Peer Scaffolding among Primary ESL Learners' Writing Task: Learners' Behaviors and Triggering Factors

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Abstract. Human interaction and support are key to students' learning. In English as a second language (ESL) settings, peer scaffolding reinforces the traditional teacher–learner interaction. A lack of peer interaction among students, which is also a product of the COVID-19 pandemic, has resulted in young learners becoming overly reliant on teachers. This concern is a factor in hindering learners' writing development. Inspired by the sociocultural perspective, this study employed a qualitative research design to explore the types of scaffolding behaviors among young learners. The analysis is based on the Taxonomy of Language Functions and what triggers these behaviors among primary ESL learners during classroom writing tasks. Data from 10 recordings of audiovisual materials and interviews were collected from 30 Year 6 primary school students and were analyzed using thematic analysis. The data analysis showed that scaffolding behaviors occurred continuously throughout each writing stage. The findings revealed that the preferred scaffolding behavior among learners was questioning. Eliciting questions was the most frequent type of inquiry that was applied during peer scaffolding. Results highlight the triggering factors that influenced scaffolding behaviors, which were learners' level of competency, personalities, and accessibility to L1. This approach can be used as an alternate strategy for

teaching writing because of its substantial impact on the writing ability of ESL students. The findings would provide a clear direction for ESL practitioners and learners to acknowledge the significance of learners' behaviors and factors during peer scaffolding in assisting their development in writing attainment.

1. Introduction
Writing is regarded as crucial in the study of a second language (Veramuthu & Shah, 2020). Writing is one of the language skills that play a crucial role in the language development of learners of English as a second language (ESL) or English as a foreign language (EFL). Moreover, every young learner should master the basics of good writing skills (Lim & Tan, 2022). However, over the years, studies focusing on learners' writing skills in the English language have shown that their writing performances are still below expectations, particularly in the Malaysian ESL context. Malaysian students, in general, do not perform well in English language exams, particularly in the writing section (Azman, 2016; Xin-Li et al., 2022). Writing is seen as a cooperative effort rather than a solitary accomplishment (Gholami Pasand & Tahriri, 2017). Unfortunately, several concerns have arisen regarding students' writing development, despite the numerous approaches and strategies implemented by teachers in the ESL writing classroom. One of the difficulties students encounter while writing is that they lack certain abilities, including the use of grammar, syntax, punctuation, capitalization, and spelling, which are connected with the mechanics of writing (Ramasamy & Aziz, 2018; Idris et al., 2020). According to Selvaraj and Aziz (2019), demotivation toward writing assignments is a prevalent problem that students – particularly those with poor skill levels – have to face. Another issue that has become a subject of concern for researchers is students' attitudes toward being overly dependent on their teachers when completing their writing tasks. Dependence in teacher–child relationships could suggest a child's incapacity to use the instructor as a safe platform for autonomous inquiry. Thus, learners who tend to rely heavily on their teachers could have fewer opportunities to connect and engage with their peers, eventually losing out on opportunities to socialize and learn basic social skills. If the dependency between teachers and students is not resolved, then it will most certainly disrupt students' learning.

One strategy teachers use to help students accomplish their writing tasks is peer scaffolding. Many studies have explored aspects of learners' written attainment, internal and external factors affecting their writing and the interventions implemented to address concerns related to writing. Researchers have often looked at various strategies for teaching writing, including the practice of peer scaffolding, but they have not always sufficiently explored the learners' roles and the triggers behind their roles during peer interaction, especially primary school students. Hence, this study strives to explore the behaviors of primary pupils in peer scaffolding during writing, as well as the pattern of their behaviors, so that this pedagogical practice can act as an alternative for teacher-pupil scaffolding

which will benefit learners' writing development. The study also focuses on the possible triggering factors which can influence their behaviors in peer scaffolding. Scaffolding is a "process that enables a child or novice to solve a problem, carry out a task or achieve a goal which would be beyond his unassisted efforts" (Wood, Bruner & Ross, 1976, p. 90). Peer scaffolding, which theoretically originated from the sociocultural theory of mind by Vygotsky (1978), implies that second language learners who are scaffolded and assisted in their Zone of Proximal Development (ZPD) are more likely to develop competencies in the target language. The concept of Vygotsky's sociocultural theory that scaffolding is the support offered in the ZPD, which is the gap between what a learner can achieve independently and what he or she can do with the help of a more competent person, was extended by van de Pol, Mercer, and Volman (2019). Shin et al. (2020) highlighted numerous types of peer scaffolding: hinting, demonstrating, explaining, confirming, procedural assistance, providing feedback, posting, and clarifying. Furthermore, Dong and Liu (2020) identified several variables that affect the way in which students interact in group activities, including grouping arrangements, conversation issues, and English language proficiency. Previous research related to peer scaffolding has discovered that scaffolding is also known as peer collaboration and has a positive impact on students' writing (Sari et al., 2018).

The current study examines the type of scaffolding behaviors portrayed by students in peer scaffolding, ascertains the preferred scaffolding behavior adopted by students during writing tasks and explores how peer scaffolding behaviors are triggered among students. To achieve these goals, the following research questions were proposed:
1. What are the types of scaffolding behaviors portrayed by students in peer scaffolding during writing tasks?
2. What is the preferred scaffolding behavior adopted by students during writing tasks?
3. How are peer scaffolding behaviors triggered among students during writing tasks?

