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Innovative grammar instruction: employing corpus-based pedagogy and the 4P model for teaching *Wh*-questions

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Abstract: This exploratory study addresses the ongoing challenge of making grammar teaching more effective and engaging. Recognising that no single approach fits all learners, the paper underscores the necessity for teachers to tailor their strategies to accommodate varying needs, interests and learning styles. By leveraging computer-assisted techniques, corpus linguistics enables the analysis of extensive, principled databases of authentic language to uncover linguistic patterns. This paper introduces a data-driven learning (DDL) approach that utilises corpus-based natural language within a 4P model (Presentation, Problem-solving, Practice, Production) to teach *wh*-questions. The effectiveness of this approach was assessed through pre- and post-tests, student evaluations and interviews with selected participants. Findings indicate significant improvements in students' understanding of *wh*-questions and an increase in motivation to learn. The research demonstrates how educators can effectively integrate the form-focused, corpus-based DDL approach into the 4P model, fostering a well-rounded focus on form, meaning and use in grammar instruction.

Keywords: corpus; data-driven learning; grammar teaching; inductive approach; *wh*-question

1 Introduction

Many English as a Foreign Language (EFL) teachers and students depend on grammar textbooks to enhance their grammatical knowledge (Alhaysony 2017; Yang et al. 2000). A significant critique centres on the prevalent deductive approach, which typically involves the teacher explaining grammar rules, illustrating them with decontextualised isolated sentences, and having students practise

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through manipulative exercises that require uniform answers. This method is often viewed as monotonous and ineffective, as it emphasises teacher-centred instruction, reinforces student passivity, and discourages creativity and meaningful language use (Berry 1991; Lee and Collins 2009; Lin and Lee 2015; Tsui and Bunton 2000). Ur (2018) contends that for learners to automatise the target grammar, it is insufficient to engage them solely in traditional grammar exercises focused on forms; it is considered important to provide opportunities for students to use the target structure with an emphasis on meaning.

According to the *English Language Education: Key Learning Area Curriculum Guide (Primary 1 – Secondary 6)* (Curriculum Development Council 2017) for schools in Hong Kong, China, the use of mechanical grammar drills should be minimised and learners should be provided with a wide range of materials and activities that allow them to apply their learning in context. Meaningful tasks or activities should be assigned to provide language practice. Teachers should therefore move away from an over-reliance on traditional grammar textbooks and instead develop a repertoire of strategies and resources that cater to different learning styles. One approach recommended in this paper is to integrate corpora into everyday English instruction to encourage the self-discovery of language patterns and promote active participation and autonomous learning among learners. This paper seeks to examine the effectiveness of this strategy alongside the 4P model (Presentation, Problem-solving, Practice, Production) to enhance grammar instruction, focusing specifically on the teaching of *wh*-questions.

2 Literature review

2.1 Using corpora for grammar instruction

A corpus is a large, principled collection of authentic texts (spoken and/or written) stored electronically (Reppen 2010). A well-constructed corpus that is sufficiently large with multi-functional search tools enables users to efficiently discover authentic language patterns across different registers (Liu et al. 2025; Viana 2023). Corpora are widely used in synchronic and diachronic studies focusing on lexis, grammar, discourse analysis, language variation, and gender studies (e.g., Biber et al. 1998; Johansson and Ebeling 1998; Lee 2006, 2018). Furthermore, corpus linguistics can provide a means of not only introducing natural language into English classrooms but also engaging learners in interacting with real language through hands-on activities.

In recent years there has been a growing interest in using corpora and concordances for language learning through the data-driven learning (DDL) model (e.g., Bernardini 2004; Johns 1991, 1994; Liu et al. 2025; O’Keeffe et al. 2007; Reppen 2010;

Sinclair 1997, 2004; Tribble 2012; Viana 2023; Willis 2011; Yang et al. 2024). DDL is founded on the principles of learner autonomy and the inductive approach, whereby learners discover language patterns through observation and analysis of language data, much like corpus researchers. Rather than adopting a teacher-centred classroom with a top-down approach, DDL promotes a bottom-up process in which learners take control of their own learning and the teacher acts as a facilitator for learners to solve language problems.

Teachers and textbook writers can leverage insights from corpus data to enhance grammar teaching in various ways. One approach is to encourage learners to identify fundamental grammatical patterns through Key Word In Context (KWIC) information generated by concordance programmes. KWIC displays the target word centrally, with contextual words arranged to the left and right, revealing how the target word functions within its context. For example, a concordance search of the Corpus of Contemporary American English (COCA) can help learners identify the appropriate preposition to use after “married”. Specifically, “married to” refers to a spouse, while “married with” indicates the presence of children in the marriage, as illustrated in the KWIC examples provided in Figures 1 and 2.

do in most daily life . I am a bisexual woman married to a bisexual man . So we have and acknowledge all the
sniding in the microphone , like ugh . GUTFELD# You are married to a Brit PERINO# Who is now an American and for
guess she just could n't take it , huh ? Being married to a Cylon Being the mother of a half-breed abomination ?
Sole proprietorship . " Owner 's marital status " ? Happily married to a dead woman . [FOOTSTEPS] Excuse me . Are you open
mean , e -- each one of my wives have been married to a different person BRADLEY : How were you different with
. Yes , I was married before . But I was married to a drunk a man who beat me , but I
beginning on a successful career as a scholar , and recently married to a girl he has known since childhood . During their honeymoon
me as a couple . " No , She 's happily married to a good friend of mine . Besides , I 've known
no businessman in their right mind would let Sandra Bullock get married to a guy whos got a predilection for porn stars .
Helen Gahagan Douglas was a spy for Stalin (besides being married to a Jew) and denunciations of Harry S Truman for being

Figure 1: KWIC examples for “married to”.

Oh , but I should mention one thing -- Nick is married with 2 children # Valerie and Nick start out as friends
a bodybuilder I spend over 1 hour in the gym and married with 2 children to spend your free time cooking and eating
argument can one make to make that ... # I am married with 4 kids My oldest are two girls : I have
got no help from my father . Walter and me got married with a 50-50 agreement he 'd help with the kids though
, it 's a happy ending for her , too . married with a baby girl on the way . CHRIS-HARRISON-1H# Welcome to "
to Boston Logan Airport . The driver , alone but happily married with a beautiful baby daughter , is British-born , 29-year-old
bonding time with her son during his visits . She is married with a blended family that includes her husband 's children from
Of course , you have a fife ; " Franane , married with a child and a thriving practice , is never available ,
crime in my life . Never stole from anyone . Happily married with a child who love and can afford to take care
.... I get " em all , actually , John is married with a child He 's relinquished his groupie card . JO

Figure 2: KWIC examples for “married with”.

