HETEROGLOSS CONTRACT ENGAGEMENT IN THE APPRAISAL SYSTEM AND SCAFFOLDING IN KNOWLEDGE CONSTRUCTION

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ABSTRACT

This study investigates heterogloss contract engagement features in classroom interactions with three objectives: to identify their forms and distributions, to analyze their role in teachers' scaffolding of students' knowledge construction, and to examine the dialogic roles of teachers and students in positioning themselves toward alternative meanings. This study is significant as no prior research has examined contract engagement through the appraisal system and scaffolding theories. A qualitative case study was conducted with one teacher and 25 students at a bilingual elementary school in West Bandung, Indonesia. Data from classroom observations and video recordings were transcribed and analyzed using the Engagement domain of the Appraisal System. The findings show, first, that teachers employed more contractive features than students, with both groups frequently using proclaim-pronounce and disclaim-deny. Second, teachers' contract engagement served as scaffolding strategies, particularly through rhetorical and leading questions that guided students' knowledge construction. Third, teachers and students displayed distinct dialogic roles: teachers acted as epistemic facilitators, while students, though less frequent, engaged actively through affirm, counter, and concede in negotiating alternative meanings. This study highlights contract engagement as a key linguistic mechanism in supporting dialogic knowledge construction.

Keywords: Appraisal System**,** Heterogloss Contract Engagement, Scaffolding**,** Knowledge Construction

A. INTRODUCTION

In contemporary education, knowledge construction is no longer viewed as a one-sided process from teacher to student, but as a social interaction involving dialogue, negotiation of meaning, and active involvement of both parties (Lee et al., 2008 ; Christie & Martin, 2009 ; Yingwen & Jian, 2016) . In this context, the Appraisal theory developed by Martin and White (2005) becomes a relevant analytical framework for examining how attitudes, evaluations, and engagement are manifested through language in classroom discourse (Wei et al., 2015 ; Khan et al., 2022) . One important subcomponent of the Appraisal system is Engagement, which refers to how speakers organize their dialogical positions towards

alternative or other points of view (Baesa-Alfelor & Ocampo, 2023 ; Hasibuan et al., 2024 ; Martin, 2008) . In particular, Contract Engagement, which includes disclaim and proclaim, is an important linguistic mechanism in managing dialogic space in teacher-student interactions (Hood, 2012 ; Zhang & Cheung, 2018 ; Roseman & Smith, 2023 ; Martin, 2008).

Previous research by Christie & Martin (2009) showed that evaluative language is crucial in constructing scientific knowledge in the classroom. However, their focus was more on genre and discourse structure than on dialogic mechanisms such as engagement. Research by Moyano (2019) also discussed the use of appraisal in science learning, but did not explicitly examine the role of contractual engagement in teacher-student relationships. In Indonesia, appraisal studies are still limited and predominantly focused on written texts or media discourse, so research based on oral interactions in the classroom that is more contextual and focused on learning dynamics is needed (Zhao & Li, 2022) . Thus, this study attempts to fill the gap in pedagogical linguistic studies by focusing on contract engagement as a mechanism for limiting dialogical space which, paradoxically, can also be a way to activate scaffolding in meaningful learning. Conceptually, this study refers to the Appraisal System theory by Martin & White (2005), specifically the Engagement domain which includes monogloss and heterogloss, with subdivisions of contract and expand. Contract consists of *disclaim* (deny and counter) and proclaim (concur, pronounce, endorse), which function to limit alternative positions in discourse. In the sociocultural approach, scaffolding is seen as a temporary teacher intervention to support students' cognitive development, which is greatly influenced by how language is used in interaction. (Piaget, 1966; Vygotsky, 1986; Bruner, 1999) .