2. Literature Review
2.1. Theoretical Perspective of The Teaching of Writing
The theories outlined by previous researchers have inspired educators and contributed to the variety of pedagogical approaches employed by ESL practitioners. There are several theories related to the teaching of writing, as outlined by Hodges (2017). The four theories include the Cognitive Process theory of writing, Sociocultural theory of writing and Social Cognitive theory and self-efficacy in writing. In Cognitive Process theory, students are engaged in lots of mental activities because writing is apparently a thinking process. The theory, which Flower and Hayes (1981) developed after examining students' work, placed an emphasis on the cognitive activities in writing and laid the groundwork for a future study that would investigate the writing thought processes in greater detail. The next theory of teaching writing is Social Cognitive theory and self-efficacy, which originated from Bandura (1993). In contrast to cognitive processes, Bandura prioritized the affective and social aspects of motivation among the learners in supporting their writing. Self-efficacy is writers' belief in their own

ability to finish a particular writing project and to overcome any obstacles. Additionally, Cooper (1986) established an ecological theory of writing, which is defined as a writing ecology that extends far beyond the authors and their immediate environment. The students communicate with one another to construct systems that control and are controlled by other students' writing in their own settings. This study puts a great emphasis on the next theory regarding the teaching of writing, which is the Sociocultural theory by Vygotsky (1978). In other words, it explains how social processes such as active learning shape human intelligence and how society influences both. A more detailed description of the theory that underpins this study is provided below.

2.2. The Practice of Peer Scaffolding

In an effort to answer the research questions, the study adapted Vygotsky's (1978) peer scaffolding theory, which states that students' learning occurs when they are entangled in the situational context around them, and interact, communicate, and collaborate with one another, collectively contributing to building individual knowledge (Hanjani, 2019).
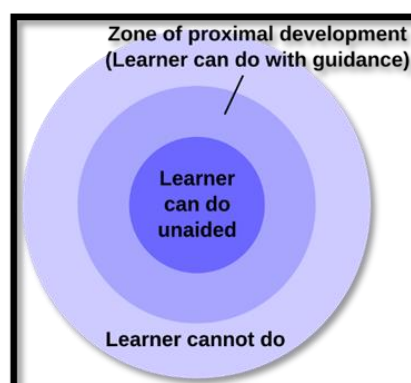

Figure 1. Zone of proximal development

Vygotsky (1978) established the concept of the Zone of Proximal Development (ZPD) as illustrated in Figure 1, which speaks to the distinction between the level of growth currently achieved through individual problem-solving and the level of development that will be achieved through problem-solving under adult supervision or in collaboration with a more experienced peer. The underlying framework of Vygotsky was then applied to academic settings. This study determines the roles of the expert and novice, and examines the exchanges between these during their interaction. With the use of scaffolding, novices are assisted by experts in the form of instructors, parents, other advisors, or even friends. This brief yet crucial component of collaborative interaction is called scaffolding (Saienko & Nazarenko, 2021). The term "scaffolding" describes the supporting strategies employed by the more proficient partner in tandem with the less proficient learner to assist the L2 learner in advancing to a higher level of linguistic competency. Nevertheless, scaffolding isn't merely one-way assistance from an expert to a novice; it can also transpire between novices, including both learners performing as experts and simultaneously and continuously helping each other through speech exchanges. Previous studies have generally focused on peer scaffolding among secondary school students (Maksić & Jošić, 2021) and

undergraduates in the tertiary level of education (To & Panadero, 2019). Furthermore, past studies by researchers such as Chen and Law (2016) and Wu, Petit, and Chen (2015) have also revealed the downside of peer scaffolding or peer feedback, including the student's propensity to emphasize local concerns of texts such as failing to consider global issues in writing, lack of comments towards their peers' written work, and feelings of doubt and discomfort when giving feedback.

3. Methodology
3.1. Research Design
This study employs a qualitative case study design in order to investigate the scaffolding behaviors portrayed by students throughout peer scaffolding during descriptive writing, students' preferred scaffolding behavior, and factors influencing their scaffolding behaviors. Instrumental case study is applied to fully comprehend a case, such as an occurrence of an incident, behavior, or procedure (Creswell & Creswell, 2018). In this case study, participants were asked about their preferred scaffolding behavior and the factors contributing to it, as well as behavioral patterns that emerged during group interactions.
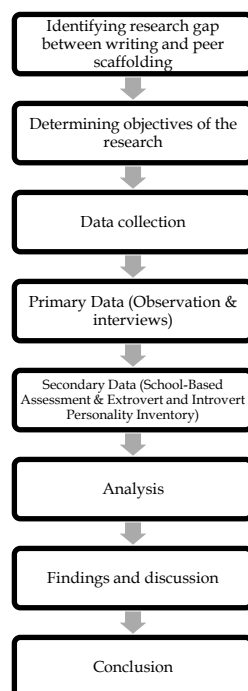
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│   Identifying research gap    │
│   between writing and peer    │
│         scaffolding           │
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│  Primary Data (Observation &   │
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Figure 2. Flow chart of the research methodology

3.2. Participants
The study was carried out at five primary schools in Sarawak. The schools are situated in both rural and urban areas; two schools are located in the urban area, whereas three schools are located in the rural area around Sarawak. The target participants were selected through purposive sampling that included snowballing methods to recruit a heterogeneous group of participants with mixed language abilities and proficiencies. The participants of this study are 30 students from Year 6 (15 females and 15 males). Their English language proficiencies range from low to moderate and high levels. Participants were informed of the

objectives of the study, and that their participation was voluntary; all gave their consent to take part in the study.