Corpus linguistics can advance our knowledge and understanding of the English language (Viana 2023), and assist educators in designing syllabi. For example, Mindt's (1997) corpus study revealed that 50 percent of instances of "any" was used in affirmative sentences (e.g., *I thought any fool would know*), 30–40 percent in negatives (e.g., *I shan't get any scripts from the assistants*), and only about 10 percent in interrogatives (e.g., *But is there any truth in it?*). Although the use of "any" in affirmative sentences is the most common, it is rarely addressed in teaching materials. This finding suggests that teachers can leverage corpus data to inform syllabus design and help students uncover essential grammatical patterns, thereby dispelling language myths, such as the misconception that the determiner "any" is exclusively used in negative statements and questions.

However, if only corpus-based exercises that focus on linguistic patterns are adopted in the English classroom, concerns may arise regarding the continued prevalence of decontextualised sentences, as seen in traditional grammar practice books. The form-focused approach also conflicts with the emphasis on meaning and interaction promoted by more recent communicative and task-based language teaching methodologies (Aston 2001; Barbieri and Eckhardt 2007; Curriculum Development Council 2017; Tomlinson 2025; Ur 2018, 2025). To bridge this gap, this paper illustrates the integration of corpus-based problem-solving activities in teaching *wh*-questions, utilising an action-oriented 4P model that emphasises the development of language skills through meaningful communication and practical, real-world applications. The effectiveness of this integrated approach will be evaluated.

2.2 Teaching and learning *wh*-interrogatives in Hong Kong, China

Despite the fact that the *wh*-interrogative is a widely used structure in different registers (Biber et al. 1999), previous studies (e.g., Bahns 1991; Lee 2012, 2016) have shown that many EFL and English as a Second Language (ESL) learners experience difficulty in *wh*-question formation. One reason for this learning problem is that to form a well-structured *wh*-question in English, learners must follow several principles simultaneously:¹ (1) choose the correct *wh*-word or *wh*-phrase (e.g., *how far*, *what place*) in the sentence initial position; (2) place an obligatory operator (i.e., a form of *be*, *have* and *do* or a modal) after the *wh*-word; (3) use the correct form of the predicator after the operator (*do*/modal + base verb form; *be* + present participle/past participle; *have* + past participle); and (4) invert the subject with the operator (unless the *wh*-word or phrase is the subject). Following these principles is a cognitively demanding task for many ESL and EFL learners, especially when the *wh*-interrogative structure in their native language is very different from that in the

English language (Lee 2012, 2016). Chinese Hong Kong learners' poor command of the *wh*-interrogative was repeatedly mentioned in the examination reports of a previous public examination for Secondary 5 leavers, in which candidates in the speaking examination had to take part in a role play and ask an examiner questions based on prompts provided. It was reported that around 75 percent of the candidates failed to form questions correctly (Hong Kong Examinations and Assessment Authority 2003). Examples such as "Where did the party held?", "What your favourite festival?" and "What difficulties experienced?" were not exceptions but common occurrences (Hong Kong Examinations and Assessment Authority 2003, 2004, 2006).

The author's previous studies (Lee 2012, 2016) have highlighted that L1 transfer among Chinese Hong Kong learners serves as an inhibiting factor in *wh*-question formation. Given the significant differences between Chinese and English *wh*-interrogative structures, direct literal translation from Chinese to English can lead to errors. The identified interference issues include misplacement of *wh*-words among lower achievers (e.g., *Mary's hat is what?*; *This is who book?*), confusion between the verbs *be* and *do* (e.g., *What is Miss Wong say?*; *Where are Mr Tang have lunch?*), omission of the operator (e.g., *Where Mr Tang go to lunch?*; *Why you feel very happy?*), incorrect forms of the predicator (e.g., *What did Miss Wong said?*; *Who is sing in the hall?*), and improper word order (e.g., *Why you are so happy?*; *Who this book is?*). Furthermore, these studies reveal that while most junior high school students in Hong Kong can effectively use one-word interrogatives, many struggle with the selection of *wh*-phrases (e.g., *which hat*, *whose ruler*, *how far*). This finding aligns with the developmental sequence of *wh*-words among L1 speakers (Bloom et al. 1982), where pronominal forms (e.g., *what*, *who*) are typically acquired before adjectival forms such as *which* and *whose*.

In addition to L1 influence, another possible reason for poor mastery of the *wh*-interrogative among Chinese Hong Kong ESL learners is due to the traditional disjointed approach adopted by many grammar practice books, which are over-reliant on decontextualised isolated sentences as well as highly controlled, mechanical practice (e.g., blank fills, multiple-choice questions, sentence transformation) (Lee 2012; Lee and Collins 2009). Celce-Murcia (2007) argues that sentence-level grammar instruction and practice does not give learners sufficient context to learn when and why to use the target structure. The focus on form and inadequate attention to the meaning may result in the learners' failure to master the interrogative structure for effective communication, which was displayed by the majority of Hong Kong Secondary 5 students in the public examination mentioned above. Celce-Murcia (2007, p. 5) postulates that "grammar instruction is much more effective when it is situated in a meaningful context, embedded in authentic (or semi-authentic) discourse, and motivated by getting learners to achieve a goal or complete an interesting task".

3 The 4P model

To address the limitations frequently observed in traditional grammar books, this paper investigates the integration of corpus-based activities into the present author's proposed 4P model, which includes Presentation, Problem-solving, Practice and Production (see Figure 3). The aim is to enhance the learner's motivation and autonomy while fostering questioning skills through meaningful, context-rich activities. This model diverges from the traditional PPP (Presentation, Practice, Production) approach in a few key ways, as outlined below.

The traditional PPP approach, rooted in behaviourist and audiolingual teaching practices, emerged in the United Kingdom during the 1950s and quickly gained widespread popularity in English language teaching globally (Maftoon and Sarem 2012). The 3P framework involves presenting a new language item, providing controlled practice, and allowing learners to produce the language in less controlled situations (Jarvis 2015; Richards and Renandya 2002; Ur 2018, 2025). Despite its widespread adoption, the PPP approach has faced significant criticism (Carless 2009; Maftoon and Sarem 2012). One major critique is its prioritisation of grammatical accuracy at the expense of fluency, treating language as a set of discrete products to be learned sequentially rather than as a tool for real-world communication (Maftoon and Sarem 2012). The PPP approach has also been criticised for its reliance on decontextualised and repetitive drills, which often fail to engage learners meaningfully. In light of the growing emphasis on communicative language teaching and

