

The Impact of ‘Think-Talk-Write-Practise’ Strategy on Primary Four pupils’ Performance in Stimulus-based Conversation

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Abstract

The focus of our research project was to do a comparative study of the impact of the ‘Think-Talk-Write-Practise’ strategy on pupils’ performance in Stimulus-based Conversation in the Primary Oral examination. The method used was a pre- and post-test quasi-experimental design. The research was carried out on a total of two Primary 4 classes of 80 pupils. A comparison between the traditional teacher-centred lessons and the use of the ‘Think-Talk-Write-Practise’ strategy was carried out. A total of 20 lessons were carried out over a period of 10 weeks. Pre- and post-tests were administered to the two groups of pupils. The test consisted of standard questions in the Stimulus-based Conversation component used for semestral oral examinations. Improvements in the post-test results were observed for both experimental and control groups. However, both teachers and pupils saw the benefits of using the strategy in the Stimulus-based Conversation components of oral examinations.

Introduction

It was highlighted in the Ministry of Education’s *English Language Syllabus 2010* (Curriculum Planning & Development Division, 2008) that teaching and learning in Singapore schools should raise the English language competency of all pupils. In particular, schools have to equip their pupils with skills to generate ideas, plan and organise presentations. Hence, following the publication of the revised English Language Syllabus, a new assessment format for the oral component was introduced and implemented in 2015. Under the new format of oral testing, the conversation component has been merged with the picture discussion component to form the new Stimulus-based Conversation component in the Primary School Leaving Examination (PSLE). Instead of getting pupils to describe the given picture without further input, the Stimulus-based Conversation component requires pupils to express their personal opinions, ideas and experiences clearly and effectively while conversing with the examiner. Pupils are also assessed on their ability to speak fluently with grammatical accuracy, using a range of appropriate vocabulary and structures. From the feedback of English Language teachers, the new format is definitely more demanding for pupils as it requires pupils to think on their feet for content while applying the right sentence structure and appropriate vocabulary. On the other hand, the old format allowed pupils to practise describing a

picture and applying standard phrases and vocabulary before the examinations.

Given the demands of the revised oral component, it is pertinent for students to develop both speaking and thinking skills in the language classroom. One way to promote these skills in young learners would be through the 'Think-Talk-Write-Practise' strategy described below. Another impetus for the research is the potential of the 'Think-Talk-Write-Practise' Strategy for developing the 21st Century Competencies in the pupils. Through the explicit teaching of organization skills for thinking, pupils develop their Critical Inventive Thinking (CIT) skills. The use of a wide range of reading, and audio-visual materials enabled pupils to be exposed to multi-cultural content which developed the pupils' awareness of Civic Literacy, Global Awareness and Cross-cultural (CGC) skills.

Literature Review

The learning of oral skills has been documented many times as a platform for developing pupils' literacy skills (Dickinson & Tabors, 2001; Scarborough, 2001). Oral skills enable pupils to develop their abilities to construct and process complex sentences. This eventually leads them to pick up oral skills such as narrating and recounting.

In addition, Vygotsky's (1978) learning theory explains that allowing pupils to be active learners through talking is crucial to the learners as, in this way, they clarify what they have learnt. He theorized that talking was important not just to clarify understanding but also for the individual to learn how to communicate. By talking in the classroom, pupils internalize concepts. Vygotsky's notion of the 'zone of proximal development' which represents the difference between what a learner can do without help and what he or she can do with help, strongly supports immersing pupils in social interactions to develop their skills sets. He believed that adult guidance and peer collaboration play an important role in helping pupils to learn, through bringing objects and ideas to their attention, discussing a topic, sharing ideas, playing while sharing, reading stories, and asking questions.

Research has also suggested that talking is essential in the development of understanding (Jones, 2007). When trying to speak their thoughts, children often become clearer in their understanding of a topic. Thus, it is important for classroom strategies to focus on making implicit thoughts explicit. Kaur (2012) postulated that the highest student achievement occurs in schools where high level thinking and reasoning are encouraged. Talk in the classroom facilitates pupils in uttering their thoughts to clarify their own thinking.