3.3. Instrument of Data Collection

The instrument of written worksheets was designed based on the topics in the recent syllabus from the new Academy Stars Textbook for Year 6, which was Unit 2 In the Past (see Appendix 1). Academy Stars Textbook refers to the textbook-based lessons designed by the Ministry of Education and starts from the Welcome Unit to Unit 10. Besides, the textbook covers sufficient material for four language skills (Reading, Writing, Listening, and Speaking) as well as Language Arts and Language Awareness. In addition to the application of written assignments, the use of interviews was implemented as an instrument for this study. The participants were selected to engage in semi-structured interviews, which comprise three main questions (see Appendix 2) that have been constructed according to proficiency level to capture participants' preferred scaffolding behaviors and the reasons behind their choices. Scaffolding roles, such as student expert and student novice, will also be determined by their level of proficiencies. A student who is more proficient tends to take the role of an expert, while a student who is less proficient will be more likely to receive scaffolding as a novice. In terms of the writing assignment, the participants had learned the topics beforehand to enable them to activate their background knowledge on the topic, which would help them in completing the writing task. First, the participants completed a flow map to help them brainstorm during the pre-writing stage. Finally, in post-writing, the participants revised their drafts after exchanging feedback on each other's writing.

3.4. Data Collection

The study applied various forms of data collection, including the use of document, questionnaire, observation and audiovisual materials. First, information on participants' performance levels was gathered from the written document, which contained the result of their School-Based Assessment. The participants' personality data was collected using a questionnaire called Eysenck's Extroversion-Introversion scale (Eysenck & Eysenck, 1987) (see Appendix 3). Then, the participants' interaction was observed during the writing task and the types of scaffolding behaviors displayed were recorded. All interactions were videotaped, and the participants' dialogues were transcribed. Semi-structured interviews with 30 participants were conducted to obtain their opinions on how they preferred to scaffold and the reasons behind their preference.

3.5. Data Analysis

The findings of the study were examined and analyzed in light of the research questions, using the Taxonomy of Language Functions, which is adopted from Li and Kim (2016), to determine types of scaffolding behaviors among the participants, such as *Eliciting, Greeting, Justifying, Questioning, Requesting, Stating, Suggesting, Acknowledging, Agreeing, Disagreeing,* and *Elaborating*. For the second research question, all participants were involved in the interview session, and they were encouraged to elaborate on their points of view. Data gathered from the interviews were analyzed and coded thematically using thematic analysis. Their final writing products were then assessed based on the scoring system for writing

presented by Nasr and Namaziandost (2019). Next, an English teacher with more than 10 years of experience validated their scores in order to increase reliability. The study also employed member checking, whereby results from the interview and writing were shared with the participants in order to maintain the validity.

4. Findings and Discussion
RQ1: What are the types of scaffolding behaviors portrayed by students in peer scaffolding during the writing task?
Table 1 shows the analysis of audio transcription which was transcribed from the videotape and types of scaffolding behaviors portrayed by the ten participants during each stage of their writing task.

Table 1. Audio transcription in peer scaffolding during writing stages

Pre-writing stage		
Scenario	Scaffolding behaviors	Transcription
1	Acknowledging	Student Expert B: Good..good. We can write the special performance.
2	Acknowledging	Student Novice D: I like that one (idea).
3	Acknowledging	Student Expert C: Nda ngawa enti salah [It's okay to make mistakes].
4	Questioning & Eliciting	Student Expert B: You know the past tense for go? It starts with W.
5	Questioning	Student Novice B: What is 'persembahan' in English?
6	Stating	Student Expert B: 'Persembahan' is performance. P-E-R-F-O-R-M-A-N-C-E.
While-writing stage		
Scenario	Scaffolding behaviors	Transcription
7	Questioning	Student Novice D: Betul tu? [Is this correct?]
8	Questioning & Eliciting	Student Expert A: I look…. Nuan ba museum meda apa? History? [What can you see in the museum?]
9	Questioning & Elaborating	Student Expert A: Ya. Friends lah. Ya nyebut we went on a school trip tu. Ba school kan ada kawan…dengan kawan. With friends. I go to the museum with friends. What did you do? [Yes. It's friends. There are friends in school….with friends. I go to the museum with friends. What did you do?]
10	Questioning & Eliciting	Student Expert B: How do you feel about the special performance?
11	Questioning & Requesting	Student Novice B: Ulih ku meda enggi nuan? [May I see your work?]
12	Disagreeing	Student Expert D : Enda. Lain-lain nuan. [No. You have to write about another place].
13	Disagreeing	Student Expert D: Tak bolehlah macam itu. [You can't write it like that].
14	Agreeing	Student Expert C: Yes, yes. You can add that. Write "I went there with my teachers and friends".
15	Justifying	Student Novice E: Tulis 'were' laban udah berlaku. There were many water activities. [Write 'were' since it has happened]

Post-writing stage		
Scenario	Scaffolding behaviors	Transcription
16	Questioning	Student Novice B: Bakatu deh? [How about this?]
17	Questioning & Requesting	Student Novice A: Betul kah? Ulih check ke aku? [Is this correct? Can you check for me?]
18	Questioning & Suggesting	Student Expert A: How about you write 'Wow!!!'?
19	Justifying	Student Expert E: Nadai 'polar bears' ba Thailand, deh. 'Polar bears' ba tempat sejuk lah. [There's no polar bears in Thailand. Polar bears live in cold region].