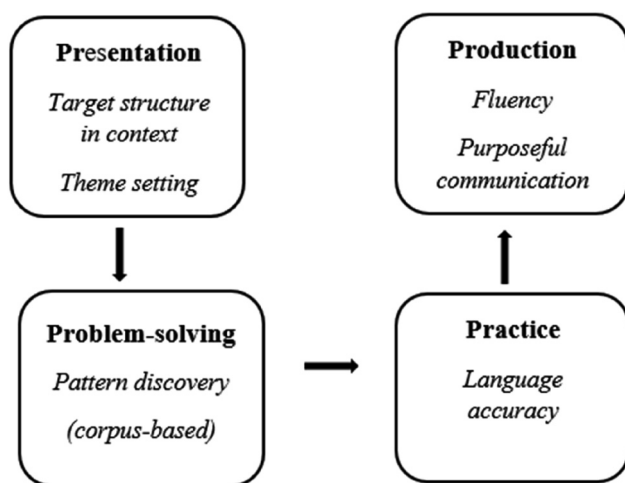


Figure 3: 4P model for grammar instruction.

task-based learning in modern classrooms, teachers, as facilitators, should focus on creating contexts that encourage interaction and the construction of meaning, thereby fostering a more dynamic and engaging learning environment. Another critique of the 3P approach is its teacher-centred nature, which contrasts with modern humanistic, learner-centred frameworks that emphasise interaction and learner autonomy (Brown 2014; Harmer 2015). As Maftoon and Sarem (2012) argue, the ultimate goal of education is to facilitate change and learning, making the ability to learn independently more valuable than passive instruction.

In contrast to the 3P approach, which typically emphasises grammatical forms, the Presentation stage of the proposed 4P model does not include explicit grammar explanations using decontextualised sentences. Instead, teachers are advised to begin lesson planning by considering the question: In what contexts is the target grammar structure commonly used? By selecting a theme that is both relevant and engaging for learners, teachers can enhance motivation and prepare students for the subsequent grammar learning activities. According to Celce-Murcia (2007), only those activities that are richly situated, fully meaningful and contextualised will enable learners to learn when and why to use the target grammar point. In addition to presenting the target structure in an appropriate context during the Presentation stage, teachers can design activities to assess learners' prior knowledge of the target structure, which will help them gain a clearer understanding of learners' needs (Ma and Mei 2021).

During the Problem-solving stage – a rule-discovery process that is absent from the traditional PPP approach – teachers can implement an inductive learning strategy to help learners actively identify, categorise, contrast and generalise language patterns, thereby enhancing their language consciousness. This can be achieved through the use of provided corpus data or by involving learners in hands-on corpus search activities. Guided discovery provides an effective framework to facilitate learning by doing and to promote learner autonomy (Oveshkova 2018). For instance, to help students differentiate between pronominal *wh*-words, adjectival forms as determiners, “how” as an adverbial, and “how” as a premodifier, they can be asked to “identify” the word or phrase that immediately follows each *wh*-word, as illustrated in the concordances in Figure 4.

Students can then be asked to “categorise” and “contrast” the concordances based on whether the *wh*-words are single words or phrases. If they are phrases, they can also be tasked with identifying the part of speech of the word that follows each *wh*-word, as shown in Table 1.

Subsequently, teachers can guide students to “generalise” the patterns: When *wh*-words such as “which” and “what” stand alone, they are pronouns; when used before a noun, they act as determiners. When “how” stands alone, it is an adverb

c. "Revenge is to endlessly cooked and never eaten." 6. Which is the best expression of the theme of the play? (main idea)
. Fernand's hiding place * c. an escape route out of prison 5. Which statement is an example of a metaphor? (literary dm, ? ice)
to jail. * c. Edmond learns to read and write. 3. Which statement is a fact? (fact vs. opinion) * a. Napoleon was
. Jeff: Yes. Danny, you say you're into the Internet. Which search engine do you prefer to use? I'm partial to Google, myself
Forrest Sawyer, you personally are a little bit of a litmus test there. What's going to happen to you now? Are you going to be able to
, in which he seemed to scuttle any hope of bilateral negotiations at all. What do you make of that timing? RHONDA HABIB, Agence France-Presse: Well,
anything, for the last couple of days, from President Mubarak of Egypt, What role is he playing at the moment? BARRIE DUNSMORE, ABC News: Well
, if you would, then, of how it looks in Saudi Arabia. What kind of equipment is coming in? And is America putting its stamp on that
We just heard this described as the North's most powerful nuclear test yet. How significant was it? GREG THIELMANN, -Fo# Well, it's the latest piece of
have a nine-year-old and he can't even listen to the guy on television. How will he bridge that gap? I don't know. But when you live
endorse Donald Trump and, you know, he keeps talk being a process. How long is this process going to take? PRIEBUS# Well, listen, I do
leading conservatives are talking about trying to mount an independent conservative campaign for president. How seriously do you take that? PRIEBUS#
you say we must build a wall, and Mexico will pay for it. How do you get those things done? TRUMP# Through competence, throughout knowing what to

Figure 4: Concordance analysis of *wh*-words in guided discovery activities.

Table 1: Categorisation and comparison of *wh*-word patterns.

<i>Wh</i> -word + word class	Examples
– Which	Which is the best expression of the theme of the play?
– Which + _____	Which statement is an example of a metaphor? _____?
– What	_____?
– What + _____	What role is he playing at the moment? _____?
– How	_____?
– How + _____	How significant was it? How seriously do you take that? _____?

functioning as an adverbial; when placed before an adjective or another adverb, it functions as a premodifier.

Following the Problem-solving stage is the Practice stage. Instead of relying on decontextualised repetitive drills such as gap fills or multiple-choice exercises typical

of the traditional PPP approach, the Practice stage of the proposed 4P model encourages teachers to engage students in focused language practice based on contextualised activities, corpus data or the learners' own writing. This approach allows learners to concentrate on the target structure and enhances their accuracy within context. It is grounded in behaviourist learning theory, which suggests that practice fosters mastery, facilitating students' transition from declarative knowledge to gradual proceduralisation (DeKeyser 2017).

In addition to achieving accuracy through practice, developing fluency and ultimately reaching automatisisation through purposeful activities is deemed essential during the Production stage of the proposed 4P model. At this point, teachers are encouraged to engage learners in a contextualised task that necessitates the effective use of the target structure for its successful completion. This approach helps students gain a better understanding of how, why and when to use specific language items and structures.

It is hypothesised that the use of the proposed 4P model, with the integration of corpus-based activities during the Problem-solving stage, may help to address long-standing criticisms of the conventional deductive 3P approach, including teacher-centeredness and failure to fit with more humanistic learner-centred frameworks, as well as overemphasis on forms and accuracy rather than meaning and fluency (Harmer 2015).

4 The present study

Although corpus linguistics has been extensively researched in recent decades, it remains relatively unfamiliar to school teachers, who require corpus-based language pedagogy to effectively integrate corpora into English instruction (Ma and Mei 2021). This study aims to investigate the effectiveness of implementing such pedagogy in the classroom by utilising the 4P model (Presentation, Problem-solving, Practice, Production). The focus of this investigation is on teaching *wh*-questions.

