitative and quantitative method were used to analyze the data. The main result adduces ideational meanings in material process represent problems and solutions, such as indifference, defection, negligence, abandonment, laziness, fatigue, breakthrough, hope, struggle, persistence, pride, achievement, determination, courage, and encouragement. Most frequently used participant is *I*, referring to most of these students and the problems and solutions they face and implement. The most widely used circumstances are time and accompaniment. This research result is different from the theory raised by Gerot and Wignell, which state that the most dominant circumstances and tense in expository text are time, cause and present. Additionally, past tense forms are observed in some clauses in the problem-solution texts. The theoretical contribution of this study is to apply SFL as a model of language use that use material processes to obtain ideational meaning as a function, while the practical contribution is to help students be more courageous in writing English and to express their ideas, experiences and goals more easily. The pedagogical contribution of this study is to apply SFL as a model and use descriptive language to examine how linguistic choices reflect social contexts and their functions in students' lives in advancing their learning.

Keywords: ideational meaning, material process, problem-solving text, systemic functional linguistics.

I. INTRODUCTION

The background of this research is grounded in the challenges faced by students in Eastern Indonesia who are learning English as a Foreign Language (EFL). Writing texts, a crucial skill in language learning, remains a significant hurdle for many of these students. Despite the growing importance of English proficiency in global communication, students in this region often striking a blow to effectively express their thoughts and ideas through writing. This issue is largely attributed to the lack of appropriate and effective teaching methods tailored to students' needs, resulting in underdeveloped writing skills. Research on writing in academic fields has been driven by the challenges students encounter when writing in English

language schools [1]. The aim of this study was to address these challenges by enhancing students' ability to generate and organize their writing ideas. This study emphasizes the importance of encouraging students to draw upon their own experiences and factual information as a basis for their written expressions and after that the idea of writing in the form of problem-solution text is further analyzed to see its ideational meaning so that in the end the problem can be resolved critically to make the education system in Indonesia better according to what students feel and expect. By analyzing the material process used in students' writing, the rationale of this research aims to identify patterns and common challenges, providing insights into how students express themselves in English. This analysis can inform more targeted teaching strategies that align with the linguistic needs of EFL learners in Indonesia.

The Systemic Functional Linguistics theory used, in this case in the material process analysis, does not only encourage students to nerve themselves to write more in English but also to explore deeper and more complete meanings and their handling of course by also looking at the context of participants and circumstances to get the pinpoint ideational meaning to devise the problems they face and the solution to be followed up. The importance of SFL's practical contribution can be seen from the application of this approach which not only helps students engage more deeply in the writing process, but also allows them to construct more meaningful and coherent pieces of writing. By fostering a connection between their real-life experiences and writing tasks, students can better develop their capacity to express ideas in English writing. Pedagogical contributions also provide new ways to encourage students to be braver and more active in writing and of course to express more flowing ideas by looking at material process or the process of doing something that can be seen from their critical clauses in the problem-solution text which will later form an ideational meaning in the students' texts that show their attitudes towards problems and their relationships with something and others and will later not only help them practice English more often but also find solutions to the problems they face when dealing with learning on campus and around to develop knowledge.

Ultimately, this research forages to contribute to the improvement of writing instruction for EFL students by proffering an exhaustive understanding of the writing process through the lens of the SFL. By focusing on the transitivity system, this study aims to provide practical recommendations for lecturers, helping them to implement more effective methods that support students in overcoming their writing challenges. This, in turn, can lead to improve writing skills among EFL students, enabling them to become more proficient and confident in their ability to communicate in English.

Recent studies on effective English language instruction have drawn consequential attention with an increasing number of research efforts focusing on teaching English as a Second Language (ESL) or English as a Foreign Language (EFL) to improve students' language skills and communication competence [2]. Proficiency in English is essential for future career opportunities and for accessing knowledge from international sources. According to David [3], English plays a crucial role in global communications. Recognizing challenges such as students' limited ability to construct sentences, difficulty in developing writing ideas, and reluctance to engage in English writing, the writers, who are also lecturers, implemented a genre-based learning method. This approach focuses on one of the expository texts, problem-solution text, which is particularly effective in helping students expand their ideas. Applying the concept of expressing the potential meaning of language through a system network offers significant benefits for L2 and foreign language education [4]. The genre-based approach is grounded in the principles of Systemic Functional Linguistics (SFL), as outlined by Maiorani and Liu [5], emphasizing the performance context. This method connects language knowledge with social purposes and prioritizes the audience's understanding of the writer's perspective [6].

Using genre-based learning methods with one of expository texts, problem-solution text encourages students to enhance their writing skills by drawing from their own experiences or knowledge. The expository text genre was selected because, compared to other types such as narrative, descriptive, argumentative, and persuasive, it allowed students to express more words and ideas fluidly and coherently. As lecturers, the writers facilitated this by guiding students to produce problem-solution expository texts, encouraging them to explore problem-solution related to their campus life or living environment. It examines how language selections and structures communicate specific ideas within a text [7].

At Universitas Negeri Manado, Indonesia, the number of English major students are very few compared to other majors and the total number of students in a class is around 20 students. The writers observed that

23 students' problem-solution texts often reached over 250 words, spread across four to five paragraphs. This outcome contrasts with their output when asked to write narrative, descriptive, argumentative, or persuasive texts, which usually ranges from 100 to 150 words. The writers noted that when working on these four text types, students tended to remain silent for about 1-15 minutes, struggling to generate new content or organize the flow of their writing. By contrast, students seem to write more fluently when writing expository texts, as they are not constrained by rigid writing rules. This freedom allows them to express their ideas and purposes without feeling restricted.