1. The Appraisal System

The Appraisal System is part of the Systemic Functional Linguistics (SFL) theory developed by (Roseman & Smith, 2023 ; Martin, 2008 ; Halliday, 2014) . This system is designed to analyze the expression of attitudes, judgments, and evaluations in discourse, as well as how speakers position themselves towards opinions, ideas, and values in interpersonal communication (Konold et al., 2004 ; Taverniers, 2008 ; İlhan & Erbaş, 2016) . The Appraisal System consists of three main domains: Attitude (emotional, ethical, and aesthetic attitudes), Engagement (how speakers open or close space to other opinions), and Graduation (strengthening or weakening the intensity of attitudes) (Eggins, 2004 ; Martin, 2008) . In the context of learning interactions, the Appraisal System allows researchers to observe how teachers and students convey support, rejection, reinforcement of meaning, and evaluation in the process of negotiating knowledge (Wei et al., 2015) . This system is also relevant to identifying how language is used to form epistemic positions and control over classroom discourse (Vail Lowery, 2002 ; Martin, 2008) .

2. Heterogloss Contract Engagement

The Engagement domain in the Appraisal system highlights the extent to which speakers position themselves in relation to the alternative meanings available in communication. Engagement is divided into two: monogloss (statements that do not open up alternative space) and heterogloss (statements that consider or close down the possibility of alternative meanings) (Martin & White, 2005). Within heterogloss, there are two poles: contract (closing the dialogic space) and expand (opening the dialogic space) (Hemmati et al., 2023). Heterogloss contract engagement refers to a linguistic strategy to narrow the space of

possible meanings by affirming (proclaim) or denying (disclaim) a proposition. Disclaim consists of deny (direct denial) and counter (contraposition to expectations). Proclaim includes concur (affirmation), endorse (support for external authority), and pronounce (personal affirmation) (Ober et al., 2023 ; Hasibuan et al., 2024 ; Ma & Liu, 2024 ; Martin & White, 2005 ; Guo & Xu, 2020) . The use of contract engagement in classroom discourse shows how teachers manage dialogue, affirm concepts, and correct misconceptions, while students can use it to negotiate meaning or assert their epistemic positions (Hemmati et al., 2023; Alshammari, 2025).

3. Scaffolding

Scaffolding is a pedagogical concept that describes the temporary support provided by teachers to students to achieve competencies that are not yet able to be achieved independently (Bruner, 1999; Ghadiri et al., 2024) . This concept is rooted in the Zone of Proximal Development (ZPD) theory by (Vygotsky, 1986)where social interaction, especially through language, is the main foundation of cognitive development. In learning practice, scaffolding is realized through guiding questions, clarification, conceptual models, and corrective responses that are temporary and tailored to student needs (Jin et al., 2024 ; Cahyono & Pribady, 2020; Gunawan & Wirza, 2025) . Scaffolding is contingent, systematic, and withdrawn gradually when students begin activities independently (Wilson & Devereux, 2014). Linguistic features in contract engagement such as leading questions, pronouncements, and justifications function as a form of verbal scaffolding that guides students in building understanding gradually (Li et al., 2019; Acquaro, 2020) .

4. Knowledge Construction

Knowledge construction refers to an active process in which learners construct new understandings through social interactions and cognitive activities (Vygotsky, 1986 ; Bruner, 1999) . Furthermore, knowledge is not transferred directly from teacher to student, but rather constructed through dialogue and negotiation of meaning within a social and cultural context (Yohanes, 2010 ; Kubálková et al., 2015; Muzakki, 2021) . Language not only reflects knowledge but also creates it (Moyano, 2019) . Therefore, linguistic features used in classroom interactions, including contract engagement, play a crucial role in regulating interpersonal relationships and shaping mutually agreed-upon conceptual structures (Arvaja et al., 2007; Lam, 2015) . When teachers use contractive linguistic strategies to affirm, deny, or guide students' responses, they are not only transferring information but also constructing knowledge collaboratively. Students who begin to utilize these features also demonstrate developing epistemic positions and active participation in the learning community (Griffes & Reynolds, 2024; Christie & Martin, 2009).