4.1 Methodology

This exploratory study seeks to investigate the integration of corpus-based activities in the teaching and learning of *wh*-interrogatives through the 4P model. The research question guiding this inquiry is: To what extent can the use of corpora-based discovery learning and the 4P model enhance the understanding of *wh*-question formation?

The project team consisted of the author as the project supervisor and seven full-time student teachers (five females and two males) from a university in China. Five of them were enrolled in the MATESOL programme while two were final-year Bachelor of Education students majoring in English. They participated in the experimental project to learn how to design effective grammar lessons that incorporate corpus-based language discovery activities and the 4P model.

Initially, they were trained in analysing language patterns using corpus data and in applying the 4P model to teach specific grammar points. Following this, they engaged in lesson planning and materials development on selected grammar topics, during which they received feedback from project members, reflected on their designs, made revisions, conducted trial lessons, and ultimately evaluated the project. Owing to the limited space of this paper, the focus is on the instruction of *wh*-questions, while other grammar topics are excluded.

The school trial for *wh*-question formation was conducted with a Secondary 2 class (Grade 8) consisting of 32 students at a Band 1 English-medium school. In Chinese Hong Kong, secondary schools are classified into three Bands based on students' academic achievements and admission criteria, with Band 1 representing the schools with the highest academic performance. During the 80-minute lesson trial, two student teachers facilitated the research lesson, while four team members, including the author, observed and provided feedback afterwards. To assess students' understanding of *wh*-question formation, a pre-test was administered one week prior to the trial lesson, followed by a post-test conducted one week afterwards. Students' feedback on the lesson was gathered through a post-lesson questionnaire survey involving the whole class, as well as a 10-minute interview with three selected students (see Section 4.3 for details).

4.2 Lesson design

In accordance with the English Language curriculum guidelines (Curriculum Development Council 2017), this lesson aimed to enhance learners' understanding of the target structure while simultaneously fostering their communication skills and promoting positive values and attitudes. The learning experience was contextualised within the theme of "pet adoption". The lesson had three specific objectives: (1) to identify the correct *wh*-words, word order and verb phrase structure in *wh*-questions; (2) to conduct a pet adoption interview at a pet shelter using *wh*-questions; and (3) to cultivate an affection for animals. The lesson was structured in stages according to the 4P model.

4.2.1 Presentation – video viewing

To establish the context and to engage students' interest in learning, the teacher presented the video clip "The Present" (Filmakademie Baden-Württemberg 2014), which tells an inspirational story about a disabled boy and the gift of a disabled dog from his mother. Before watching the video, the teacher posed several questions to provide target language input, such as "How many of you have pets at home?", "What pet do you have?" and "Where did you get your pet?". After viewing the video, the students were asked to create two questions about the story to assess their prior knowledge of *wh*-question formation. Examples of students' responses include: "Why the boy get mad after he see the dog?", "Where the dog come from?", and "Why the mother did not punish the boy when she saw the boy is playing game?". Some of the questions generated were shared with the class. In addition to linking this language component to the video, the errors made by students could serve as a catalyst for their learning of *wh*-questions in the subsequent sections of the lesson.

4.2.2 Problem-solving – structure of *wh*-questions

The lesson used natural language data generated from COCA and the British National Corpus (BNC). Staged corpus-based learning activities were designed to help students discover the critical features of *wh*-questions, including the selection of *wh*-words or phrases, word order, the use of dummy *do* and verb phrase structures (e.g., *do/does* + infinitive; *be* + present/past participle). The concordance lines generated from these corpora differ significantly from traditional grammar exercises. To make the problem-solving activities more manageable for students, a familiar grammar practice format was employed (see Appendix A for examples of the problem-solving activities).

4.2.3 Practice

4.2.3.1 Proofreading exercise

The *wh*-questions written by the students during the pre-test were collected, and they were tasked with identifying and correcting the mistakes made by themselves and their classmates. This exercise provided valuable practice in using the target grammar correctly.

4.2.3.2 Further language practice

The students watched the short video "Pet adoption" (Disney Junior 2014). After answering several comprehension questions, which provided additional language

input, they were tasked with formulating their own questions about the video. Some examples can be found in Appendix B.

4.2.4 Production

The students were asked to imagine that they were working at a pet shelter and needed to conduct an interview with a potential adopter to assess his/her suitability for adopting pets. They were required to write down at least six questions before engaging in a role play. Some prompts were provided, such as the number of people living at home, the size of the home, and the type of pet to be adopted. To enhance the authenticity of the activity, students were shown a real pet adoption questionnaire prior to starting the task.

4.3 Data collection and analysis

Both quantitative and qualitative data were collected to evaluate students' learning. To address the research question regarding the effectiveness of using corpora and the 4P model in enhancing student learning, the study included pre- and post-lesson tests, a post-lesson evaluation survey, and a post-lesson interview with three students representing high, medium and low English proficiency levels, as identified by the school teacher. The pre-test was administered one week before the trial lesson and the post-test was conducted one week afterwards. A total of 31 students completed the pre-test, and 29 students completed the post-test. The pre-test results of the two students who did not participate in the post-test were excluded from analysis.

To objectively measure student learning, the pre- and post-test items remained consistent (see Appendix C). The tests included three parts: (1) filling in blanks with *wh*-words/phrases; (2) a multiple-choice cloze passage focusing on word order and verb phrase structures; and (3) *wh*-question formation based on a provided picture and corresponding answers. In addition to the pre- and post-test scores for each item, the questions formed in Part 3 of the tests were coded to evaluate the correct use of critical features, including *wh*-word placement, *wh*-words/phrases, operators, predicators and word order. Each critical feature was analysed independently by a research assistant and verified by the author. Responses that were irrelevant to the five examined components were ignored. The results were analysed using SPSS, and

paired samples *t*-tests were conducted to gauge students' learning from the research lesson. Examples of the critical feature analysis are presented below.

Example 1:

There are three brushes: blue, green and red. Paul uses the blue brush to draw.

Student answer: *Which one is Paul uses?*

Analysis: correct *wh*-word placement; correct *wh*-phrase; wrong operator; wrong predictor; correct word order

Example 2:

Sam enjoys the Art lesson because he likes artwork.

Student answer: *Why Sam enjoys the Art lesson?*

Analysis: correct *wh*-word placement; correct *wh*-word; wrong operator; wrong predictor; wrong word order

A total of 32 students participated in the trial lesson. For the post-lesson evaluation, all students were invited to rate five statements and provide written responses to two open-ended questions. A 4-point Likert scale was used for the ratings, with options ranging from “strongly disagree” to “strongly agree”. The statements included:

- 1) I gained a clearer understanding of the structure of *wh*-questions from today's lesson.
- 2) I have a better understanding of how to use *wh*-questions as a result of the lesson.
- 3) I feel more confident in asking *wh*-questions after the lesson.
- 4) I enjoy discovering grammar rules on my own by studying the example sentences given.
- 5) I like the teacher to tell me grammar rules.