Students' work on problem-solution expository texts demonstrates not only their improved fluency in writing in English but also the presence of implied meanings that can be analyzed using Systemic Functional Linguistics (SFL). Through transitivity analysis and the study of ideational meaning, the writers seek to uncover the deeper meanings embedded in the clauses of these expository texts to communicate with their readers. The use of material processes in expository texts as a first language (L1), Indonesian, and as EFL, English, is equally frequently used compared to other processes in the transitivity system, but in comparison, they write more clauses in Indonesian because it is an everyday language that is easier to express compared to English as EFL because they are also learning and are not as fluent as their mother tongue.

The research gap in this study lies in the data analyzed where previously there was no research on the material process as the part of SFL analysis using problem-solution expository text. Previous research on the SFL examined the process of transitivity system in descriptive [8], narrative [9] and argumentative texts [10]. In addition, the writers examined the linguistic features employed by the students, noting new findings that may differ from the findings of previous researchers. These insights could offer new perspectives or variations that contribute to the development of systemic functional linguistics.

II. RELATED WORK

Systemic Functional Linguistics (SFL) is a theory of language that views language as a social semiotic system [11]. In SFL, language is comprehended as a system of choices in which various linguistic forms are selected according to the context and the specific functions they are meant to serve. This study adopts the SFL approach to analyze the language choices made by students to convey their ideational meanings, representing their experiences of the world through language in their writing. Within the SFL, the concept of ideational meaning is central to understanding how meaning is constructed. According to Alaei and Ahangari [12], ideational meaning involves the representation of experiences are represented in language. The analysis of ideational meaning through material processes in problem-solution expository texts aims to capture students' experiences in a straightforward, authentic, and natural manner, contributing to their progress in writing skills. Eggins [13] states that, in systemic functional linguistics, ideational meaning includes two components: experiential meaning within individual clauses and logical meaning between clauses in complex sentences.

Writers encourage EFL students to practice their writing skills in problem-solution texts. Huang and Tan [14] emphasized that writing skills involve not only mechanical proficiency in grammar and spelling, but also the capacity for critical reflection and the ability to utilize feedback effectively to produce coherent and cohesive texts. Gayed et al. [15] also said that writing text skills also involve overcoming cognitive barriers, thereby enhancing overall writing performance. It is important to understand learning through analyzing the material process in forming ideational meaning in expository writing, especially problem-solution texts, to identify problems and find solutions, in addition to their writing skills becoming more honed.

Problem-solution texts as one of expository texts are written by the students to serve as valuable research data to uncover ideational meaning and objectives. According to Astuti et al. [16], an expository text examines a specific issue, presenting multiple answers or opinions, as well as offering recommendations, instigation, or invitations to the audience on a particular topic. These texts possess the distinct characteristics that define them. Liunokas [17] outlines several linguistic features of expository texts, including a focus on generic participants, the use of chronological connectors, and the passive voice use. Additionally, Gerot and Wignell [18] note that expository texts, including problem-solution text primarily utilize temporal and causal circumstances while often employing present tense forms. Expository texts are categorized into five types: descriptions, sequences, comparisons, and problem-solutions [19], [20]. The writers focus on the problem-

solution type to foster critical thinking among students, encouraging them to analyze the reasons behind an issue or problem, and to find out the solution.

The transitivity system in SFL serves as a network that originates from major clauses, including predictions [21]. Zhang [22] described transitivity as a way to illustrate how individuals express their experiences based on the realities around them and within themselves. To fully understand ideational meaning, this study thoroughly analyzes the transitivity system in problem-solutions in expository text by examining the different processes involved. The transitivity system comprises six types of processes: material, relational, verbal, mental, behavioural, and existential.

Karori et al. [23] noted that each type of process involves distinct participants. The material process refers to actions or events (processes of doing), with key participants being the actor (the one performing the action), the goal (the object affected by the action), and the goal (an entity that remains unaffected). The writers analyzed deeply the material process to examine the process of action performed by the students in their writing. In Systemic Functional Linguistics (SFL), the material process refers to the processes of doing or actions that involve physical or tangible activities. The material process is identified by looking at the verbal group that shows the process of doing something in each clause. This type of process describes events or actions in which something is being done or happens, typically involving an actor (the doer) and a goal (the recipient or entity affected by the action). Halliday and Matthiessen [11] defined material processes as processes of "doing" or "happening" that involve a change in the physical world. Arús-Hita et al. [4] further discussed the role of material processes in SFL, focusing on how these processes can be analyzed to understand the dynamics of actions and events in written texts, especially in the contexts of second language learning. They emphasize the importance of these processes in helping learners develop a better grasp of how physical actions are represented in language.

In addition to analyzing participants and processes, this study also examines the circumstances within the clauses to derive a more nuanced understanding of ideational meaning. Circumstances can be found in all types of processes and consist of eight categories: extent, which focuses on frequency, place; indicating location; time, referring to specific periods; Manner, which covers means, quality, and comparison; cause, relating to reasons and purposes; accompaniment, concerning involvement and addition; role, dealing with identity or outcomes; and considerations of problems or situations that address what and how actions are taken. Rajiha [24] described circumstances as conditions that provide information about participants and processes in relation to time, place, conditions, reasons, and comparisons. They answer questions, such as when, where, why, how, to what extent, and what role they play.

III. MATERIAL AND METHOD

Ethical approval obtained from students, who are students of one of the writers, and university official, represented by the dean of the Faculty of Language and Arts, Universitas Negeri Manado to use written data in the scientific publication of this research article where as their lecturer, the writer collects exploratory texts of the problem-solution type resulting from learning about various texts in Academic Writing course. The written attachment of this ethical approval will be attached in a separate file. This problem-solution text is the result of students' assignments collected by the writer as their lecturer and the results of their writing will be used for the writer's research. In addition, written approval is also approved by the campus represented by the Dean.

1. DATA ANALYSIS

Inter-rater reliability was obtained by analyzing 23 problem-solution texts from 23 students to see the clauses categorized in the material process so that the most ideational meaning would be obtained to see their critical tendencies in expressing problems and solutions.