However, studies on how Contract Engagement is strategically articulated in the context of elementary learning, especially in relation to scaffolding strategies to build student knowledge, have not been discussed in depth (Cahyono & Pribady, 2020; Mulia et al., 2022; Ma & Liu, 2024) . Most previous studies have focused more on the Attitude aspect of the Appraisal system or only discussed Engagement in general without distinguishing in detail the dialogic functions of contract versus expand (Eggins, 2004; Hood, 2012) . This creates a gap in research, especially in the context of bilingual or multilingual learning at the elementary school level, where the dynamics of verbal interaction are more complex due to students' language limitations and teachers' efforts to adjust linguistic input to still be able to build conceptual understanding (Bums & Knox, 2005; Davidse & Simon-Vandenbergen, 2008; Jupri, 2019) .

This research is important because understanding heterogloss contract engagement not only contributes to the discourse of systemic-functional linguistics, but also to more reflective pedagogical practices (Schulze, 2015; Schwarz & Hamman-Ortiz, 2020). By examining how teachers and students use contractive forms such as *denial* ("no, that's not it") or *counter-expectancy* ("quite the opposite"), we can identify linguistic strategies that support or hinder *dialogic space* in the learning process (Bums & Knox, 2005; Butler, 2013; Moore et al., 2018) . This study aims to show how teachers' verbal interventions can expand students' zone of proximal development functionally and dialogically (Wells, 2002; Fitrianie et al., 2006; Su & Wang, 2010) .

This study addresses three main research questions: (1) What forms and distributions of heterogloss contract engagement features are realized by teachers and students in fifth grade classroom interactions? (2) How do teachers' uses of contract engagement features function as scaffolding strategies in supporting students' knowledge construction in bilingual classes? and (3) What differences exist in the dialogic roles of teachers and students when employing contract engagement to affirm or reject alternative meanings in classroom discourse? Correspondingly, the objectives of this study are to identify and describe the forms and distributions of contract engagement features, to analyze the pedagogical role of teachers' contract engagement in scaffolding students' knowledge construction, and to examine the distinct dialogic roles of teachers and students in regulating positions toward alternative meanings during classroom interaction. This research is expected to provide theoretical and practical benefits. Theoretically, this research contributes to the development of appraisal analysis, particularly in enriching the understanding of *engagement systems* in the context of elementary education. Practically, the results of this study can serve as a basis for reflection for teachers in developing communication strategies that are not only authoritative but also dialogic, thus enabling meaningful, collaborative learning.

B. METHOD

This study uses a qualitative method with a case study design, because it aims to identify contract engagement features, analyze their pedagogical role in scaffolding knowledge, and examine teachers' and students' dialogic roles in managing meanings during interaction (Saldaña, 2018). The participants of this study were 25 students and a teacher at fifth grade an elementary school in West Bandung, West Java, Indonesia, which implemented a bilingual approach to science instruction. The primary focus of the study was on verbal interactions that occurred during teaching and learning activities, which served as the primary data for analysis. The main instruments employed for data collection was the direct observation of the learning process via video recording, aimed at capturing genuine conversations between teachers and students. This approach is effective because naturalistic observation enables researchers to document language use in its authentic context without interference from the researcher (Creswell, 2014). Observations took place over multiple class sessions to guarantee the richness and variety of the data, as extended engagement enhances the credibility of qualitative data and offers a more comprehensive view of interaction patterns (Lincoln & Guba, 2019). Subsequently, the researcher transcribed the recorded data verbatim in both Indonesian and English, paying close attention to linguistic elements such as intonation, emphasis, and pertinent speech structures. This meticulous transcription is crucial for discourse analysis, facilitating the examination of nuanced aspects of meaning-making (Martin & White, 2005).