The two questions which required students' free responses were:

- 1) Did you enjoy today's grammar lesson? Were the teaching activities different from those in previous grammar lessons?
- 2) Which activity in the lesson did you like the most? Why?

To further assess students' learning, the author conducted a post-lesson semi-structured interview with three students representing high, medium and low levels of English proficiency. The students were invited to respond to the following questions:

- 1) What did you learn in today's lesson?
- 2) When do you use *wh*-questions?
- 3) How did today's lesson differ from previous grammar lessons?
- 4) Did you enjoy today's lesson? Which part did you like the most?

For the quantitative data collected in the questionnaire survey, descriptive statistics were compiled, recording the frequency of each response option. To assess the average response and variability, the mean and standard deviation for each statement were calculated. Additionally, a paired-samples *t*-test was conducted to determine whether there were significant gains resulting from the lesson. For the qualitative data collected from the questionnaire survey and interview, verbatim transcriptions were produced. The transcriptions were then coded to identify recurring themes relevant to the research question.

To further evaluate students' progress in formulating *wh*-questions, this paper also compares the *wh*-questions created for Activity 1 with those generated during the final activity, the pet adopter interview.

5 Results and discussion

5.1 Comparison of pre- and post-test results

There was corroborating evidence indicating that students experienced significant learning from the research lesson. The mean score for all the items in the pre-test was 17.21, and that for the post-test was 18.93 (maximum score: 21). A significant difference was noted ($t(28) = -5.073, p < 0.001$). The following sections will discuss students' performance in more detail.

5.2 Selection of *wh*-words

Table 2 shows that the Band 1 students, recognised as high performers, experienced no difficulties with *wh*-word choices. They attained high scores on the gap-fill exercise in both the pre-test and post-test. The only significant improvement was noted for Question 7 *Whose bag is this?*, which features the *wh*-phrase "whose bag" ($t(28) = -2.703, p < 0.01$), with a medium effect size ($d = 0.412$). This finding aligns with the findings of the author's previous studies (Lee 2012, 2016), which suggested that while most junior high school students in Chinese Hong Kong can effectively use one-word interrogatives, many – particularly lower-achieving students – struggle with selecting appropriate *wh*-phrases. The Problem-solving Stage, which included a self-discovery activity focused on the structure of *wh*-phrases (see Appendix A), appeared to be effective in addressing this issue.

Table 2: Blank-filling – *wh*-word.

<i>Wh</i> -word	Pre-test		Post-test		<i>t</i>	1-sided <i>p</i>
	Mean	SD	Mean	SD		
1. Who/Whom are you speaking with?	0.93	0.258	0.97	0.186	−0.571	0.286
2. When shall we have lunch?	1.00	0.000	1.00	0.000		
3. Why do you come to school so early every day?	1.00	0.000	1.00	0.000	−1.000	0.163
4. Who finished the work first?	0.83	0.384	0.90	0.310		
5. Whose dog should I take, the black one or the white one?	0.97	0.186	0.97	0.186	1.440	0.080
6. How can I get to the roof?	1.00	0.000	0.93	0.258		
7. Whose bag is this?	0.79	0.412	1.00	0.000	−2.703	0.006
8. What do you usually do on weekends?	1.00	0.000	0.90	0.310	1.797	0.042
9. Excuse me, where is the bus stop?	1.00	0.000	1.00	0.000		

5.3 Word order and verb phrase structure

Table 3 presents the pre- and post-test results for the multiple-choice cloze passage focused on the word order and verb phrase structure of *wh*-questions, except for Sentence 1, which features the word order of a statement for comparison. The findings indicate that students with high English ability possess a solid understanding of *wh*-question formation, achieving generally high scores on the cloze passage, consistent with the author’s previous studies (Lee 2012, 2016). However, significant improvements were observed for Sentence 4 *Where did you last see your cat?* ($t(28) = -3.266, p = 0.001$), and Sentence 7 *Where are you going, Lucy?* ($t(28) = -1.797, p < 0.05$), both demonstrating a medium effect size ($d = 0.371$ for Sentence 4 and $d = 0.412$ for Sentence 7).

Table 3: Multiple-choice cloze passage – word order and verb phrase structure.

Question items	Pre-test		Post-test		<i>t</i>	1-sided <i>p</i>
	Mean	SD	Mean	SD		
1. Hazel met little Tony in a park while <u>she was walking</u> her dog.	1.00	0.000	1.00	0.000	0.000	0.500
2. Why <u>are you</u> so sad?	0.76	0.435	0.76	0.435		
3. What <u>can I do</u> to help you?	0.97	0.186	0.97	0.186	0.000	0.500
4. Where <u>did you</u> last <u>see</u> your cat?	0.66	0.484	0.93	0.258	−3.266	^a 0.001
5. What <u>does it</u> look like?	0.83	0.384	0.79	0.412	0.441	0.331
6. How <u>does it</u> help?	0.83	0.384	0.86	0.351	−0.571	0.286
7. Where <u>are you going</u> , Lucy?	0.90	0.310	1.00	0.000	−1.797	^a 0.042

^aIndicates significant differences, with $p < 0.05$.

5.4 *Wh*-question formation

Table 4 presents a comparison of the pre- and post-test results for question formation, specifically the transformation of statements into *wh*-questions. Notable significant improvements were observed in the overall results. The mean score for the five critical features in the pre-test was 21.1379, while the post-test mean score was 22.8966 ($t(28) = -3.742$, $p < 0.001$). Four out of the five questions (Questions 1–4) demonstrated marked gains, with a p -value of less than 0.05. Regarding the critical features of *wh*-question formation, significant improvements were noted in the selection of *wh*-words ($t(28) = -3.018$, $p < 0.005$), operators ($t(28) = -3.819$, $p < 0.001$), and word order ($t(28) = -1.839$, $p < 0.05$).

The effective learning demonstrated by students as a result of the research lesson was also highlighted through a comparison of the questions they asked in Activity 1, following the video viewing, and those generated during the final role-play activity (pet adopter interview). Table 5 presents several example sentences produced by the students. Notably, the missing operator, which was frequently observed among students in Activity 1, was effectively addressed during the role-play activity. This aligns with the findings presented in the post-test.