This study employed both qualitative and quantitative methodologies. Qualitative methods facilitate the collection and documentation of all the necessary information to meet the objectives of the study [25]. Rahman and Razali [26] noted that a qualitative descriptive approach aimed to investigate how students develop their communication skills in language classrooms. It provides an explanation about the relationship among variables [27]. In contrast to qualitative research, Harisson et al. [28] defined quantitative research as

a systematic investigation focused on quantifying problems through the generation of numerical data that can be analyzed statistically. The writers wield qualitative data to explore the ideational meaning of the material process and quantitative data to obtain the number of participants, processes, and circumstances to explore new goals and findings.

2. DATA COLLECTION

The writing results were derived from 23 problem-solution texts produced by sixth-semester EFL students enrolled in the English Language Education Program at Universitas Negeri Manado, Indonesia. The demographics of the students researched were 23 students. This text as their assignment is part of the Academic Writing Course, during which students learn about various types of texts of expository texts but the type studied is problem-solution text. In collecting data, the writers had taken several steps to obtain sufficient and valid data for analysis. First, the writer who is also their lecturer collected the results of problem-solution texts from 23 sixth-semester students as the population in the class. The writers analyzed each clause categorized as a material process. The quantity of clauses written by students in problem-solution texts varies, but in terms of words, the writer instructed them to write at least 250 words and they were allowed to write texts of more than 250 words. Paragraphs are not limited in this expository text writing assignment. The text data results are soft copy because at that time the campus was conducted in hybrid learning. The problem-solution text result file of 23 students are attached in a separate file.

Data collection occurred in the even semester of 2023/2024, as students wrote one of the expository texts, the problem-solution type. The research methodology was structured to effectively address the research questions and fulfil the objectives of the research. This research aimed to analyze and describe the ideational meaning of expository texts. The data analysis process involves several steps. First, the writers gather student writings, specifically expository texts, in digital format. These texts must be at least 250 words long and consist of several paragraphs. The second step involved categorizing the clauses according to the transitivity system and conducting a detailed analysis. The third step focused on examining specific categories for the participants and circumstances related to the material processes. The fourth step entails a thorough analysis of ideational meaning as as the reliability of the assessment by reviewing the processes, participants, and circumstances in detail. Finally, the study presents the material process, participants, and circumstances applied by the students, revealing patterns and tendencies in how they represent their experiences through their problem-solution text writing and its impact on students' progress.

IV. RESULT AND DISCUSSION

1. RESULT

Material processes are taken from clauses in expository texts of the problem-solution type, which describes occurrences or actions where something is taking place. The material process is identified by looking at the verbal group that shows the process of doing something in each clause. The analysis of the material process is presented in each table and explained in the description. The ideational meaning of the material process in the clause can be analyzed with the supporting context of the participants (actor and goal) and circumstances. The analysis of the five data below is a representative data analysis, and the overall data appertained in the material process are displayed in the research result table, which in total shows the 102 clauses come under the material process.

Table 1. Material process with the meaning of innovation with specific participants and circumstance of manner.

| | | | | |
|--|--------------------------|-----------------------|----------------------|-----------------------|
| where the lecturer tends to explain in full English. So, what is explained is difficult for us to understand. | To solve this problem, | some lecturers | change | their way of teaching |
| | Circumstanc e: Manner | Participant: Actor | Process: Material | Participant: Goal |

In first data, to solve this problem, the clause 'some lecturers change their way of teaching' is included in the material process because the process, indicated by verbal group, shows the actions carried out by their lecturers; that is changing the teaching method, which is marked by a material process of 'change.' The participants that appear in the clause above are actors some lecturers which refers to these students' lecturers and goal their way of teaching. The actor participant indicates the entity that does something, in this case the lecturers who change their teaching methods. The participant that appears in this clause is some lecturers who refer to certain lecturers in the English Language Education Department, Universitas Negeri Manado, which indicates specific and human participants, while the goal refers to certain teaching methods used by their lecturers on their campus which means indicating specific participants even though these participants do not refer to people but to teaching methods. This is different from the opinion of Gerot and Wignell [18] who stated that participants in expository texts are generic and non-human, so there is a finding in the analysis of the clause above. The circumstance of manner 'To solve this problem' explains the method that will be used to overcome problems experienced when the lecturer explains one direction to the students in full, but the students do not understand it well.

The ideational meaning is expressed by students by the transitivity system through the material process 'change,' the participants; actor and goal 'some lecturer's and 'their way of teaching' and the circumstance of manner 'To solve this problem.' It represents the lecturer's innovation or breakthrough to change his teaching methods so that students can understand the subject matter in class well and become more active by creating discussion groups. This is supported by the next clause, that is which was previously a full lecturer explanation, becoming a group discussion.

Table 2. Material process with the meaning of innovation with specific participants and circumstance of time and matter.

| | | | | | |
|---|-------------|---------------------|-------------------|----------------------|---------------------------------------|
| In the Semantic-Pragmatic subject by Ma'am X, | after | the teaching method | was changed | to group discussion | I understood the material in the book |
| Circumstance: Waktu | Conjunction | Participant: Goal | Process: Material | Circumstance: Matter | |

In data 2, the clause 'after the teaching method was changed to group discussion' is included in the material process because the verbal group shows the actions carried out by their lecturers; that is changing the teaching methods that are marked by the material process 'was changed.' The verbal group 'was changed,' written in the passive form, showing teaching method changed. The participant that appears in the clause above is the goal 'the teaching method' which is a direct object that does the action done by the actor. The actor in the clause above is ellipsis which actually refers to their lecturer, Mrs. X's lecturer as an entity that does something, changing the teaching method. In addition, Gerot, Wignell [18] and Liunokas [17] said that participants in expository texts focus on generic participants, but what is found in the clause above is a specific participant seen from the goal 'the teaching method' done by Ma'am X so there is a new finding obtained from the analysis of the clause above. The circumstance of time 'in the semantic-pragmatic subject by Ma'am X' answers the question at what time the material process takes place.