Next, the researcher conducted mapping and codification of linguistic features using the Appraisal theory analysis tool developed by Martin and White (2005) as a basis for updating the categorization, especially in the Engagement system . Codification focused on identifying and categorizing forms of contract engagement, such as disclaim: deny and counter, and proclaim which includes endorse, pronounce, and concur. This process includes separating data based on the role of the speaker (teacher and student), as well as language classification (Indonesian or English). For data analysis, the researchers applied Appraisal system to describe how engagement features play a role in managing dialogic space and how they support or hinder scaffolding strategies in learning. The analysis was conducted through triangulation of transcript data, video recordings, and field notes to ensure the validity and reliability of the findings (Creswell, 2002). Through this procedure, the research is expected to be able to provide an in-depth description of the realization of contract engagement in learning practices in elementary schools, as well as its contribution to the development of knowledge through collaborative and reflective linguistic interactions (Martin & White, 2005).

C. FINDINGS AND DISCUSSION

Before the researcher conducted data analysis, linguistic data mapping was carried out first by recapitulating and mapping the linguistic distribution realized in the context of classroom interactions between teachers and students. The following is a recap of the distribution of Appraisal heterogloss contracts in classroom interactions that occur between teachers and students in the construction of knowledge.

Table 1. Summary of Heterogloss Contract Appraisal Distribution in Class Interactions

No	Heterogloss Contract			Knowledge Construction			
				Teacher	%	Students	%
1	Disclaim		Deny	27	19.0%	13	25.5%
			Counter	12	8.5%	7	13.7%
2	Proclaim	Concur	Rhetorical Question	8	5.6%	0	0.0%
			Leading Question	13	9.2%	0	0.0%
			Affirm	17	12.0%	10	19.6%
			Concede	7	4.9%	5	9.8%
		Endorse		14	9.9%	1	2.0%
		Reinforce	Justification	20	14.1%	4	7.8%
			Pronounce	23	16.2%	11	21.6%
	Sum Total			141	100%	51	100%

Based on the data in the table regarding the distribution of features heterogloss contract engagement in interactions between teachers and students in fifth grade of elementary school. In response to the first research question, the following section presents.

1. The Form and Distribution of Heterogloss Contract Engagement Features in Teacher-Student Interactions

The results of the analysis of the interactions for the first research question of fifth -grade elementary school students show that teachers and students realize various forms of contract engagement included in the Appraisal system, especially in the heterogloss category. This distribution is classified into two main types, namely Disclaim (which includes Deny and Counter) and Proclaim (which includes Concur, Endorse, and Reinforce), as shown in Table 1. Table 1. Shows that teachers used a total of 141 contractive features while students used 51 features. This indicates the dominant role of teachers in managing dialogic positions during the knowledge construction process in the classroom. This pattern corresponds with the perspective of Martin and White (2005) that contractive engagement resources, including deny and pronounce, enable speakers to eliminate alternative viewpoints and assert dominance over meaning. The increased prevalence among educators illustrates their institutional function as epistemic managers who support students' comprehension by deliberately regulating the dialogic environment.

Disclaim

In the disclaim category, teachers used Deny most frequently (27 times; 19%), followed by Counter (12 times; 8.5 %). Deny was used to reject students' incorrect statements or provide clarification regarding misunderstandings. Students were also quite active in using deny (13 times; 25.5 %) and counter (7 times; 13.7%), which indicates that they began to actively correct information and express learning experiences that contradicted their expectations. As noted by Martin and White (2005), the regular employment of the terms deny and counter by both educators and learners illustrates the dialogic contraction function inherent in the disclaim category. In this context, teachers provide authoritative clarification while students start to adopt an evaluative stance by questioning or rectifying meanings within classroom discussions.

Proclaim: Concur

In the concur feature, the teacher showed absolute dominance in the use of Rhetorical Questions (8 times; 5.6 %) and Leading Questions (13 times; 9.2%), while students did not use this feature at all. This indicates that teachers use questions to limit alternative meanings and subtly direct students' understanding, as a form of scaffolding. The Affirm feature was used fairly evenly by teachers (17 times; 12 %) and students (10 times; 19.6 %), which indicates a mutual affirmation of understanding between the two. On the other hand, Concede, namely the recognition of alternative positions, was used by teachers (7 times; 4.9 %) and students (5 times; 9.8%). This pattern aligns with the perspective of Martin and White (2005), suggesting that features such as rhetorical and leading questions facilitate teachers' dialogic control and scaffolding roles. Furthermore, the relatively balanced application of affirm and concede indicates a collaborative negotiation of meaning and a mutual acknowledgment of differing viewpoints within classroom discourse.