The 'Oral Language Pie' (McCandlish, 2012) highlighted four domains of oral language (i.e., Listening and Responding, Building Words in Talk, Vocabulary & Concepts and Retells & Recounts) that can be developed by educators in their pupils. In this project, we have selected the 'Think-Talk-Write' strategy as the focus of this project. It enables pupils to grasp the skill of building talk into and for their thinking. The 'Think-Talk-Write' strategy has been effectively used by educators to lead children into articulating and recording their thoughts in an organised manner. At the 'Think' stage, graphic organisers, videos and photographs of a selected theme are used to assist pupils to think about the theme. The variety of stimulus also provides the opportunity for the explicit teaching of vocabulary for the theme. The graphic organisers enable pupils to organise their ideas, and hence help to organise thinking. At the 'Talk' stage, pupils come together in groups to engage in talk about the theme. Talking about their experience and sharing ideas are crucial in strengthening oral language skills and assist the children in organising language. At the 'Write' stage, pupils devote time to pen down their thoughts and experiences and this helps them organise their thinking. Bearing in mind that the main objective of this project is to improve the oral skills of pupils, we want to bring the strategy to the next level by including the component of 'Practise'. This is to ensure that pupils familiarize themselves with the skills and assimilate them into their oral conversation with ease. Since the pupils are IT-savvy, we have incorporated the use of technology into

the component of ‘Practise’. The pupils showcase what they have learnt through a website called ‘Kaizena’. On this website, the pupils are able to record their conversation after which their peers provide feedback. In so doing, the pupils not only improve on their oral skills based on the feedback given but they are also empowered to assist in improving their peers’ oral skills.

Our research question was:

Will the use of the ‘Think-Talk-Write-Practise’ strategy increase Primary 4 pupils’ oral scores for stimulus-based conversation?

Methodology

Samples

Two classes of Primary 4 pupils were selected. One was the comparison class and the other the experimental class. Both groups took a pre-test and post-test (see Appendix A for a sample of the testing materials).

Intervention

The study used a quasi-experimental design. The pupils were selected based on their entry point for English in Primary 3. Forty pupils were selected from each of the two classes. The research was conducted over a period of 10 weeks from 29 June 2015 to 31 August 2015. The teacher of the experimental group conducted two lessons per week which made up the oral curriculum for the week. Another English teacher, who was not the teacher of the experimental group, conducted oral lessons for the comparison group based on the STELLAR curriculum.

Randomized groups pre-and-post-test design			
	Pre-test	Action	Post-test
R1	O1	X	O3
R2	O2	--	O4

Data collection

Two tests were administered to both the experimental and comparison groups in the form of a pre-test and a post-test (refer to Appendix A). Both comprised the standard question types found in the Stimulus-based Conversation component of the semestral oral examinations. The themes for the pre- and post-tests differed slightly.

The oral lessons were conducted based on the ‘Think-Talk-Write-Practise’ strategy as outlined in the Oral Language Pie approach (McCandlish, 2012). Lesson packages to teach using the targeted strategy were designed and five common Stimulus-based Conversation themes were selected. Appendix B shows the five themes selected for the intervention. A sample of the lesson package designed to teach oral skills to pupils is found in Appendix C. A perception survey was also conducted to provide insights into the affective, behavioural and cognitive engagement of the pupils (Appendix D).

Results

A paired-samples t-test was conducted to evaluate whether there was a significant change in pupils’ ability to answer questions in the Stimulus-based Conversation component of oral examinations after the intervention. For the experimental group, there was a significant difference in test scores of pupils in the pre-test ($M = 7.13, SD = 1.18$) and post-test ($M = 7.78, SD = 1.29$); $t(40) = -3.23$,

$p = .003$ (2-tailed). The effect size of $r = .254$ indicated that the impact was small.

Table 1
Paired-Samples t-test for Experimental Group

	Mean	SD	t-value	Df	p
Pre-Test	7.13	1.18			0.003
Post-Test	7.78	1.29	-3.23	39	

For the comparison group, there was a significant difference in test scores of pupils in the pre-test ($M = 6.88$, $SD = 1.04$) and post-test ($M = 7.25$, $SD = 1.01$); $t(39) = -2.94$, $p = .005$ (2-tailed). The effect size of $r = .178$ indicated that the impact was small.

Table 2
Paired-Samples t-test for Comparison Group

	Mean	SD	t-value	Df	p
Pre-Test	6.88	1.04			0.005
Post-Test	7.25	1.01	-2.94	39	

An independent samples t-test was conducted to compare the results of both groups for pre-test and post-test. There was no significant difference in the pre-test scores for the experimental group ($M = 7.13$, $SD = 1.18$) and the comparison group ($M = 6.88$, $SD = 1.04$); $t(80) = 1.00$, $p = .715$ (2-tailed). The Levene's Test for Equality of Variances showed a significant inequality between both groups at the start of the study, $F(1, 79) = .13$, $p = .720$. There was no significant difference between the post-test scores for the experimental group ($M = 7.78$, $SD = 1.29$) and the comparison group ($M = 7.25$, $SD = 1.01$); $t(80) = 2.03$, $p = .300$.