The ideational meaning of the clause contained material process and represented through the process or verbal group was changed, goal participant, that is the teaching method and circumstance of time and matter, 'In the Semantic-Pragmatic subject by Ma'am X, and to group discussion demonstrates innovation of changes that is beneficial for students in terms of understanding lessons that are easier to comprehend. That makes relief and pleasure over the change in teaching methods that are more effective for them.

This problem-solution clauses used past tense in the process 'was changed'. This is different from the opinions of Gerot, Wignell [18], and Liunokas [17] where the tenses used in expository texts are present tense. It is because material process 'was changed' used by this student shows the learning method some time ago.

Table 3. Material process with the meaning of struggle with specific participants and circumstances of manner.

| | | | | | | |
|--------------------|------------------|----------------------|---------------------|-------------------|----------------------|--|
| I | worked | hard | to be able to speak | English | well | Yes, I managed to do it. It is because somehow, I kept feeling left behind by my friends in my organization. |
| Participant: Actor | Proses: Material | Circumstance: Manner | Proses: Material | Participant: Goal | Circumstance: Manner | |

Data 3 depicts the clause 'I worked hard to be able to speak English well' which is included as a material processes because of two processes/ verbal groups. The first one is characterized by the material process 'worked' and the second process is 'to be able to speak.' Both processes indicate the process of doing something; in this case working hard and being able to speak English. The participant is actors 'I' which refers to the student himself. There is also goal participant 'English' as direct object the thing that the actor will achieve. Gerot, Wignell [18] and Liunokas [17] said that participants in expository texts focus on generic and non-human participants, but what is found in the clause above are specific and human participants who are seen from the actors 'I,' which refers to the student when telling his experience, even though the goal participant 'English' shows generic participants as English in general. There is a new finding in the analysis of the above clause. There are two-manner circumstance that appear in the clause above, those are 'hard' and 'well' which depict the way the student works and how he can speak English.

The ideational meaning of the clause above is analyzed from the experiential meaning expressed by the student by the transitivity system through the material process 'worked' dan 'to be able to speak,' actor I, goal 'English,' and two circumstances of manner, 'hard' and 'well.' The ideational shows the struggle and success of the student in his efforts and hard work in advancing himself by working hard until he can speak English well. Again, the process worked used is past tense. This differs from the opinions of Gerot, Wignell [18] and Liunokas [17] where the tenses used in expository texts are the present tense.

Table 4. Material process with the meaning of solution and improvement with generic participants and circumstance of accompaniment.

| | | | |
|----------------------|-------------------|----------------------------|---|
| Schools and teachers | can foster | a positive reading culture | by providing a variety of interesting reading materials, implementing engaging library programs, and encouraging fun and challenging reading-based discussions and activities |
| Participant : Actor | Process: Material | Participant: Goal | Circumstance: Accompaniment |

The clause in data 4 is included as a material processes because it is characterized by the process 'can foster. The verbal group or process, can foster, shows the process of doing something, in this case fostering a positive reading culture. The participants that appear in the clause above are actor 'Schools and teachers' that refer to campus and lecturers in the context of this article, and there is also a goal 'a positive reading culture' which is a direct object, developed by the actor. Gerot, Wignell [18] and Liunokas [17] said that the participants in the problem-solution type of expository text above focus on non-human participants, but what is found in the clause above is the actor 'Schools and teachers,' one of which refers to teachers who are certainly human. There is the circumstance of accompaniment which is marked by an adverbial group 'by providing a variety of interesting reading materials, implementing engaging library programs, and encouraging fun and challenging reading-based discussions and activities' that has the meaning of telling something to others or with what else; in this case a positive reading culture can be carried out in several ways that are found in this circumstance.

The Ideational meaning is represented by experiential meaning through material process 'can foster,' actor and goal, 'Schools and teachers' and 'a positive reading culture,' and the circumstance of accompaniment 'by providing a variety of interesting reading materials, implementing engaging library programs, and encouraging fun and challenging reading-based discussions and activities.' Thus, the ideational meaning that shows solutions and improvements done by the campus and lecturers to create a positive reading culture for students which greatly helps them overcome laziness and improve their ability and desire to study on campus.

Table 5. Material process with the meaning of solution or repair with generic participant and circumstance of accompaniment.

| Friends, family, and educators can provide... | Finally, | students | should actively replace | play | with healthier activities |
|---|--------------------------------|-----------------------|----------------------------|-----------------------|--------------------------------|
| | Circumstance: Accompaniment | Participant: Actor | Process: Material | Participant : Goal | Circumstance: Accompaniment |

The clause in data 5 included as a material processes is characterized by process/ the verbal group 'should actively replace' that demonstrates the process of doing something, that is, having to actively replace the playing habits. The participant that appears in the first clause is the actor 'student's as entities that do something that must actively replace the game that shows generic participants because it refers to students in general as and the goal indicated by the noun group 'play' which is also a generic participant because it refers to games in general. Gerot, Wignell [18] and Liunokas [17] state that participants in expository texts focus on non-human participants, but what is found in the clause above is a specific and human participant that can be seen from the actor 'students' which refers to the students. New findings are obtained from the clause analysis. The circumstances that emerge are two circumstances of accompaniment 'Finally which tells something or the latest information and other accompaniment 'with healthier activities' which functions to have the meaning of telling something to others in this case with healthier activities.

The ideational meaning depicts the solution or improvement of this student as the last step to reduce addiction to playing online and offline games by replacing them with healthier activities. This also contains the meaning of this student's concern for helping, friends who are addicted to games. It is depicted that the use of past tense should actively replace used which differs from the opinions of Gerot, Wignell [18] and Liunokas (2020), where the tense used in this expository text is the present tense.

2. DISCUSSION

From 207 clauses written by students, there are 102 clauses using material processes. The students represent their experiences of the problems and solutions faced, both on campus and in their surroundings.