The participants were required to brainstorm in pairs during the pre-writing stage by filling out the flow map on the topic before they carried out the writing of their diary entries. As can be seen in the table, the most used scaffolding behavior in the pre-writing stage was acknowledging, followed by questioning and stating. According to the table, Expert B and Novice D acknowledged their partners by complimenting their ideas as they were brainstorming. In scenario 3, Expert C acknowledged his partner's contribution of ideas by reassuring them that the fear of making mistakes in their sentences should not have stopped them from writing. Next, Expert B asked if Novice B knew the past tense for "go" and gave him a hint to elicit the answer. Novice B asked him a question (scenario 5), and Expert B stated the correct spelling.

The participants continued to write and revise their draft during the while-writing stage. Observation showed that participants tended to discuss the mechanics of writing, such as grammar, punctuation, capitalization, and spelling. As the following dialogues illustrate, most participants exhibited scaffolding behaviors, such as questioning, followed by disagreeing, eliciting, elaborating, requesting, agreeing, and justifying. As shown in the table, Novice D asked her partner if her sentences were correct. Expert A asked a question to draw out information from his partner about activities that could be done in the museum (scenario 8). Expert A continued to elaborate on the supporting sentences for Novice A. Expert B asked a question to elicit his partner's feelings about the activity. Then, Novice B asked to look at his partner's writing. Expert D showed disagreement twice as he reacted with negative responses, such as "No" and "You can't write it like that" when Novice D wanted to write about the same place as his. Expert C agreed with the novice's suggestion to write about teachers and friends in his sentence. Novice E justified the reason for using past tense in the expert's sentence.

As the participants moved to the post-writing stage, they worked together to respond, edit, and evaluate each other's work. As can be seen in the table, the most frequently used scaffolding behaviors during the post-writing stage were questioning, followed by requesting, suggesting, and justifying. The findings showed that Novice B questioned his partner on his spelling (scenario 16), whereas Novice A asked her partner to check her work. Expert A then suggested that her partner add an expression to the diary. Expert E explained why his peer's choice of animal was not suitable, providing justification. In summary, the findings indicate that primary ESL learners demonstrated a range of scaffolding

behaviors throughout the entire writing activity. The questioning technique was the most frequently used scaffolding behavior and served different purposes, depending on the scaffolders' needs and intentions.

RQ2: What is the preferred scaffolding behavior adopted by students during the writing task?

For the second research question, semi-structured interviews were conducted with a total of 30 participants. The participants stated their preferred scaffolding behavior when completing the writing task and were also encouraged to elaborate on the reasons behind their choice of behaviors. Most participants (n = 28) preferred to apply the behavior of questioning when engaging in peer interaction with their classmates. In addition, the two remaining participants selected the stating strategy as their ideal scaffolding behavior. The data from the interview session were analyzed and four primary themes were generated, as depicted in Table 2.

Table 2. Structured interview excerpts

Participant	Dialogues	Themes
2	I asked question because I wanted to know about the activities in the museum.	Questioning to initiate ideas
6	I asked question to generate points for supporting details.	
10	I asked question because I was not sure about the correct spelling.	Questioning to clarify
12	I asked question because I did not know how to say 'persembahan' (performance) in English.	
17	I asked question to see if my friend knew the right word before I decided to help him.	Questioning to confirm
19	I asked question to see whether he wanted to follow my idea or write about a different place.	
21	I asked to see my friend's work as a polite gesture.	Questioning to ask permission
25	I asked my friend first to see if he can help me because I needed his help to check my work.	

RQ3: How are peer scaffolding behaviors triggered among students during the writing task?

The results of this study further extend the body of research on peer scaffolding by supplementing the data on existing types of scaffolding behavior with data about the factors triggering these learner behaviors. The findings also indicate that three key variables – namely, the student's performance level in the second language, their personality, and their accessibility to the first language – have the potential to trigger a range of scaffolding behaviors. The data were gathered based on their performance level in English, personality assessment, and audio transcription during the writing stages. As can be seen, most of the participants are introverts; they range from low to high-performance levels in English. By

allowing the usage of L1, the participants were encouraged to produce a high number of utterances, which then contributed to the frequency of scaffolding behaviors.

Table 3. Participants' results including performance level, personality assessment, and number of utterances

Student	Performance level	Frequency of scaffolding behavior	Number of utterances	
			L1	L2
Novice				
A (Introvert)	2	1	5	1
B (Extrovert)	2	3	8	4
C (Introvert)	2	1	1	0
D (Introvert)	2	2	2	4
E (Extrovert)	3	1	4	6
Expert				
A (Extrovert)	5	3	15	30
B (Extrovert)	5	4	0	26
C (Introvert)	4	2	4	15
D (Introvert)	4	2	7	0
E (Introvert)	4	1	7	4

5. Discussion

5.1. Dynamic Patterns of Scaffolding Behaviors in ESL Writing Activities

Referring to the first objective of the research, which is related to the type of scaffolding behaviors, the findings reveal that the students showcased a wide range of behaviors, including acknowledging, questioning, eliciting, stating, elaborating, requesting, disagreeing, agreeing, justifying, and suggesting. The students were already acquainted with one another; hence, the greeting behavior was not shown throughout the writing task. In the same vein, Chairinkam and Yawiloeng (2021) noted that greetings between participants as they discuss writing tasks in a classroom setting are not essential. As the types of behaviors differed at each level of the writing activity, the scaffolding behavior pattern was notably dynamic and flexible. Next, the findings reveal that the student experts' usage of scaffolding behaviors was higher than that of the student novices (12 vs. 7). These data show that the student experts applied more scaffolding behaviors compared with their peers, although each partnership mutually formed scaffolding. This finding corroborates the findings of Gholami Pasand and Tahriri (2017), who suggested that the less experienced students can also serve as scaffold providers, in addition to mediators, particularly regarding writing activities.