5.5 Post-lesson evaluation

In the post-lesson survey, the 32 participating students were asked to rate five statements regarding the research lesson (see Table 6). The findings reveal that with the exception of one student who answered “disagree” for statement 4, all other students rated the statements as either “agree” or “strongly agree”, indicating their positive attitudes towards the research lesson, which incorporated the 4P model and corpus-based activities. Notably, the students rated statement 5, “I like the teacher to tell me grammar rules”, highly (mean score = 3.38), which has two implications. First, after students engage in self-discovery activities that involve analysing natural language data, it is essential for teachers to explicitly articulate grammar patterns and rules to ensure that learners of varying abilities can achieve the same learning outcomes. Second, this finding highlights the fact that students have diverse learning styles, suggesting that no single teaching approach is universally effective. Therefore, teachers should cultivate a repertoire of teaching strategies and apply professional judgement to determine which approach will be most effective for a particular lesson, taking into account factors such as the topic, its learnability, and the learners’ age and proficiency level. The 4P model is most effective when used in conjunction with other instructional methods. This aligns with Ur’s (2025) argument that maintaining a balance of “juggling balls” related to

Table 4: *Wh*-question formation.

Question items	Pre-test		Post-test		<i>t</i>	1-sided <i>p</i>
	Mean	SD	Mean	SD		
1. <i>When do the students have the Art lesson?</i>	0.55	0.506	0.90	0.310	−3.360	^a 0.001
<i>Wh</i> -word placement	1.00	0.000	1.00	0.000		
<i>Wh</i> -word	1.00	0.000	1.00	0.000		
Operator	0.59	0.501	0.90	0.310	−3.087	^a 0.002
Predicator	0.97	0.186	1.00	0.000	−1.000	0.163
Word order	0.83	0.384	0.97	0.186	−1.684	0.052
2. <i>With whom is Tim talking?//Who(m) is Tim talking with?</i>	0.69	0.471	0.90	0.310	−1.992	^a 0.028
<i>Wh</i> -word placement	0.97	0.186	0.97	0.186		
<i>Wh</i> -word	0.86	0.351	0.97	0.186	−1.361	0.092
Operator	0.93	0.258	1.00	0.000	−1.440	0.080
Predicator	1.00	0.000	1.00	0.000		
Word order	0.90	0.310	0.93	0.258	−0.571	0.286
3. <i>Which brush does Paul use to draw?</i>	0.28	0.455	0.59	0.501	−3.087	^a 0.002
<i>Wh</i> -word placement	1.00	0.000	1.00	0.000		
<i>Wh</i> -word	0.52	0.509	0.79	0.412	−2.289	^a 0.015
Operator	0.48	0.509	0.66	0.484	−1.983	^a 0.029
Predicator	0.66	0.484	0.66	0.484	0.000	0.500
Word order	1.00	0.000	0.97	0.186	1.000	0.163
4. <i>Why does Sam enjoy the Art lesson?</i>	0.41	0.501	0.66	0.484	−2.544	^a 0.008
<i>Wh</i> -word placement	1.00	0.000	1.00	0.000		
<i>Wh</i> -word	1.00	0.000	1.00	0.000		
Operator	0.48	0.509	0.66	0.484	−1.983	^a 0.029
Predicator	0.55	0.506	0.69	0.471	−1.440	0.080
Word order	0.66	0.484	0.83	0.384	−1.983	^a 0.029
5. <i>What is Ali doing?</i>	0.83	0.384	0.93	0.258	−1.361	0.092
<i>Wh</i> -word placement	1.00	0.000	1.00	0.000		
<i>Wh</i> -word	1.00	0.000	1.00	0.000		
Operator	0.86	0.351	0.97	0.186	−1.797	^a 0.042
Predicator	0.97	0.186	1.00	0.000	−1.000	0.163
Word order	0.93	0.258	0.97	0.186	−0.571	0.286
Total						
<i>Wh</i> -word placement	4.9655	0.18570	4.9655	0.18570		
<i>Wh</i> -word	4.3793	0.62185	4.7586	0.43549	−3.018	^a 0.003
Operator	3.3448	1.31681	4.1724	0.96618	−3.819	^a <0.001
Predicator	4.1379	0.91512	4.3448	0.76885	−1.440	0.080
Word order	4.3103	0.92980	4.6552	0.72091	−1.839	^a 0.038
Total	21.1379	3.07901	22.8966	2.36560	−3.742	^a <0.001

^aIndicates significant differences, with $p < 0.05$.

Table 5: Questions produced by students.

Participants	Activity 1 – 1st video viewing	Pet adopter interview
Student 1	<i>Why the boy get mad after he see the dog?</i>	<i>What size of the pet do you want to adopt?</i> <i>How often will you take the dog for a walk?</i>
Student 2	<i>Why the boy get hurt with his leg?</i> <i>Where the dog come from?</i>	<i>What pet do you want to adopt?</i> <i>Why did you want to adopt pet?</i>
Student 3	<i>Why did the boy started to play with the dog?</i>	<i>When will you take the dog for a walk?</i> <i>Why do you want to adopt a pet?</i>
Student 4	<i>What the boy doing when he see a dog?</i> <i>Why the dog fall down?</i>	<i>What kind of animal do you want to adopt?</i> <i>How large is your home size?</i>

Table 6: Post-lesson survey results.

Question items	Mean	Standard error	Standard deviation
1. I gained a clearer understanding of the structure of <i>wh</i> -questions from today's lesson.	3.53	0.090	0.507
2. I have a better understanding of how to use <i>wh</i> -questions as a result of the lesson.	3.53	0.090	0.507
3. I feel more confident in asking <i>wh</i> -questions after the lesson.	3.25	0.078	0.440
4. I enjoy discovering grammar rules on my own by studying the example sentences given.	3.28	0.092	0.523
5. I like the teacher to tell me grammar rules.	3.38	0.087	0.492

grammar teaching to create a coherent set of procedures tailored to a specific teaching context is likely to yield optimal learning outcomes.