Table 1. Description of the grouping of participants, processes, and circumstances.

| No | Participants | | Material Process | Circumstances | |
|----|-----------------------|-----------------------|---------------------|-----------------------------------|---------------------------|
| | Actor | Goal | | | Types of Circumstances |
| 1. | To solve this problem | their way of teaching | change | To solve this problem | cause |
| 2. | the group discussions | - | makes | for me to understand the material | accompaniment |

| | | | | | |
|-----|---|----------------------------|--------------------------------|---|---------------|
| 3. | - | after the teaching method | was changed | to group discussion | accompaniment |
| 4. | this way | the students | can help | - | |
| 5. | This often | students task's | happens | -- | |
| 6. | - | requirements | do not fulfil | properly | Manner |
| 7. | Schools and teachers | a positive reading culture | can foster | by providing a variety of interesting reading materials, implementing engaging library programs, and encouraging fun and challenging reading-based | Manner |
| 8. | Teacher | students | doesn't even want to socialize | in learning material | |
| 9. | - | - | doesn't even want to socialize | - | |
| 10. | - | ourselves | must improve | - | |
| 11. | you | mistakes | make | in the learning process | matter |
| 12. | Continuing to focus on self-improvement and having motivation | us | will push | to be better than before | cause |
| 13. | I | myself | also continued to develop | - | |
| 14. | I | - | worked | hard to be able to speak English well | cause |
| 15. | I | the things | can finish | | |
| 16. | he | the rest | can be spent | of the time on self-growth as diseases attacking students because of fatigue in doing campus assignments among students, namely depression, anxiety disorders, and insomnia | matter |
| 17. | Some of the characteristics | - | began to arise | | cause |
| 18. | Several mental health disorders | - | often occur | | accompaniment |
| 19. | This habit | - | must be changed | - | |
| 20. | a healthy lifestyle | - | apply | by paying attention to regular diet and sleeping | manner |
| 21. | - | vitamins | exercise and take | regularly | manner |
| 22. | Insomnia | my sleep patterns | does not only disrupt | - | |
| 23. | it | my productivity and | affects | - | |

| | | | | | | |
|-----|--|--|--------------------------------------|---|---------------|--|
| 24. | Lack of sleeping | overall health physical and mental fatigue | causes | - | | |
| 25. | Creating open lines of communication and setting boundaries around playtime, | the recovery process. | can help | - | | |
| 26. | students | play | should actively replace | with healthier activities | manner | |
| 27. | Developing effective time management skills and creating a structured routine, | chances of excessive gambling | can also reduce | - | | |
| 28. | students | addiction and their lives. | can successfully overcome and regain | By combining self-awareness, support systems, and proactive measures, | manner | |
| 29. | Learning effectiveness | procrastination | is severely hampered by | is severely hampered by | manner | |
| 30. | Overwhelm | , work | is reduced by breaking | into manageable chunks | accompaniment | |
| 31. | The efficacy of learning | - | is further increased by | by considering the negative effects of procrastination and by using efficient study methods | accompaniment | |
| 32. | Procrastination | - | may be overcome | with time, self-compassion, and steady use of these techniques | accompaniment | |
| 33. | the effects of a remedial program | students | help | with various procrastination tendencies | accompaniment | |
| 34. | Some student | the time to do assignments | often delay | to do assignments | matter | |
| 35. | - | it | do | immediately after finishing the class | time | |
| 36. | it | assignment from piling up the D-1 collection assignments | will prevent | from piling up | matter | |
| 37. | most of them | | work on | - | | |

| | | | | | |
|-----|------------------------|--|----------------------|--|-------------------|
| 38. | laziness | - | starts creeping up | on you | accompani ment |
| 39. | - | it | don't let it drag on | - | |
| 40. | your parents | proud | to make | - | |
| 41. | The solution | yourself | is forcing | - | |
| 42. | - | self-rewards | create | to increase your excitement | cause |
| 43. | - | your cell phone | get rid of | first while doing your assignments to complete your tasks quickly including electronic devices, social media, hunger and thirst, external noise, and so on | time |
| 44. | Distractions | many forms | come in | at a faster pace | accompani ment |
| 45. | - | - | learn | | manner |
| 46. | - | their academic and personal goals learning opportunities, poor academic performance, disruption of learning environments | achieve | - | |
| 47. | Lack of time in class, | technology alarms, navigation apps | may lead to miss | - | |
| 48. | - | technology | use | to save time | cause |
| 49. | technology | the lesson | Use to set and use | - | |
| 50. | the teacher | the student | should not stop | - | |
| 51. | he | - | must go to | to find out why he is late from the beginning of semester 1 when entering college until now, semester 6 | accompaniment |
| 52. | I | - | have survived | | time |

| | | | | | |
|-----|--|--|----------------------|---|---------------|
| 53. | I | every assignment an hour before the assignment submission deadline | almost did | To be honest, in some of the courses; an hour before the assignment submission deadline | time |
| 54. | I | games | played | - | |
| 55. | I | - | didn't eat | enough | manner |
| 56. | I | it | had to stop | - | |
| 57. | the assignment apps making you | - | be submitted | before deadline | time |
| 58. | lazy to move 24 hours | | don't download | - | |
| 59. | they | - | have piled up | - | |
| 60. | These things | me | taught | how to handle my problems in a more holistic way | manner, cause |
| 61. | I | time | started allocating | well | manner |
| 62. | the schedule for assignments | - | was also established | - | |
| 63. | I | an atmosphere change | made, change | - | |
| 64. | I | a favourite song | play | to ease my laziness while working on the backlog of tasks | cause |
| 65. | Extortion practices | access | can hinder | to education for students | accompaniment |
| 66. | - | 0, education | provide | to all campus members about the negative impacts and dangers of extortion | matter |
| 67. | Adopting a legal payment system and implementing strong internal and external controls | extortion | can prevent | - | |