Table 3
Independent Sample t-test for Pre-Test and Post-Test

	Groups	N	Mean	Std.Deviation	Std.Error	t	Sig. (2-tailed)
					Mean		
Pre-test	Experimental Group	40	7.13	1.18	0.19	1.00	0.715
	Comparison Group	40	6.88	1.04	0.16		
Post-test	Experimental Group	40	7.78	1.29	0.24	2.03	0.30
	Comparison Group	40	7.25	1.01	0.16		

Discussion

Quantitatively, there was a significant difference in the test scores of the pupils in the pre-test and the post-test for the experimental group as well as comparison group.

Goh and Doyle (2014) stated that most pupils engage in 'exploratory talk' which resembles everyday talk (talk that is not prepared or is more spontaneous) if they are working in a small group. As

the pupils work in a small group setting, they attain a better understanding of the topic by thinking together, responding to each other's' talk and defending their views. According to the authors, this form of exploratory talk enables pupils to learn the language by strengthening their vocabulary and the structures pertaining to the topic or subject. The teacher's role then is to move the pupils from this spontaneous and unprepared talk to a more structured one.

In this research project, the pupils were placed in a social setting in which they could generate ideas with the help of their peers. The pupils were given free rein to vocalise their ideas and opinions. They were engaged in group work for most part of the lessons. The teacher then provided graphic organizers and planned other activities like journal writing to help organize the pupils' thought processes, opinions and ideas.

The perception survey results also produced the following results:

- 100 % of the pupils agreed that oral lessons were interesting and fun;
- 100 % of the pupils felt that they were encouraged to ask questions and show curiosity during oral lessons; and
- 100% of the pupils felt that they had learnt how to organise their thoughts when they shared their experiences.

The teacher in the experimental class noticed that through the use of the 'Think-Talk-Write-Practise' strategy, pupils were more effective in producing ideas and organizing their thoughts. In the perception survey, the pupils gave positive feedback on the use of the many resources in their oral lessons as they were flooded with ideas pertaining to the given themes through the use of magazines, pictures, PowerPoint slides, newspapers and articles. They also stated that they would have liked to discuss more uncommon themes like sea creatures or discoveries around the world rather than the themes covered which included places of interest, hobbies, pets and sports.

Although the pupils seemed to enjoy the 'Think-Talk-Write-Practise' strategies, they were not so positive about the 'practise' segment. From the perception survey, only 69% of the pupils said that they enjoyed recording their sharing online. The pupils might have encountered difficulties recording their responses using the given online programme. Teachers may want to consider using recording functions on other ICT devices to carry out the 'practise' segment of the strategy should they want to try and replicate this study.

The pupils' ability to engage in the Stimulus-based Conversation during Semestral Assessment 2 and their subsequent encouraging results could have been due to the fact that the topic discussed was similar to one of the themes in the Oral Package that was designed for this research project. The topic was 'Pets'. Pupils who owned pets also had an added advantage and might have performed better in the oral assessment as a result.

Conclusion

Since both the teacher-centred and 'Think-Talk-Write-Practise' strategies are effective in bringing about an improvement in the performance of pupils in Stimulus-based Conversation, the teacher has the luxury of finding the right mix of teaching methods to address the learning needs of the pupils. Since the ultimate ideal goal of any teacher is to mould pupils into confident people, it is important to bring out the best in any child, be it in speech, language skills, or the latent talent budding in them. Further studies could focus on the impact of the 'Think-Talk-Write-Practise' strategy on high progress pupils. It would be useful to study the effects of this strategy on the quality of pupils' conversations.

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Appendix A: Pre- and Post-Test