Proclaim: Endorse

This feature was used more by teachers (14 times; 9.9 %) than students (1 time; 2%), and serves to refer to authoritative sources (e.g., books or previous experiments) as a form of knowledge validation. As stated by Martin and White (2005), the increased utilization of this feature by educators signifies their function in utilizing endorsed resources to elicit authoritative voices and affirm knowledge, thus enhancing their epistemic authority within classroom discourse.

Proclaim: Reinforce

In the reinforce subcategory, there are two dominant features: Justification and Pronounce. Teachers used Justification 20 times (14.1 %) to explain or provide logical reasons for scientific concepts. Students also used it, although in smaller numbers (4 times; 7.8 %). The most frequent feature among all categories was Pronounce, used by teachers 23 times (16.2 %) and students 11 times (21.6%). This indicates that both teachers and students demonstrated assertiveness in conveying claims, with students appearing to show growing confidence. According to the appraisal theory proposed by Martin and White (2005), the regular employment of justification, particularly the term 'pronounce,' by both educators and learners exemplifies the use of dialogic contraction to affirm and substantiate assertions. This behavior highlights the authoritative position of teachers and the growing self-assurance of students in adopting evaluative roles.

Overall, the heterogloss contract engagement feature was intensively realized by the teacher as a strategy to control and facilitate dialogic space in the learning process. Meanwhile, students' significant involvement in features such as deny, affirm, and pronounce demonstrated their active participation in constructing meaning, as well as the development of their dialogic and metacognitive abilities. These findings reinforce the view that *the* engagement system, especially the contract, plays a key role in linguistic scaffolding strategies, where teachers limit alternative meanings while still providing space for students to contribute meaningfully to the learning process.

2. Contract Engagement Features to Scaffolding Strategies in Knowledge Construction in the Classroom

This is the second research question of the fifth- grade bilingual learning, teachers' use of contract engagement features has been shown to play a crucial role in managing dialogic space and supporting scaffolding strategies in students' knowledge construction. Linguistically, contract engagement refers to discourse actions that limit alternative meanings through disclaims (denials and rebuttals) and proclaims (strengthening and affirming positions). This contractive function, when used strategically, becomes a key instrument in verbal scaffolding, namely the language support provided by teachers to guide, facilitate, and strengthen students' understanding. Based on the analyzed data, teachers used the contract engagement feature 141 times, with the dominant types being Deny (19.0 %), Pronounce (16.2%), and Justification (14.1%). This high frequency indicates that teachers actively managed the direction of the dialogue and limited students' interpretations to keep them within the expected scientific understanding zone.

Deny and Counter as Corrective Guides

When students express a wrong or incorrect concept, the teacher uses deny to immediately reject it and replace it with the correct concept, as in the example:

"No, it's not floating. It's sinking because it's heavy."

This feature serves as corrective feedback in scaffolding, helping students revise their hypotheses explicitly (Wood et al., 1976). Beyond corrective feedback, teachers also rely on rhetorical questions to guide dialogue.

Rhetorical and Leading Questions as Dialogue Guiding Tools
Teachers also use *rhetorical* and *leading questions* exclusively, such as:

> "So if it's heavy, it has to sink, right?"

These types of questions don't actually require answers, but are used to direct students' attention to the concept or principle being developed. This reflects contingent scaffolding, where teacher assistance is tailored to the students' level of readiness (Van de Pol et al., 2010).

Furthermore, the teacher also uses Justification and Recitation as Conceptual Reinforcement.

Justification and Pronounce as Conceptual Reinforcement
Teachers' use of justification —for example:

> "It floats because the surface area is large and it's less dense."