| | | | | | |
|-----|---|---------------------------------------|--------------------------------------|---|----------------|
| 68. | Collaboration with external parties such as government institutions, NGOs and the community | - | also needs to be carried out | to improve supervision and eradicate extortion | cause |
| 69. | - | confirmati on | didn't provide | - | |
| 70. | you | - | can try to continue to chat | with the lecturer, at least once every two days | cause |
| 72. | Friends, family, and educators | the guidance and encouragement needed | can provide | to get out of addiction | cause |
| 73. | Creating open lines of communication and setting boundaries around playtime | - | can help | with the recovery process | accompani ment |
| 74. | students | play | should actively replace | Finally, with healthier activities | accompani ment |
| 75. | Developing effective time management skills and creating a structured routine | the chances of excessive gambling | can also reduce | - | manner |
| 76. | students | addiction, control of their lives | can successfully overcome and regain | By combining self-awareness, support systems, and proactive measures, | Manner |
| 77. | I | the choice | made | to fix something first | cause |
| 78. | - | online games | get away from | - | |
| 79. | - | all your homework | sit and finish | in the school library | place |
| 80. | I | that fear | have to be able to fight | -- | |
| 81. | - | a room/area | designate | for sleeping and no other activities | cause |

| | | | | | |
|-----|---|--|--------------------------|---|----------------|
| 82. | You | some research | may need to do s | to find the sound that is right for you | cause |
| 83. | - | - | Get ready to sleep. | - | |
| 84. | - | any to-do list app | Install | - | |
| 85. | Students who are lazy to do their assignments | their assignment s | always pile on | in 1 week | time |
| 86. | they | them (the assignment s) | will let pile up | | |
| 87. | they | them, the day | will do | and later, before they are collected | time |
| 88. | - | it (the task) | do | immediately | time |
| 89. | your grade,0 | | may drop | | |
| 90. | it (avoiding tasks | your grade | lowers | significantly | manner |
| 91. | - | personal health | can significantly affect | significantly | manner |
| 92. | - | realistic expectatio ns | Set | | |
| 93. | - | challenges | face | along the way | accompani ment |
| 94. | realistic goals | | Set | based on my abilities | accompani ment |
| 95. | - | personal growth | and prioritize | rather than just focus on grades | accompani ment |
| 96. | - | tasks | Prioritize | based on importance and urgency | accompani ment |
| 97. | Global warming | many serious alterations | can result | to the environment, eventually impacting human health | accompani ment |
| 98. | It | a rise in sea level, leading to the loss of coastal land | can also cause | leading to the loss of coastal land | accompani ment |

| | | | | | |
|------|---|--------------------------|-----------|---------------------|-------------------|
| 99. | - | - | invest | in renewable energy | accompani ment |
| 100. | - | sustainable transport | switch to | | |
| 101. | - | the oceans | protect | | |
| 102. | - | plastic | reduce | | |

Source: Authors' own work.

Based on table 1, the description of data research demonstrates the problems and solutions in clauses included as material process.

Table 2. Ideational meaning.

| No | Ideational Meaning | | | |
|-----|--|----------|---|-----|
| | Problem | Solution | | |
| 1. | Disinterest/ Indifference | 3 | Innovation/ Breakthrough/ Change | 4 |
| 2. | Defection/ negligence | 2 | Hope | 1 |
| 3. | Abandonment | 1 | Struggle/ Persistence | 5 |
| 4. | Causes of Bad Conditions/Habits | 2 | Pride | 1 |
| 5. | Laziness | 1 | Goal Setting and Achievement/ Prioritization | 4 |
| 6. | Fatigue | 1 | Implementation of Obligations | 1 |
| 7. | Disturbances/ Obstacles/ Negative Impacts | 7 | Award | 1 |
| 8. | Inhibitors/ Barriers | 2 | Changes in a positive direction | 1 |
| 9. | Bad habits | 2 | Convenience/Improvement | 25 |
| 10. | Lost | 1 | Protection | 1 |
| 11. | Error/Negligence | 1 | Search/Research | 1 |
| 12. | Accumulation | 2 | (Good) Arrangement/ Determination | 2 |
| 13. | Impairment in Score | 2 | Completion/Settlement | 1 |
| 14. | Delay | 2 | Termination | 1 |
| 15. | Inability | 1 | Increase/ Raise | 2 |
| 16. | | | Prevention/Prohibition | 5 |
| 17. | | | Gambling/Waste Reduction | 2 |
| 18. | | | Effort/ Action/ Learning/ Experiment | 5 |
| 19. | | | Courage | 1 |
| 20. | | | Help | 3 |
| 21. | | | Investment | 1 |
| 22. | | | Appeal/ Motivation/ Teaching/ Encouragement | 9 |
| | SUM | 37 | | 82 |
| | PERCENTAGES | 31% | | 69% |

Source: Authors' own work.

Based on table 2, the results of the material process analysis above depict that the students in Indonesia, represented the process of doing or activity by openly and clearly showing the problems faced on campus

and in the environment where they socialize and study. Surprisingly, they actively showed the process of doing or an activity in their writings on the solutions they put forward. Therefore, their activeness is not only seen from their enthusiasm in writing English much more fluently but also the actions they put forward are the result of their critical thinking and solutions that are more than 2x the problems they face. Of the 37 (31%) problems that were written down, students offered more solution 82 (69%), demonstrating their proactive approach to problem-solving. They propose those solutions openly and actively represented in ideational meaning, that is *convenience or improvement*, which were written by students in response to the problems they faced, totalling 25 clauses. The participants revealed by the students show varied actors and goals.

Table 3. Participants features.

| Participants | | | |
|--------------|---------|----------|---------|
| Actor | | Goal | |
| Specific | Generic | Specific | Generic |
| 36 | 34 | 36 | 51 |
| 51.4% | 48.6% | 41.3% | 58.7% |

| Participants | |
|--------------|----------|
| Generic | Specific |
| 85 (54%) | 72 (46%) |

Source: Authors' own work.