YISHUN PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1

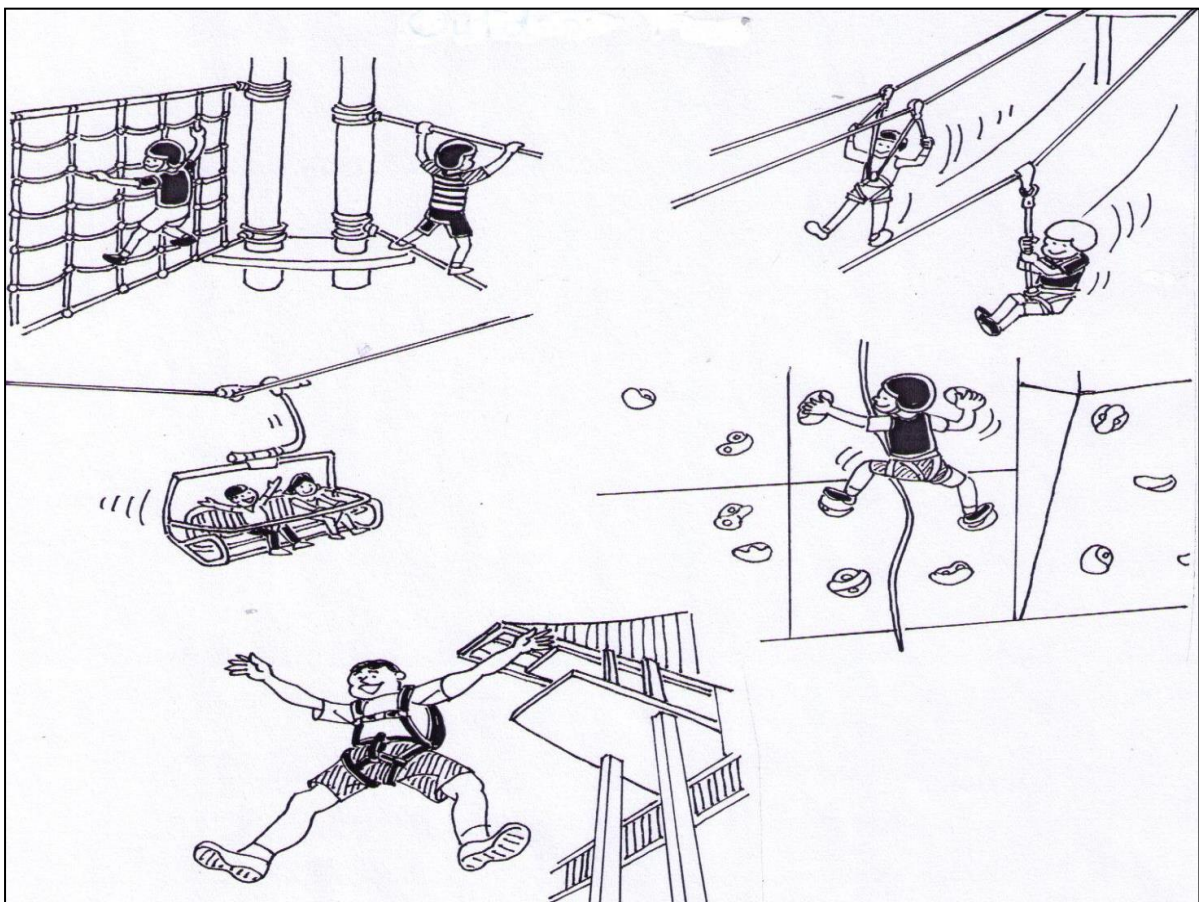
2015
PRIMARY 4
ENGLISH LANGUAGE
ORAL

Stimulus-Based Conversation

10 marks

Day 1

Outdoor Fun



**YISHUN PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 1
2015
PRIMARY 4
ENGLISH LANGUAGE
ORAL**

**Stimulus-based Conversation
Day 1**

Notes to Examiners:

- (i) Use all the main prompts, (a), (b) and (c).**
 - (ii) The bulleted prompts are provided for examiners to use as necessary. You should use them at your discretion to facilitate the conversation.**
 - (iii) You may also come up with your own additional prompts or discuss with the candidate relevant issues that might arise in the course of the conversation.**
-
- (a) Look at the picture. Which of these have you tried? Tell me about your experience.
 - If you have not tried any of these activities before, which of them would you be willing to try? Why?

 - (b) There are some children who are afraid of heights and will keep away from such activities.
 - Do you think they should give it a try so that they can overcome their fear? Why?
 - If you were afraid of heights, what would you do about it?

 - (c) There is usually an admission fee for the activities shown in the picture.
 - Can you name some places in Singapore where families can have a great time without having to pay anything?
 - Tell me about a time when you went to a fun place with your family that was free of charge.