It demonstrates the teacher's effort to not only convey facts but also reinforce the reasoning behind the concept, which is the essence of cognitive scaffolding. The pronounce feature also serves to affirm the validity of a concept in an authoritative manner, reassuring students that they are on the right track. Finally, the teacher also uses Affirm and Endorse as Validation and Collaboration.

Affirm and Endorse as Validation and Collaboration
When students answer correctly or are close to the correct answer, teachers use affirmation to acknowledge their contributions. This strengthens the inter-subjective connection in the learning process and builds students' self-confidence. Meanwhile, endorsement is used to link students' answers to scientific authorities, such as textbooks or experimental results, reinforcing that students' knowledge is not only accepted but also scientifically verified (van de Pol et al., 2010).

Implications for Knowledge Construction
The use of contract engagement by teachers demonstrates a pattern of interaction that is not merely authoritative, but rather dialogically engineered to support students' cognitive development through language. In a bilingual context, this is even more important because students must not only understand scientific concepts but also represent them in two languages. By using contract engagement, teachers limit meanings so they don't become too broad or vague, while still providing safe and directed pathways for thinking (Van de Pol et al., 2010; Humphrey et al., 2015).

Thus, contract engagement functions as a linguistic scaffolding tool, strengthening the teacher's epistemic position while expanding students' capacity for understanding. This aligns with Vygotsky's (1978) view that language is a primary tool in the zone of proximal development (ZPD), and the teacher's role is to actively mediate the gap between what students know and what they are capable of achieving. Analyzed contract engagement distribution data, the dialogic roles between teachers and students show significant differences, both in terms of frequency of use and strategic function in strengthening or rejecting alternative meanings during classroom interactions.

3. Differences in the Dialogic Roles of Teachers and Students in Using Contract Engagement

The third research question concerns the differences in the dialogic roles of teachers and students when employing contract engagement features within the Appraisal System, particularly in the Engagement domain. These features function to limit or close the space for alternative meanings in classroom discourse. While both teachers and students draw on such features, their dialogic roles vary considerably in terms of intensity, function, and control over meaning-making. Teachers tend to assume a more authoritative position, whereas students demonstrate emerging participation as responsive and exploratory interlocutors. The summary of these differences is presented in Table 2.

Table 2. The Summary of Differences in Dialogic Roles

Aspect	Teacher	Student
Main function	Managing, directing, and closing the space of meaning	Responding, testing, and constructing meaning
Interaction style	Authoritative, scaffolding, validate	Responsive, exploratory, starting to be argumentative
Dominant features	Deny, Pronounce, Justify, Leading Question	Deny, Affirm, Pronounce, Counter
Control over discourse	High (directing dialogue)	Medium to low (growing in interactions)
Roles in dialogue	Epistemic facilitator	Developing learning participants

Table 2 shows clear differences in how teachers and students use contract engagement features. Teachers take a dominant role as managers of meaning, using strategies such as deny, pronounce, justify, and leading questions to control and direct classroom discourse. Their interaction style is more authoritative and focused on scaffolding. In contrast, students play a responsive and exploratory role, beginning to construct meaning through features like deny, affirm, pronounce, and counter. While teachers hold high control over dialogue, students show growing but limited control, indicating their gradual shift from passive recipients to active participants in knowledge construction. To better understand these differences, the analysis is divided into two parts. The first focuses on the teacher, who appears as the dominant manager and director of meaning, while the second highlights the students, who are beginning to show more responsive and collaborative roles in classroom discourse.

