CHAPTER FIVE

FINDINGS

In this chapter the data to answer the following research questions will be analysed: Is there evidence of higher order thinking in students’ responses to the portfolio assessment tasks? What evidence of self-assessment do students exhibit when performing portfolio assessment? What are the characteristics of teacher assessment and feedback available to students during portfolio assessment? What are students’ perceptions of the Portfolio Assessment Package? Data were collected from students’ work on the various assessment tasks, their self-assessment and peer-assessment of these pieces of work, teacher’s assessment of students’ work, students’ journals, the teacher’s journal, the researcher’s field notes, and interviews with students and the teacher. The data collected were then analysed qualitatively. However, some quantified data in the form of percentages were used to substantiate the information.

5.1 Analysis of Students’ Responses to Assessment Tasks: Evidence of Higher Order Thinking

Higher order thinking is defined differently by different researchers (Newmann, 1990, Resnick, 1987b). However, for the purpose of this study, higher order thinking (HOT) is taken to mean all levels of thinking that goes beyond the memory phase of recall. The data were analysed according to Strauss and Corbin’s (1990) coding procedures. Data (students’ responses to the Assessment Tasks) were analysed into phenomena, categories, properties, dimensions and its dimensional range based on Strauss and Corbin’s (1990) open coding. In other words, the data (students’ responses to
the Assessment Tasks) were categorised according to higher order thinking categories. The phenomenon that was examined in this research question was higher-order thinking. Higher-order thinking was categorised into three predetermined categories that are, interpreting and applying, organising and creating and making judgments. Each category includes several properties as follows: interpreting and applying (paraphrasing, interpreting, citing examples, making inferences, applying principles), organising and creating (questioning assumptions, making comparisons, categorizing, organising and integrating information, creating), and making judgments (selecting and providing reasons, making value judgements using criteria). The dimensions and the dimensional range however emerged from the data, that is, they showed the extent of students responses that fell within the various categories (refer to Table 5.1).

Sometimes students' responses depict mere recall, in which case it will not be categorized as higher order thinking. These responses are regarded as lower order thinking (LOT).

In the previous chapter (Chapter 4) in describing the development of the Portfolio Assessment Package, it was mentioned that each of the assessment tasks was designed to encourage students to perform higher-order thinking when responding to the tasks (refer to chapter 4, Table 4.2). In this chapter, students' responses to the Assessment Tasks were analysed to determine if there were evidences of higher-order thinking manifested in their responses to the tasks. The analysis also showed the percentage of students' responses (dimensional range) that displayed such evidences.