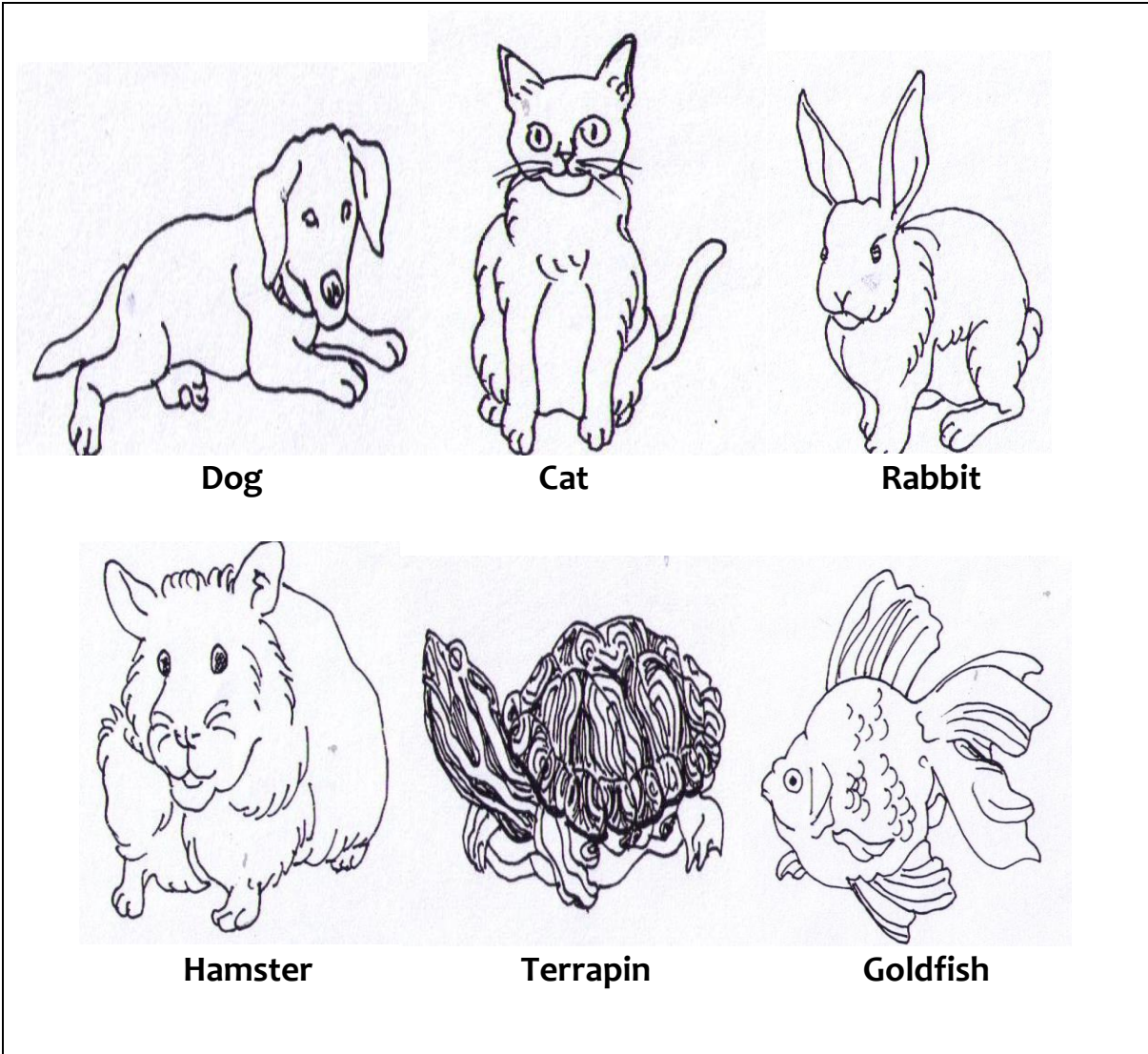
YISHUN PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2

2015
PRIMARY 4
ENGLISH LANGUAGE
ORAL

Stimulus-based Conversation

10 marks

Day 1



**YISHUN PRIMARY SCHOOL
SEMESTRAL ASSESSMENT 2
2015
PRIMARY 4
ENGLISH LANGUAGE
ORAL**

Stimulus-based Conversation

10 marks

Day 1

Notes to Examiners:

- (i) Use all the main prompts, (a), (b) and (c)
- (ii) The bulleted prompts are provided for examiners to use as necessary. You should use them at your discretion to facilitate the conversation.
- (iii) You may also come up with your own additional prompts or discuss with the candidate relevant issues that might arise in the course of the conversation.

Prompts for Stimulus-based Conversation:

- (a) Look at the picture. Which one of the animals would you like to have as a pet? Tell me why?
 - How would you go about learning how to care for your pet/pets so you can be a responsible pet owner?