The findings reveal that most of the participants employed the questioning technique when they were engaged in dyadic interaction, particularly during the while-writing stage. This result differs from the results of Chairinkam and Yawiloeng (2021), who found that Thai EFL students applied various scaffolding behaviors during the pre-writing stage. Moreover, as they went into the while-writing and post-writing stages, the number of scaffolding behaviors gradually declined. The students resorted to the questioning technique when they wanted to overcome writer's block. Through question-and-answer sessions, the students were able to alleviate their writing anxiety, which included feelings of hesitancy or confusion about how to proceed with their writing, allowing ideas to flow more smoothly. This finding is consistent with that of Abdollahzadeh and Behroozizad (2015) and Herayati (2019), who found that the use of questioning helped most students to generate creative ideas, as it jogged their memory or prior knowledge of the subject, which can help to enrich their writing with details. These findings may help us to understand the various scaffolding behaviors in ESL writing classes, enabling us to better utilize their potential for peer scaffolding.

5.2. Key Features of Questioning in Peer Scaffolding

Concerning the second research objective, the results show that the scaffolding behavior of questioning is the most preferred strategy used by students during the writing task. One method of scaffolding that can aid in learning, the development of thinking abilities, and the guiding of learners towards appropriate learning objectives includes the provision of question prompts. These prompts can help students to focus on the material at hand and model the kinds of questions they will need to learn (Mahtari et al., 2020). As with the revised Bloom's Taxonomy, there are lower-order questions that correspond to the levels of remembering and understanding and higher-order questions that relate to the levels of applying, analyzing, evaluating, and creating (Gul et al., 2020). The students, who are primary school learners, tend to pose lower-order questions in their interaction, based on the analysis of the audio transcription. These findings further support the findings of Namasivayam et al. (2017), who concluded that lower-order questions are frequently used by learners with novice or basic language skills because they make it easier for them to retain and associate background experience with the situation. In addition, student experts also fully utilize lower-order questions to gauge their level of understanding and how well they are learning.

The study discovered that this scaffolding behavior serves different purposes depending on the learners' intentions and goals to achieve certain pre-determined goals when using the questioning technique. The five underlying themes that emerged from the students' responses are referred to as pre-determined goals. Dös et al. (2016) believed that a question's outcome may be disorganized, unpredictable, and ultimately incapable of facilitating learning if its goal is not determined. Questioning is generally intended for initiating ideas. The findings show that there are three key features of questioning used to spark thoughts and concepts, which are questioning-eliciting, questioning-elaborating, and questioning-suggesting. The student expert acts as an elicitor who asks questions rather than presenting the information firsthand to the novice. Next is questioning

elaborating. Based on the observation, experts helped their partners to elaborate on their texts by asking Wh-questions. Thus, student writers were able to add more supporting details and explanations to their text construction. Asking Wh-questions, for instance, helps students get ready for writing by helping them to organize their thoughts and, as a result, generate a clear focus for their text. Another scenario demonstrates the utilization of the questioning-suggesting strategy by having an expert offer a recommendation in the form of an inquiry rather than a statement.

The next type of questioning intention utilized by the students is clarifying ideas to remove uncertainty and develop comprehension. Novices asked questions when they needed clarification on certain areas of which they had very little knowledge. This result aligns with Shin et al.'s (2020) findings, which emphasized clarifying as one of the nine types of peer scaffolding in group tasks. On the other hand, the experts' questions were usually posed as confirmation to their partners. Questioning requesting was employed when students sought a desired action from their partners and thus expressed their needs through questioning. In essence, the whole range of questioning types works toward the same goal, which is to enhance one's writing development through peer interaction. Nevertheless, Jamali et al. (2021) adopted a broader perspective, arguing that interactions between peers do not always result in grammatically and academically accurate meaning. Student experts can assist their peers as far as their expertise and abilities allow them to because peers typically possess only a fraction of the available expertise. The study also revealed that despite receiving assistance from the student experts, the participants were still susceptible to grammatical mistakes in their sentences. Consequently, there are varying views among academics on the efficacy of peer scaffolding as a student learning strategy.

5.3. Triggering Factors Underlying Peer Scaffolding Behaviors

There are several factors, including both internal and external, that contribute to the interaction system among students. The data from the participants' performance level, questionnaire and audio transcription were analyzed and the study summarizes that the learners' performance in English, learners' personalities, and their access to the use of their first language may influence the pattern of their behaviors in a peer-scaffolded environment. First, learners' proficiency levels in the second language are reflected in their performance levels. Students who are more proficient in L2 tend to produce better writing with higher scores. The findings observed in this study mirror those of the previous studies that examined the significance of a learner's proficiency level on the development of their interaction when using a second language (Dong & Liu, 2020; Valadi et al., 2015). Learners who have attained higher proficiency levels are more capable of providing scaffolding as they possess adequate background knowledge to facilitate writing tasks. This finding confirms those of Aliyu and Yakubu (2019), who found that interactions with peers and more competent experts help students acquire new information. For instance, Expert B frequently portrayed numerous scaffolding behaviors during peer interaction, owing to his high proficiency level.