Teacher as Manager and Director of Meaning (Dominant & Authoritative)
Teachers employed contract engagement features 141 times (100%), far exceeding the students' 51 occurrences, underscoring their dominant role in directing classroom interactions and shaping knowledge construction. Among these, deny (19%) and counter (8.5%) were frequently used to reject incorrect answers or contrast student expectations, often accompanied by scientific clarification. Teachers also employed rhetorical questions (5.6%) and leading questions (9.2%), strategies unique to them that subtly constrained alternative meanings while guiding students toward more accurate understandings. In addition, the use of justify (14.1%), endorse (9.9%), and pronounce (16.2%) reflected the teachers' tendency to reinforce meanings through affirmation, logical reasoning, and references to authoritative sources such as textbooks or experiments. These patterns emphasize the teacher's position as manager and director of meaning, exercising both

dominant and authoritative roles in classroom discourse. In other words, teachers use *contract engagement* as a dialogic scaffolding tool — not just to limit, but also to direct and validate the formation of students' scientific concepts.

Students as Participants Who Start to Dare to Argue (Responsive & Collaborative)
Students employed contract engagement features 51 times, demonstrating their growing confidence in classroom dialogue. The most frequent features were deny (25.5%) and counter (13.7%), which students used to reject or refute information based on their own observations. This indicates that they were beginning to speak up and correct meanings, even within a guided context. In addition, affirm (19.6%) appeared often, showing that students actively supported or agreed with the teacher's meanings as part of collaborative participation. Interestingly, students also used pronounce (21.6%), suggesting that they were starting to assert their own stance or belief despite epistemic limitations. Finally, the use of entertain (9.8%) reflected an emerging dialogic awareness, as students acknowledged alternative possibilities before expressing their own positions. These patterns highlight that students were not merely passive recipients but were becoming responsive and collaborative participants in knowledge construction. This shows that students are not merely passive recipients, but are beginning to develop as active participants in the construction of knowledge, with increasingly stronger control over meaning.

In other words, teacher utilize contract engagement as a dialogic scaffolding mechanism — not merely to restrict, but also to guide and affirm the development of students' scientific concepts. This is consistent with Martin and White's (2005) Appraisal theory, which posits that contractive engagement resources such as "deny," "pronounce," and rhetorical questions assist speakers in managing dialogic space and asserting authoritative positions. Furthermore, these characteristics embody Vygotsky's (1978) scaffolding principle within the Zone of Proximal Development (ZPD), where educators facilitate students' comprehension through strategic prompts and affirmations. From an Appraisal standpoint (Martin & White, 2005), the evolving application of deny, affirm, and pronounce by students indicates their progressive transition from merely responsive participation to adopting more authorial voices, which signifies a growing mastery over the process of meaning-making. Additionally, the incorporation of these contractive engagement features can be interpreted as a component of dialogic scaffolding (Vygotsky, 1986) wherein students start to internalize and apply argumentative strategies that are demonstrated by teachers within the nurturing environment of classroom discourse. Thus, the differences in the dialogic roles of teachers and students in the use of *contract engagement* indicate complementary interactive dynamics: the teacher creates a guiding dialogue structure, while students begin to take an active role in understanding and constructing meaning, according to the principle of *scaffolding* in the zone of proximal development (Vygotsky, 1978).

D. CONCLUSION

This study set out to investigate heterogloss contract engagement features in classroom interactions, focusing on their forms and distributions, their pedagogical role in scaffolding, and the distinct dialogic roles of teachers and students. The findings revealed that teachers employed contract engagement features more frequently than students, with both groups relying most on *proclaim-pronounce* and *disclaim-deny*. Teachers' use of rhetorical and leading questions functioned as effective scaffolding strategies, directing students' learning while maintaining dialogic space. Furthermore, teachers and students displayed different dialogic roles: teachers acted as epistemic facilitators who managed and directed meaning,

while students, though less dominant, showed increasing responsiveness and collaboration through *affirm*, *counter*, and *concede*. These findings contribute to the understanding of classroom discourse by showing how contract engagement operates as a key linguistic mechanism in knowledge construction, bridging appraisal theory with scaffolding practices. Pedagogically, the results highlight the need for teachers to balance their authoritative role with opportunities for students' active participation. Future studies could extend this work by examining different grade levels, subject areas, or multimodal interactions to further explore how engagement resources shape dialogic learning in diverse educational settings.

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