- (b) Sometimes pets are abandoned by their owners. What do you think could be the reason?
 - What can be done to stop owners from abandoning their pets?

- (c) Why are wild animals not allowed to be kept as pets?
 - Name some places we could go if we wanted to see wild animals.
 - Which wild animal do you admire the most? Tell me what you know about it.

Appendix B: Themes

No.	Topic	Term/Week
1	Pets	T3 Wks 1-2
2	Hobbies	T3 Wks 3-4
3	Sports	T3 Wks 5-6
4	Celebration	T3 Wks 7-8
5	Places of Interests	T3 Wks 9-10

Appendix C: Sample of Lesson Package

TEACHERS' GUIDE – Primary 4

WEEK 3/ Lesson 1:

Specific Instructional Objectives

By the end of the lesson, pupils will be able to:

1. Learn vocabulary and phrases associated with the theme 'Hobbies'.
2. Organise their thoughts and thinking on the targeted topic using appropriate vocabulary.

21st CC Skills

1. Critical and Inventive Thinking;
2. Communication, Collaboration and Information Skills

No.	Activity	Rationale	Time	Resources
Wk 3 L1	<p>Key Quality 1: THINK</p> <p>I. Tuning-In Teacher shows pupils the video about hobbies. https://www.youtube.com/watch?v=GLJpFqYhuuQ Think-pair-share:</p> <ol style="list-style-type: none"> 1. Why did the characters want to have a hobby? 2. What is considered a hobby? <p>II. Activity 1: Categorisation Pupils will be given a series of pictures depicting different types of hobbies. Pupils will work in groups of 4 to sort out the hobbies according to different categories. Teacher can suggest categories or pupils can come up with them on their own. Pupils paste the pictures onto butcher paper. Possible categories: outdoors and indoors Individual activity and group activity</p> <p>III. Activity 2: Brainstorm! After sorting the hobbies into categories, pupils brainstorm vocabulary and phrases associated with the hobbies. Pupils write the words and phrases on the butcher paper with the pictures.</p> <ul style="list-style-type: none"> • What would be some of the feelings if you carried out the activities? • What would you need to prepare if you took up the hobbies? • Why do people take up that hobby? (Targeted language features: giving opinions, present and future tense) <p>Teacher to walk around to facilitate discussion and lead pupils to come up with the targeted language features, words and phrases.</p> <p>IV. Activity 3: Coming Together Groups work together using Google Slides to collate the words and phrases associated with the theme.</p> <p>V. Closure Teacher goes through the targeted language features, words and phrases associated with the theme.</p>	<p>Teaching Processes (<i>MOE Syllabus, 2010</i>)</p> <p>Raising Awareness</p> <ul style="list-style-type: none"> • (Vygotsky's Social Constructivist Theory) • To stimulate interest through audio cues and create awareness. • Oral Language Pie – THINK (using pictures to help pupils acquire targeted language features, and vocabulary associated with the theme) • Organisation of thoughts <p>Guiding Discovery</p> <ul style="list-style-type: none"> • To provide pupils with familiar contexts to help them create meaning in their learning. • Collaborative learning <p>Guiding Discovery</p> <ul style="list-style-type: none"> • To provide scaffolding for pupils to come up with the targeted language features. • Collaborative learning <ul style="list-style-type: none"> • To help pupils recapitulate on what was learnt in the lesson. 	<p>10m</p> <p>10m</p> <p>15m</p> <p>10m</p> <p>5m</p>	<ul style="list-style-type: none"> • Video https://www.youtube.com/watch?v=GLJpFqYhuuQ • Pictures of hobbies (RS 1.1) • Butcher paper • Glue • I pads / lap tops • Google slides

Appendix D: Perception Survey

Questionnaire for Pupils on Learning & Teaching

	Strongly agree	Agree	Disagree	Strongly disagree
1. Oral lessons are interesting and often fun.				
2. I learn how to organise my thoughts when I share my experiences.				
3. The teacher gives me encouragement and the confidence that I can speak up during oral lessons.				
4. I am encouraged to ask questions and show curiosity during oral lessons.				
5. If I'm stuck, my friends give me ideas during class discussions.				
6. I am trusted and encouraged to do things for myself.				
7. Writing down my points makes it easier for me to talk about my experiences.				
8. I know what I need to do to make progress in my oral presentations.				
9. I enjoy recording my sharing online.				
10. Recording my oral presentation helps me to be more confident in sharing my thoughts and experience.				
What are the best things about the oral lessons at the school?	If you could change one thing about the oral lessons at the school, what would it be?			