In addition to language proficiency, learners' personalities will also predict the outcome of an interaction system. There are two types of personality that can impact participation during peer scaffolding; that is, the extroversion or introversion of the learners. The audio transcription results revealed that Experts A and B demonstrated high language production in terms of word contribution during the interaction and therefore were considered active participators, owing to their extroverted personalities. Conversely, Novice C was deemed to be the most passive, owing to his introverted nature. As a result, this student performed the least scaffolding behavior due to his minimal oral production. However, Experts C, D and E, who were quite proficient, also displayed the least scaffolding behavior and produced few words during peer interaction. A similar situation can be found in Chew and Ng's (2021) study, which found that although learners may be fluent in English, their introverted nature can prevent them from wanting to participate in face-to-face conversations. This present finding contradicts that of Baraketi (2019), who revealed that there is no clear link between extroversion-introversion and the oral performance of ELL. Allowing access to L1 has proven that peer scaffolding is adaptive and flexible. The students were too timid to converse in English, and the fact that their discussion was being videotaped seemed to impede the conversation. In order to make sure that students feel comfortable participating in a conversation, a conducive learning atmosphere must be provided. Hence, the students were encouraged to rely on their first language to make the interaction more productive. These results are consistent with the findings of Graham and Dooly (2018), who stated that, with the aid of their L1 resources, students were able to co-create their L2 production and finish the assigned job through peer-scaffolded writing. This finding has important implications for teachers in creating a safe space for promoting scaffolded learning, wherein learners feel important, relaxed, and unrestricted to share their thoughts in peer interaction, by considering their performance levels, personalities, and accessibility to students' first language without any judgment. Moreover, there is abundant room for further progress in determining other variables which can maximize the utilization of scaffolded assistance to help learners attain higher levels of proficiency.

6. Conclusion

Given the scarcity of research on scaffolding among primary ESL learners, this research strived to address a gap in the literature by discovering the scaffolding types, the preferred scaffolding behaviors, and the triggering factors. First, based on the students' learning goals, scaffolding behaviors such as questioning, eliciting, acknowledging, elaborating, justifying, and stating were observed during the study. ESL learners, whether experts or beginners, consistently used different scaffolding behaviors at every writing level, which clarified the dynamic patterns for scaffolding behaviors. Second, this study confirmed that the primary students preferred the questioning technique in a scaffolded learning environment. This study contributes to the current understanding of how scaffolding behaviors, such as questioning, can have different purposes depending on students' intentions. Furthermore, the background of the learners, including their performance level, personality, and access to L1, also had a significant impact on the success of their interactions. An implication of these

findings for pedagogy is that English teachers should emphasize the questioning technique, particularly questioning eliciting, as an alternative learning strategy in the ESL writing classroom, so that students can generate ideas for their written work independently. In addition, students will develop not only their writing skills but also their ability to solve other learning problems when they are acquainted with questioning scaffolding. However, the current study has only examined the findings qualitatively. Therefore, future studies employing quantitative analysis and involving a greater number of participants would yield more perspectives on the peer scaffolding framework. Further research should also investigate the scaffolding types used among higher-level students at the secondary or tertiary level, which may influence the learners' scaffolding behaviors from the aspects of learning motivation, learners' age, or writing topics, including the development of other language skills, such as reading, listening, and speaking.

7. References

Abdollahzadeh, M., & Behroozizad, S. (2015). On the importance of A socio-culturally designed teaching model in an EFL writing classroom. *International Journal of Applied Linguistics and English Literature*, *4*(4), 238–247. https://doi.org/10.7575/aiac.ijalel.v.4n.4p.238

Aliyu, M. M., & Yakubu, H. (2019). Implications of the sociocultural theory on students' reading comprehension. *Bulletin of Advanced English Studies*, *3*(2), 84–91. https://doi.org/10.31559/baes2019.3.2.3

Azman, H. (2016). Implementation and Challenges of English Language Education Reform in Malaysian Primary Schools. *3L: Southeast Asian Journal of English Language Studies*, *22*(3). https://doi.org/10.17576/3l-2016-2203-05

Bandura, A. (1993). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, *28*(2), 117–148. https://doi.org/10.1207/s15326985ep2802_3

Baraketi, F. (2019). The impact of extroversion–introversion on EFL oral performance in the Tunisian context. *TAYR Quarterly Journal*, *6*, 8–28.