Data in table 3 presents the participants featured used in this problem-solution text show the highest use of generic participants is 85 (54%) while the specific participants used were 72 (46%). This shows that there is a generalization of the mention of participants, especially in the goal, which is the target that is the point of discussion in their writing of this problem-solution type expository text. This data analysis data proves Halliday's opinion that it is true that the participants used in this expository text are generic participants, but it cannot be denied that there are also quite a lot of specific participants besides generic participants. Therefore, the writers state that expository texts do not only use generic participants but also specific participants. The development of knowledge of systemic functional linguistics can be seen in these new findings. In addition, Gerot and Wignell (1994) stated that participants in expository texts are non-human. The writers found in this analysis that many human participants were presented with this problem-solution expository text, so there are new findings to add to and enrich research on this expository text.

Table 4. Frequency of circumstances.

| Circumstances | | | | | | |
|---------------|-------|--------|-------|---------------|--------|------|
| Time | Place | Manner | Cause | Accompaniment | Matter | Role |
| 10 | 3 | 13 | 19 | 17 | 5 | 0 |
| 15% | 4.5% | 19.4% | 28.3% | 25.3% | 7.4% | 0 |

Source: Authors' own work.

Table 9 states that the most widely used circumstance in problem-solution expository text is cause and accompaniment which are 28%, and 25% respectively, and the least used circumstance is place, 4.5%; in addition, role circumstance is not used at all in 102 clauses.

The results of this study show new findings because, according to Wignell and Gerot, explanation or expository texts have significant lexicogrammatical features. Based on the data above, it is true that the circumstance used is cause, but time circumstance does not appear as much as accompaniment circumstances, so the writers conclude based on the results of data analysis, in which the most circumstances that appears is cause, 28.3%, and accompaniment, 25.3%, which is slightly different from the opinion of Gerot and Wignell, who said that the most dominant circumstance in expository text is time and cause.

V. CONCLUSION

Based on the primary theories used to analyze the data, the findings address the research questions. The results revealed that the material processes, with participants and circumstance features, identified in problem-solution expository text clauses, convey different ideational meanings. This ideational meaning depicts processes representing problems, such as disinterest, indifference, defection, negligence, abandonment, causes of bad habits, laziness, fatigue, disturbances, obstacles, negative impacts, inhibitors, barriers, bad habits, loss, error, negligence, impairment in score, delay, inability, and solutions, such as innovation, breakthrough, hope, struggle, persistence, pride, goal setting and achievement, prioritization, implementation of obligations, award, changes in a positive direction, convenience, improvement, protection, research, (good) arrangement or determination, completion, termination, increase, prevention or prohibition, gambling, waste reduction, effort, learning, experiment, courage, help, investment, and motivation. Students offered additional solutions amounting to 82 (69%), addressing a total of 37 (31%) problems documented, which indicates their proactive engagement in problem-solving tasks. The participants, labelled as actors and goals, used by students are diverse, but the most frequently used participant is 'I,' which refers to most of these students and the problems and solutions they face and implement, such as the group discussions, schools and teachers, students, continuing to focus on self-improvement, a healthy lifestyle, Insomnia, creating open lines of communication and setting boundaries around playtime, developing effective time management skills, learning effectiveness, overwhelming, procrastination, lack of time in class, laziness, your parents, the solution, distractions, technology, the assignment, extortion practices, friends, family, and educator, your grade, avoiding tasks, global warming, etc. However, overall, the participants shown were generic participants, as Liunokas [17] said. The variety of circumstances mentioned in the expository text type shows dominance by the cause and accompaniment. This result differs from the theory put forward by Gerot and Wignell [18] that such texts mainly use time and cause. Therefore, difference exist in the results of this research. The findings of this study show that students' expository texts include not only generic, but also specific participants, challenging the views of Liunokas, Wignell and Gerot. In addition, past tense forms indicate that expository texts are not limited to the present tense. Unlike Liunokas' claims, this study observed that the processes tend to use active rather than passive forms.

This research strongly supports the use of a genre-based learning model, which significantly influences the development of students' ideas and fosters their enthusiasm. The number of words and the depth of content that reflects the intended meaning and purpose of problem-solution texts which enable students to demonstrate material processes that express their experiences both on and off-campus, with a diverse range of ideational meanings. Using systemic functional linguistics for analysis facilitates a deeper understanding of the data, particularly material processes, which reveal a surprising range of ideational meanings, uncovering hidden layers beyond the written clauses. New findings emerged, challenging existing theories, such as the finding that problem-solution text as one of expository texts may include human-specific participants and past tense forms, contrary to previous assumptions of non-human, generic participants, and present tense use.

This suggests that the theory should be expanded to include these variations in language and grammar when teaching genre-based expository writing. The findings affirm that EFL education for students in Indonesia is highly effective, as students' English fluency improves, and their ability to convey complex and nuanced meanings becomes more sophisticated because of their engagement with the transitivity system.

The specific strategy in the class suggested based on the researcher's findings is to encourage each individual student to express ideas through expository text writing so that informative and solution-oriented ideational meaning is obtained so that not only is their English writing ability increasingly honed, but their freedom to express ideas, opinions, problems and critically write solutions which can be realized in writing expository texts. The writers suggest that subsequent research can discuss other types of expository texts such as cause and effect, sequence, compare/contrast, or description as an effective way to stimulate students' ideas in EFL writing and convey ideational meaning as useful ideas.

Funding Statement

This research was funded by Indonesian Education Scholarship (BPI), Center for Higher Education Funding and Assessment (PPAPT), and Indonesian Endowment Fund for Education (LPDP), grant number 202209091257.