The research lesson not only enabled the students to master the *wh*-question structure but also enhanced their motivation to learn English. In the open-ended section of the survey, 31 students (97 %) expressed that they enjoyed the research lesson. When comparing the lesson to other grammar lessons, a number of students indicated their appreciation for the abundance of example sentences (corpus-based) that facilitated their independent analyses of various *wh*-question structures. They felt that the problem-solving activities contributed significantly to their understanding of the *wh*-interrogative structure. Below are some comments from students:

Yes, I did [enjoy the lesson]. The teaching activities in today's lesson were different from those in other grammar lessons because the teachers gave us some interesting exercises to do and explained the ideas in detail. (Student 5)

Yes, [I enjoyed the lesson] because there are many examples to teach me about *wh*-questions. (Student 6)

In the post-lesson interview, the three student participants noted that in other lessons they had primarily learned grammar through a deductive approach, which involved teacher explanations of grammar rules, illustrated with sentence examples, followed by students completing exercises from their grammar books. All three students expressed a preference for the approach adopted in the research lesson, as it allowed them to discover the grammar patterns independently. Below are some examples of their comments:

The lesson was very detailed so it was clear. We could discover the structures slowly in the lesson. It's good the teacher guided us to find patterns from the sentences. (Student 7, a high achiever)

The teachers asked a lot of questions. These questions guided us to think and find the pattern. The teachers gave many example sentences for us to discover the patterns so we understood them well. When we knew the answers and circled the correct words, it means we understand. (Student 8, an average achiever)

In addition to the problem-solving activities, the students expressed appreciation for the diverse range of activities included in the lesson. In the post-lesson evaluation with the whole class, frequently used words to describe the lesson included “interesting” (16 times), “funny” (11 times), and “fun” (2 times). The majority of students (68.8 %) identified watching videos on pet adoption, which provided a realistic context for the Presentation, Practice, and Production stages, as their most favourite activity. The term “video(s)” appeared 25 times in the post-lesson evaluation, highlighting their preference for video content. Some of their comments included: “There are different videos that engage us”; “This grammar lesson was very funny. We can watch the videos and do exercises”; “I like watching the videos because I can learn something from them, like the love for animals”; and “I like ‘pet adoption’ the most, because it relates closely to our daily lives”.

The student interviews further supported these findings. Student 9, a developing learner, expressed delight at the variety of lesson activities, particularly the video watching. Student 8 noted that students enjoyed listening to video stories, which helped establish context for their grammar learning. Student 7 indicated that this contextual framework made the learning experience more authentic, allowing her to understand the grammar structures more easily.

In addition to the videos, some students expressed a fondness for the activities during the Production stage, as they enjoyed creating sentences and formulating

questions on their own. Several students also mentioned that they appreciated conducting interviews because it was engaging, creative and relevant to their daily lives.

To sum up, the successful integration of corpus-based activities and the 4P model in contextualised settings allows students to focus not only on the forms of *wh*-questions but also on their use in authentic situations. The improvements observed in learners' post-lesson test scores, along with their positive feedback in the post-lesson evaluation, offer valuable insights for educators to further explore this approach in teaching other topics.

6 Conclusions and implications for teaching

This exploratory study indicated that corpus-based activities and the 4P model not only enhanced students' grammatical knowledge but also increased their motivation to learn. The significant improvement in *wh*-question formation, as demonstrated by the comparison of the pre-test and post-test results, as well as the *wh*-questions produced by students at the beginning and end of the research lesson, supports the effectiveness of using DDL to facilitate language learning (Johns 1991; Liu et al. 2025; Viana 2023). This approach can stimulate learners' enquiry and speculation, enabling them to discover language patterns and develop the ability to form generalisations. In this project, we used corpora to gather naturally occurring examples of *wh*-questions and organised them into different categories to facilitate quick comparisons by students for identifying critical features. Rather than using the conventional KWIC format, where keywords are centred on the page with a set number of words to the left and right, we refined the approach by placing the *wh*-words and phrases at the beginning of the examples. This modification not only aligns with the structure of *wh*-interrogatives but also employs a familiar grammar practice layout, making the problem-solving activities less overwhelming for students. For lower-achieving students, concordances drawn from the COCA and BNC may be quite challenging. To mitigate this issue, teachers can select concordances that are more accessible to their students. Additionally, they can opt for a suitable corpus from Lextutor, which offers a diverse range of corpora that include texts of varying language complexities.

To create an effective grammar unit, teachers are encouraged to incorporate the following steps into their lesson design: (1) choosing the object of learning; (2) identifying its critical features; (3) designing corpus-based activities that target these critical features; and (4) implementing the 4P model.

The object of learning for this project was to enable learners to use *wh*-questions for meaningful communication. The identified critical features of *wh*-questions are as follows: (1) selecting the correct *wh*-word or *wh*-phrase for the initial position of the sentence; (2) the auxiliary *do* functions as operator in interrogatives when no other auxiliary is present; (3) *do*-support is not required when *be* or a modal verb is used; (4) the operator inverts with the subject in *wh*-questions; and (5) the predicator is dependent on the operator. Identifying these critical features is crucial for teachers who wish to implement the DDL approach in the classroom. As facilitators, teachers need to generate and categorise relevant concordances and design problem-solving activities based on these critical features, allowing students to “identify”, “contrast”, “classify” and “generalise” the structure through corpus-based consciousness-raising activities.

However, focusing on form alone at the sentence level is insufficient. The significant contribution of this study lies in demonstrating to educators how to effectively implement the 4P model, highlighting the importance of form, meaning and use in language teaching and learning. This includes: (1) establishing an appropriate context during the Presentation stage to stimulate learner interest in the topic and gather information about their prior knowledge on the object of learning; (2) providing opportunities for learners to discover the language patterns at the Problem-solving stage through corpus-based activities that foster independent learning skills and critical thinking skills; (3) helping learners to achieve accuracy through focused language practice at the Practice stage; and (4) enabling learners to achieve fluency and mastery of the target language at the Production stage by engaging them in contextualised, meaningful tasks that require fusion of the critical features learnt for effective communication.

The present study provides evidence that the 4P model and corpus-based activities enhance students’ understanding of the critical features of the object of learning, and increase their motivation to learn the target language. However, it is important to recognise that no one single grammar teaching approach can address the diverse needs of all learners. The project does not aim to present an “ideal” method for teaching grammar. Instead, its purpose is to introduce an alternative teaching approach for educators to experiment with in the classroom, enabling them to reflect on its pros and cons based on their students’ levels, needs, expectations, interests and learning styles.

7 Limitations of the study

The present exploratory study reports on the results of a research lesson focused on *wh*-question formation, conducted with a class of high-ability students at a Band 1

school in China. As shown in previous studies (Hulstijn and De Graaff 1994; Lee 2016), many high achievers possess a strong understanding of the rules governing *wh*-interrogative formation. The integration of the 4P model may have an even greater impact on the learning of *wh*-structures among students with lower English competence. Future research could include participants of varying English proficiency levels to compare the effects of the 4P model on their understanding of selected grammatical structures. Additionally, both an experimental group and a control group could be established to assess the effectiveness of the treatment.

Notes

1. Principles (2) and (4) are for non-subject questions only. Subject questions follow the declarative structure (e.g., *Who came yesterday?*).

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Ethical approval: The research related to human use has complied with all the relevant national regulations, institutional policies, and has been approved by the Human Research Ethics Committee of The Education University of Hong Kong.

Appendix A: Examples of problem-solving activities

a. *Wh*-phrases

- 1) Study the following questions. What kind of word (e.g., verb, noun, adjective, adverb) can follow “whose”, “which”, “what” and “how” to form *wh*-questions?