Chairinkam, J., & Yawiloeng, R. (2021). Peer Scaffolding Behaviors in English as a Foreign Language Writing Classroom. *Asian Journal of Education and Training*, *7*(4), 226–234. https://doi.org/10.20448/journal.522.2021.74.226.234

Chen, C.-H., & Law, V. (2016). Scaffolding individual and collaborative game-based learning in learning performance and intrinsic motivation. *Computers in Human Behavior*, *55*, 1201–1212. https://doi.org/10.1016/j.chb.2015.03.010

Chew, S. Y., & Ng, L. L. (2021). THE INFLUENCE OF PERSONALITY AND LANGUAGE PROFICIENCY ON ESL LEARNERS'WORD CONTRIBUTIONS IN FACE-TO-FACE AND SYNCHRONOUS ONLINE FORUMS. *Journal of Nusantara Studies (JONUS)*, *6*(1), 199–221. https://doi.org/10.24200/jonus.vol6iss1pp199-221

Cooper, M. M. (1986). The ecology of writing. *College English*, *48*(4), 364–375. https://doi.org/10.2307/377264

Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches.* Los Angeles.

Dong, Y., & Liu, S. (2020). Dynamic Features of Students' Scaffolding Interaction in English Writing Class. *Theory & Practice in Language Studies*, *10*(6). https://doi.org/10.17507/tpls.1006.04

Dös, B., Bay, E., Aslansoy, C., Tiryaki, B., Çetin, N., & Duman, C. (2016). An Analysis of Teachers' Questioning Strategies. *Educational Research and Reviews*, *11*(22), 2065–2078. https://doi.org/10.5897/err2016.3014

Elsworth, S. & Rose, J. (2017). *Academy Stars 6 Pupil's Book*. Malaysia.

Eysenck, H. J., & Eysenck, M. W. (1987). *Personality and individual differences*. Plenum New York, NY.

Flower, L., & Hayes, J. R. (1981). A cognitive process theory of writing. *College Composition and Communication*, *32*(4), 365–387. https://doi.org/10.2307/356600

Gholami Pasand, P., & Tahriri, A. (2017). Peer scaffolding in an EFL writing classroom: An investigation of writing accuracy and scaffolding behaviors. *Research in English Language Pedagogy*, *5*(2), 147–166. https://relp.isfahan.iau.ir/article_535479_6125156887fff8a2084e9f7af9be2a5e.pdf

Graham, A., & Dooly, M. (2018). *The use of L1 in student-student interactions in a collaborative learning context* [Master's thesis, Autonomous University of Barcelona]. https://ddd.uab.cat/record/199301

Gul, R., Kanwal, S., & Khan, S. S. (2020). Preferences of the teachers in employing revised blooms taxonomy in their instructions. *Sjesr*, *3*(2), 258–266. https://doi.org/10.36902/sjesr-vol3-iss2-2020(258-266)

Hanjani, A. M. (2019). Collective peer scaffolding, self-revision, and writing progress of novice EFL learners. *International Journal of English Studies*, *19*(1), 41–57. https://doi.org/10.6018/ijes.331771

Herayati, H. (2019). THE EFFECT OF QUESTIONING TECHNIQUE IN PRE-WRITING STAGE TOWARD STUDENTS'WRITING ABILITY. *Journal on Education*, *1*(4), 756–763. https://doi.org/10.31004/joe.v2i2.430

Hodges, T. S. (2017). Theoretically Speaking: An Examination of Four Theories and How They Support Writing in the Classroom. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, *90*(4), 139–146. https://doi.org/10.1080/00098655.2017.1326228

Idris, M. I., Said, N. E. M., & Tan, K. H. (2020). Game-based learning platform and its effects on present tense mastery: Evidence from an ESL classroom. *International Journal of Learning, Teaching and Educational Research*, *19*(5), 13–26. https://doi.org/10.26803/ijlter.19.5.2

Jamali Kivi, P., Namaziandost, E., Fakhri Alamdari, E., Ryafikovna Saenko, N., Inga-Arias, M., Fuster-Guillén, D., Sirisakpanich, D., & Nasirin, C. (2021). The comparative effects of teacher versus peer-scaffolding on EFL learners' incidental vocabulary learning and reading comprehension: A socio-cultural perspective. *Journal of Psycholinguistic Research*, *50*, 1031–1047. https://doi.org/10.1007/s10936-021-09800-4

Li, M., & Kim, D. (2016). One wiki, two groups: Dynamic interactions across ESL collaborative writing tasks. *Journal of Second Language Writing*, *31*, 25–42. https://doi.org/10.1016/j.jslw.2016.01.002

Lim, S. Y. & Tan, K. H. (2022). Teaching Descriptive Writing via Google Classroom Stream: Perception Among Year 6 Primary Students. *Theory and Practice in Language Studies*, *12*(4), 647–657. https://doi.org/10.17507/tpls.1204.04

Mahtari, S., Wati, M., Hartini, S., Misbah, M., & Dewantara, D. (2020). The effectiveness of the student worksheet with PhET simulation used scaffolding question prompt. *Journal of Physics: Conference Series*, *1422*(1). https://doi.org/10.1088/1742-6596/1422/1/012010

Maksić, S., & Jošić, S. (2021). Scaffolding the development of creativity from the students' perspective. *Thinking Skills and Creativity*, *41*, 100835. https://doi.org/10.1016/j.tsc.2021.100835

Namasivayam, P., Singh, C. K. S., Mostafa, N. A., Janoory, L., & Abdullah, M. S. (2017). Improving ESL students' descriptive writing through wh-question technique. *International Journal of Academic Research in Business and Social Sciences*, *7*(7), 219–231. https://doi.org/10.6007/ijarbss/v7-i7/3091

Nasr, M., & Namaziandost, E. (2019). The impact of topic choice on descriptive writing

ability among Iranian advanced EFL learners. *International Journal of English Language Studies*, *1*(1), 9–16. https://al-kindipublisher.com/index.php/ijels/article/view/112/101