Authors Contributions

Veronika Listi Ferdini Damopolii makes substantial contributions to the idea, data collection and analysis, Eva Tuckyta Sari Sujatna contributes data interpretation and final approval or version to be submitted and published, Dadang Suganda contributes research method and is responsible for all aspects of the article and research in ensuring that questions regarding the accuracy or integrity of any part of the work are appropriately investigated and resolved, and Rosaria Mita Amalia contributes to drafting the paper or revising it for important intellectual content. All authors have read and agreed to the published version of the manuscript. All authors made an equal contribution to the development and planning of the study.

Conflict of Interests

The authors have no potential conflicts of interest or other such divergences linked with this research study.

Data Availability Statement

Data are available from the authors upon request.

Acknowledgments

This work is supported by Indonesian Education Scholarship (BPI), Center for Higher Education Funding and Assessment (PPAPT), and Indonesian Endowment Fund for Education (LPDP), Universitas Padjadjaran, and Universitas Negeri Manado. We would like to acknowledge all related institutions for facilitating this research.

REFERENCES

1. Alhassan, A. (2019). Investigating business EFL postgraduate student writing in a UK university: A qualitative study. *Cogent Education*, 6(1).
2. Ag-Ahmad, N., Mohamed, A. T. F. S., & Bakar, E. W. (2024). The jewels in English language teaching: Attributes of quality English language teachers in second language setting. *Pertanika Journal of Social Sciences and Humanities*, 32(1), 17–36.
3. David, J. (2023). Czech place names and their exonyms in parallel corpus - Between preserving the original form and adaptation. *Onomastica*, 67, 205–220.
4. Arús-Hita, J., Matthiessen, C. M. I. M., & Xuan, W. W. (2024). Learning how to mean in a second language: Uses of system networks in L2 education. *Journal of World Languages*, 10(1), 9–50.
5. Maiorani, A., & Liu, C. (2024). The Functional Grammar of Dance applied to ELAN annotation: Meaning beyond the naked eye. *Journal of World Languages*, 10(1), 221–249.
6. Merris, D., & Sari, M. (2019). *An overview of genre based approach in EFL writing class*.
7. Malkawi, R. J., & Fareh, S. (2023). The role of language in advocacy: An SFL analysis of Hanan Ashrawi's speech on Palestinian rights. *Cogent Arts & Humanities*, 10(2).
8. Sugiarto, B. R. (2024). Unlocking multilingual potential: Systemic Functional Linguistics strategies for effective descriptive writing instruction. *SAWERIGADING*, 30(2), 328–336.
9. Jati, A., & Somphithak, M. (2021). Functional analysis of narrative texts in elementary school textbook 'Fly with English.' *Elementary Education Journal*, 1(1), 19–28.
10. Hidayati, S. N. (2019). *Untangling students' problems in writing argumentative: SFL perspective and fishbone strategy*.
11. Matthiessen, C. M. I. M., & Halliday, M. (2009). *Systemic functional grammar: A first step into the theory*.
12. Alaei, M., & Ahangari, S. (2016). A study of ideational metafunction in Joseph Conrad's 'Heart of Darkness': A critical discourse analysis. *English Language Teaching*, 9(4), 203.
13. Eggins, S. (2004). *Introduction to systemic functional linguistics*. A&C Black.
14. Huang, J., & Tan, M. (2023). *The role of ChatGPT in scientific communication: Writing better scientific review articles*.

15. Gayed, J. M., Carlon, M. K. J., & Cross, J. S. (2022). Impact on second language writing via an intelligent writing assistant and metacognitive training. *IEEE Frontiers in Education Conference (FIE)*, Uppsala, Sweden, 1–9.
16. Astuti, W. T., Sumarti, S., Sunarti, I., Samhati, S., & Rusminto, N. E. (2023). Development of LKPD writing exposition text based on the discovery learning model for class X high school students. *International Journal of Multicultural and Multireligious Understanding*, 10(5), 315.
17. Liunokas, Y. (2020). The ability of Indonesian EFL university students in writing an explanation text. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 8(2), 611–622.
18. Gerot, L., & Wignell, P. (1994). *Making sense of functional grammar*.
19. Meyer, B. J. F., & Ray, M. N. (2011). *Structure strategy interventions: Increasing reading comprehension of expository text*.
20. Rochmah, N., & Wahyuningsih, T. (2022). *The correlation between content schemata and reading comprehension on expository text of the second year students at MAN 2 Jombang*.
21. Halliday, M. A. K., & Matthiessen, C. M. I. M. (2004). *An introduction to functional grammar*.
22. Zhang, Y. (2017). Transitivity analysis of Hillary Clinton's and Donald Trump's first television debate. *International Journal of Applied Linguistics and English Literature*, 6(7), 65.
23. Karori, I. B., Akbar, N., Majeed, M., & Imran, M. (2020). Transitivity analysis of Kate Chopin's 'The Story of an Hour.' *Journal of Advanced Research in Dynamical and Control Systems*, 12(7), 2546–2557.
24. Rajiha, N. (2023). Surah Al Mujadalah translation and discourse learning in higher education: A systemic functional perspective. *International Journal of English Learning and Applied Linguistics (IJELAL)*, 3(2), 95–100.
25. Alezender, S., & Karimon, J. (2024). Reinterpretation of Malay folktales in the animated film Upin & Ipin: Keris Siamang Tunggal (2019). *Pertanika Journal of Social Sciences and Humanities*, 32(2), 703–719.
26. Rahman, S. N. A., & Razali, A. B. (2024). Adapting to change: Facing the challenges in developing ESL students' communicative competence online. *Pertanika Journal of Social Sciences and Humanities*, 32(1), 1–16.
27. Wati, S. (n.d.). *Analyzing language attitude of Javanese and Sundanese urban community on English language pedagogy, in Indonesia*.
28. Harrison, R. L., Reilly, T. M., & Creswell, J. W. (2020). Methodological rigor in mixed methods: An application in management studies. *Journal of Mixed Methods Research*, 14(4), 473–495.