Whose + _____

1. *Whose side are you on?*
2. *Whose blood do you think it is really?*
3. *Whose turn was it this time?*

Which + _____

4. *Which airfield was used for agent drops?*
5. *Which novels or stories are well used as class readers in schools?*

(continued)

How + _____ or
_____6. *How deep is my boredom?*7. *How important is that to the balance of trade?*8. *How often do you blog?*9. *How exactly did it happen?*2) Now complete the following dialogue using the correct *wh*-words and phrases.

Kim, the manager of an animal shelter, is talking to Chris, a voluntary worker.

KimChris1. _____ will you
feed the animals?I'm getting ready now.2. _____ are the
gloves?They are in the box.3. _____ have you
put in the dish?

Just some dried fruits.

4. _____ animals should
I feed first, the rabbits or the
hamsters?

b. Word order

1) What is the difference between a statement and a question? Read the following lines. Underline the subject of each statement and circle the verb.

1. Often infected people are rejected by family and friends.

2. No other organisation can help.

3. Both programmes are the largest of their kind in the country.

4. Nobody has explained this to her.

What is the order of the subject and the verb in a statement?

In a statement, the subject comes _____ the verb.

2) Read the questions below. Underline the subject of each question and circle the verb(s).

1. When does the show start?

2. "When are you moving in?" "Tomorrow."

3. How could she be so blind?

4. What colour are the seats in the House of Lords?

5. When does summer end and autumn begin?

What is the order of the subject and the (helping) verb in a question?

In a question, the subject comes _____ the (helping) verb.

c. Dummy “do”

Read the lines below. When do we add the helping verb/auxiliary “do” to form a question? Write down the question numbers in the box below.

1. When can you start?

2. "When did you see these two men?" Holmes asked.

3. "Why do you ask me?"

4. "When will the hijackers set them free?"

5. How has this happened?

6. Why is the dog running at me?

Questions with “do”	Questions without “do”

When do we add the helping verb (auxiliary) “do” to form a question?

The helping verb “do” is added in Questions 2 and _____ because these sentences do not have verbs such as “can”, _____.

d. Verb phrase structure

1) Circle the main verb in each question. What is its verb form?

-
- | |
|--|
| 1. Why do you <u>want</u> me to tell a lie to the police?
2. Why did you do that?
3. What does she plan to do with the photograph? |
|--|
-

Circle the right answers below.

When it follows the helping verb *do/does/did*, the main verb is in the *base/present tense/past tense/-ing/past participle form.

e.g., *What does she *learn/learns/learning/learnt?*

2) Circle the main verb in each question. What is the verb form after “be” (*is, am, are, was, were*)? The first one has been done for you as an example.

- | |
|---|
| 1. When was Jesus Christ <u>born</u> ?
2. Which way was it facing in the oven?
3. Why are you sitting here when all your friends are playing?
4. How long am I supposed to wait? |
|---|

Fill in the blanks and circle the right answers.

When it follows the helping verb “be” (*is, am, are, was, were*), the main verb is:

(1) a/an _____ to form the present/past continuous tense.

e.g., *Why are you *cry/cries/crying/cried?*

or

(2) a/an _____ to form the passive voice.

e.g., *When was the money *steal/steals/stole/stolen/stealing?*

Appendix B: Further language practice examples

a. Answer the following questions.

1. What was the first animal adopted?



2. What pet did the duck take home?

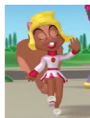


3. Why did Gilbert look worried?



b. Now read the answers given and write the questions.

1. _____ pet _____ the squirrel take?



She took a cat home.



2. _____ ?

Pig Mum wanted to adopt a pet because she wanted to find a little baby for Baby Oinky.

3. _____ ?



Joey took Gilbert home.

Appendix C: Pre- and post-tests

Part 1 Blank-filling

Choose the most suitable question word to complete each question below.

Who Whom Whose What Which Where When Why How

1. Dad: Jane, _____ are you speaking with?
Jane: I am speaking with Sam on the phone.
2. Child: Mum, _____ shall we have lunch?
Mum: We'll have it when your father is back home.
3. Teacher: _____ do you come to school so early every day?
Student: I can study quietly here.
4. Teacher: _____ finished the work first?
Student: Tony.
5. Mary: _____ dog should I take, the black one or the white one?
David: The black one.
6. May: _____ can I get to the roof?
Lily: Use a ladder.
7. Teacher: _____ bag is this?
Student: It's David's.
8. Teacher: _____ do you usually do on weekends?
Student: I often go swimming.
9. Visitor: Excuse me, _____ is the bus stop?
Sammy: It's outside 7-Eleven.

Part 2 Cloze

Read the conversation below and circle the correct answers.

Hazel met little Tony in a park while (1) _____ her dog. Tony was in tears.
Hazel: Hey, what has happened? Why (2) _____ so sad? What (3) "_____ to help you?"
Tony: I've lost my cat.
Hazel: Where (4) _____ last _____ your cat?
Tony: This park!
Hazel: Let's go to find it together! What (5) _____ like?
Tony: It has short, grey hair. Its name is Coco.
Hazel: Do you have any of Coco's things with you?

Tony took out a towel. Hazel asked her dog Lucy to sniff it. Lucy barked and then ran off.
Tony: How (6) _____?
Hazel: Lucy can remember smells and find Coco.

(continued)

The two children ran after Lucy.

Hazel: Where (7) _____, Lucy?

Finally, they found Coco next to a fire hydrant. Tony held Coco tightly.

Tony: Thank you for your help, Hazel!

Hazel: You should thank Lucy too.

- | | | | |
|------------------------|------------------|----------------------|---------------------|
| (1) A. she was walking | (2) A. will you | (3) A. am I do | (4) A. you ... saw |
| B. was she walking | B. do you | B. can I to do | B. were you ... see |
| C. she was walk | C. you are | C. I can do | C. did you ... see |
| D. she did walk | D. are you | D. can I do | D. did you ... saw |
| (5) A. it looks | (6) A. it helps | (7) A. are you going | |
| B. does it look | B. is it help | B. you are going | |
| C. is it look | C. does it help | C. will you going | |
| D. does it looks | D. does it helps | D. do you going | |

Part 3 Question Formation

Examine the picture and the sentences below. Create *wh*-questions based on the underlined parts.



Source: <https://en.islcollective.com/english-esl-worksheets/grammar/question-words/wh-questions-using-image/98648>.

1. _____?
The students have the Art lesson at 10:00 a.m.
2. _____?
Tim is talking with the teacher.
3. _____?
There are three brushes: blue, green and red. Paul uses the blue brush to draw.
4. _____?
Sam enjoys the Art lesson because he likes artwork.
5. _____?
Ali is cutting out a paper star.

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