Ramasamy, R. M. M., & Aziz, A. B. A. (2018). Peer assessment in writing using Frog VLE in a secondary school ESL classroom. *Creative Education*, *9*(14), 2265. https://doi.org/10.4236/ce.2018.914167

Saienko, N., & Nazarenko, I. (2021). Using Speaking Frames as Scaffolding Tools to Teach University Students to Speak in ESP. *International Journal of Learning, Teaching and Educational Research*, *20*(4), 99–115. https://doi.org/10.26803/ijlter.20.4.6

Sari, D. M., Suparman, U., & Sinaga, T. (2018). The Effectiveness of Scaffolding Technique on Students' Writing Analytical Expository Text. *U-JET*, *7*(3). http://jurnal.fkip.unila.ac.id/index.php/123/article/view/15404/pdf

Selvaraj, M., & Aziz, A. A. (2019). Systematic review: Approaches in teaching writing skill in ESL classrooms. *International Journal of Academic Research in Progressive Education and Development*, *8*(4), 450–473. https://doi.org/10.6007/ijarped/v8-i4/6564

Shin, S., Brush, T. A., & Glazewski, K. D. (2020). Patterns of peer scaffolding in technology-enhanced inquiry classrooms: application of social network analysis. *Educational Technology Research and Development*, *68*, 2321–2350. https://doi.org/10.1007/s11423-020-09779-0

To, J., & Panadero, E. (2019). Peer assessment effects on the self-assessment process of first-year undergraduates. *Assessment & Evaluation in Higher Education*, *44*(6), 920–932. https://doi.org/10.1080/02602938.2018.1548559

Valadi, A., Rezaee, A., & Baharvand, P. K. (2015). The relationship between language learners' willingness to communicate and their oral language proficiency with regard to gender differences. *International Journal of Applied Linguistics and English Literature*, *4*(5), 147–153. https://doi.org/10.7575/aiac.ijalel.v.4n.5p.147

van de Pol, J., Mercer, N., & Volman, M. (2019). Scaffolding student understanding in small-group work: Students' uptake of teacher support in subsequent small-group interaction. *Journal of the Learning Sciences*, *28*(2), 206–239. https://doi.org/10.1080/10508406.2018.1522258

Veramuthu, P., & Shah, P. M. (2020). Effectiveness of collaborative writing among Secondary school students in an ESL classroom. *Creative Education*, *11*(1), 54–67. https://doi.org/10.4236/ce.2020.111004

Vygotsky, L. S., & Cole, M. (1978). *Mind in society: Development of higher psychological processes*. Harvard university press.

Wood, D., Bruner, J. S., & Ross, G. (1976). Child Psychology. *Psychiatry*, *17*, 89. https://doi.org/10.1111/j.1469-7610.1976.tb00381.x

Wu, W.-C. V., Petit, E., & Chen, C.-H. (2015). EFL writing revision with blind expert and peer review using a CMC open forum. *Computer Assisted Language Learning*, *28*(1), 58–80. https://doi.org/10.1080/09588221.2014.937442

Xin-Li, E. S., binti Yamat, H., bin Mohd Said, N. E., & Hua, T. K. (2022). Hots Questions and Narrative Writing Ability of Lower Primary Pupils in a Vernacular School. *World Journal of English Language*, *12*(5), 148. https://doi.org/10.5430/wjel.v12n5p148

Appendix 1

Writing worksheet

Name :

Class :

Work in pairs and answer the questions. Then, fill in the flow map.

Name :

Class :

Write a diary entry together about your trip. Use some informal learning features such as :

| exclamation marks | sounds/noises | block capital letters | informal words or expressions |

[Date] _____

Yesterday was awesome. We went on a school trip to

_____
_____
_____
_____
_____
_____

_____

Appendix 2

Semi-structured questions	
No.	Question
1	Which scaffolding behavior do you prefer in a pair interaction?
2	How do you use that scaffolding behavior? Can you explain more?
3	Why do you like to use (scaffolding behavior)?

Appendix 3
Eysenck's Extroversion-Introversion scale (1987)

Name : .... Age : ....Personality type :   extrovert   introvert

extrovert-introvert

Statements	Yes	No
1- I have many different hobbies.	1	0
2- I am a talkative person.	1	0
3- I'm rather lively.	1	0
4- I can usually let myself go and enjoy myself at a lively part.	1	0
5- I enjoy meeting new people.	1	0
6- I like going out a lot.	1	0
7- I prefer reading to meeting people.	0	1
8- I tend to keep in the background on the social occasions.	0	1
9- I have many friends.	1	0
10- I call myself happy- go- lucky	0	0
11- I usually take the initiative in making new friends	1	0
12- I'm mostly quiet when I 'm with other people.	0	1
13- I like telling jokes and funny stores to my friends.	1	0
14- I can easily get some life into a rather dull party.	1	0
15- I like mixing with people.	1	0
16- Sometimes people say that I act too rashly.	1	0
17- I like doing things on which to act quickly.	1	0
18- I often make decision on the spur of the moment.	1	0
19- I nearly have a ready answer when people talk to me.	1	0
20- I often take on more activities than I have time for.	1	0
21- I can get a party going.	1	0
22- I like plenty of bustle and excitement around myself..	1	0
23- Other people think of me as being very lively.	1	0