Besides categorising the data (students' responses to the Assessment Tasks) according to higher order categories, students' responses were also categorised according
<table>
<thead>
<tr>
<th>Task</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
<th>Dimensional Range</th>
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<tbody>
<tr>
<td>AT1.1.1a/1.1.2a (Location of Malaysia in Southeast Asia and in the world) Question 1A(iv)</td>
<td>Interpreting &amp; applying</td>
<td>Applying principles</td>
<td>Direct Application</td>
<td>86.1% of responses were at least 50% accurate. (Appendix 12)</td>
</tr>
<tr>
<td>Question 1B(iv)</td>
<td>Interpreting &amp; applying</td>
<td>Applying principles</td>
<td>Direct Application</td>
<td>83.3% of responses were at least 50% accurate. (Appendix 12)</td>
</tr>
<tr>
<td>Question 1C</td>
<td>Interpreting and applying</td>
<td>Making inference</td>
<td>Giving an opinion based on reasons observed from map1a &amp; map1b</td>
<td>61.8% responses had at least 1 inference with reason. (Appendix 13)</td>
</tr>
<tr>
<td>AT1.1.1b/1.1.2b (Cycling expedition) Question 2(v)</td>
<td>Interpreting and applying</td>
<td>Paraphrasing</td>
<td>From visual to tabular form</td>
<td>86.1% of responses were at least 50% accurate.</td>
</tr>
<tr>
<td>Question 2(vi)</td>
<td>Interpreting and applying</td>
<td>Paraphrasing</td>
<td>From visual &amp; tabular form to written form</td>
<td>50% of the students able to produce reports with no errors. (Appendix 14)</td>
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<tr>
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<tr>
<td>AT1.2.1a (States of Malaysia – Jigsaw Game)</td>
<td>Organising &amp; creating</td>
<td>Making comparisons</td>
<td>Comparing similarities &amp; differences</td>
<td>58.3% responses were more than 50% accurate. (Appendix 15)</td>
</tr>
<tr>
<td>AT1.2.1b (States of Malaysia – Making a map of Malaysia)</td>
<td>Organising &amp; creating</td>
<td>Organising &amp; integrating information, &amp; creating</td>
<td>Selecting relevant material, organising in a sensible (accurate) order.</td>
<td>All groups able to create the map. (Appendix 16)</td>
</tr>
<tr>
<td>AT1.2.1c (States of Malaysia- Poster Competition)</td>
<td>Interpreting &amp; applying</td>
<td>Paraphrasing &amp; citing examples</td>
<td>Writing contents using own words</td>
<td>7 of 9 groups able to paraphrase sufficient &amp; relevant material.</td>
</tr>
<tr>
<td></td>
<td>Organising &amp; creating</td>
<td>Creating</td>
<td>Creating a product – A poster</td>
<td>8 of 9 groups able to cite examples from other sources &amp; their own examples.</td>
</tr>
<tr>
<td>AT1.2.2a (States of Malaysia – Flags &amp; other symbols)</td>
<td>Interpreting &amp; applying</td>
<td>Paraphrasing</td>
<td>Writing contents using own words</td>
<td>All responses contained paraphrasing.</td>
</tr>
<tr>
<td></td>
<td>Making Judgment</td>
<td>Selecting &amp; providing reasons</td>
<td></td>
<td>All responses were without reasons cited. (Appendix 18 – Table 1)</td>
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<tbody>
<tr>
<td>AT1.2.2b (States of Malaysia – State Emblem)</td>
<td>Organising &amp; creating</td>
<td>Categorising</td>
<td>Listing common characteristics under generic terms</td>
<td>All 3 groups able to prepare list.</td>
</tr>
<tr>
<td>Making Judgment</td>
<td>Providing reasons</td>
<td>Providing logical &amp; relevant reasons</td>
<td>1 of 3 groups able to provide reasons. (Appendix 18 – Table 2)</td>
<td></td>
</tr>
<tr>
<td>AT1.2.2d (States of Malaysia – Designing a flag &amp; emblem)</td>
<td>Organising &amp; creating</td>
<td>Creating</td>
<td>Creating an idea</td>
<td>All 3 groups created the flag; 2 groups created the emblem.</td>
</tr>
<tr>
<td>Making Judgment</td>
<td>Providing reasons for selection</td>
<td>Providing logical &amp; relevant reasons</td>
<td>3 groups able to provide reasons for design of flag; 1 group provided reasons for design of emblem. (Appendix 18 – Table 3)</td>
<td></td>
</tr>
<tr>
<td>AT1.3.1a (Identity of the country – Preparation for school assembly)</td>
<td>Interpreting &amp; applying</td>
<td>Applying principles</td>
<td>Direct application of principles</td>
<td>3 groups able to sing National Anthem according to criteria.</td>
</tr>
<tr>
<td>Interpreting &amp; applying</td>
<td>Paraphrase</td>
<td>Using own words</td>
<td>3 of 12 students able to paraphrase the explanation of the National Flag.</td>
<td></td>
</tr>
<tr>
<td>Interpreting &amp; applying</td>
<td>Paraphrase</td>
<td>Using own words</td>
<td>9 of 12 students able to explain National</td>
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</tr>
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<tbody>
<tr>
<td>AT 1.3.1b (Identity of the country – The Malaysian Flag)</td>
<td>Organising &amp; creating</td>
<td>Creating</td>
<td>Create a product</td>
<td>5 of 12 students produce souvenirs with accurate flags</td>
</tr>
<tr>
<td></td>
<td>Making judgments</td>
<td>Providing reasons</td>
<td>Providing reasons that are logical &amp; relevant</td>
<td>7 of 12 students gave reasons to support their statements. (Appendix 19 – Table 2)</td>
</tr>
<tr>
<td>AT1.3.1c (Identity of the country – Mural)</td>
<td>Organising &amp; creating</td>
<td>Creating</td>
<td>To produce a product</td>
<td>4 of 12 students able to create a mural with 5 symbols creatively.</td>
</tr>
<tr>
<td></td>
<td>Interpreting &amp; applying</td>
<td>Paraphrasing</td>
<td></td>
<td>All students <strong>unable</strong> to paraphrase features of National Emblem. (Appendix 19- Table 3)</td>
</tr>
</tbody>
</table>
to the nature of the task. Students' responses were then compared across the different
tasks to determine if the nature of the tasks had an effect in influencing or discouraging
students from performing higher-order thinking. The tasks were compared on the basis of
whether they were group or individual tasks, if resources were supplied or if students
needed to source for their own material, and if the tasks were activities, or pencil and
paper tasks. Strauss and Corbin’s axial coding procedures were used to make these
comparisons.

So far the analysis of data to determine evidence of higher order thinking was
examined from the perspective of students responses, which is the result of students
interacting with the Assessment Tasks. What effect, if any, did the teacher’s interaction
with the students and Assessment Tasks have on students’ responses? The teacher’s
interaction with the students and Assessment Tasks will be referred to as task
management. The analysis of data will also review task management to see its effects, if
any, on students' higher order responses. Again Strauss and Corbin’s axial coding
procedure was used to show if task management had an effect on the phenomenon
(students’ higher order thinking responses). The data for teacher’s task management was
obtained from the field notes. This evidence was corroborated with students’ self-
assessment statements in the form of revelations of how they did their task. Therefore
three sources of evidence were used to establish if students’ performed higher order
thinking in their responses to the Assessment Task. They were students’ responses to the
Assessment Tasks, teachers’ task management strategies, and students’ self-assessment
statements.
Only those aspects of the Assessment Tasks that were designed with a higher order thinking component will be discussed in this chapter. The following are the findings derived from the analysis of students' responses to the Assessment Tasks of the Portfolio Assessment Package, students' journals, researcher's field notes, and students' self-assessment statements.

5.1.1 Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in Southeast Asia, and in the world)

Assessment Task 1.1.1a/1.1.2a was about the location of Malaysia in relation to the countries of Southeast Asia and the continents of the world. There were three questions in this task. Question 1A was related to map work. For this question students were required to name the countries of Southeast Asia on map1a (recall - LOT task) and then state their location in relation to Peninsula Malaysia. It was found that students were able to state the location of the countries of Southeast Asia in relation to Peninsula Malaysia (86.1%) (Table 5.1). Students' responses revealed that students were able to apply their skills and knowledge of compass points to state the location of countries. Question 1B on the other hand required students to name the continents marked on map1b (recall - LOT task) and then state their locations in relation to Peninsula Malaysia. For this task evidence showed that students were able to apply (property) their skills and knowledge in compass points to state the locations of continents in relation to Peninsula Malaysia. Students' responses to question 1A and question 1B revealed that students' performed higher-order thinking and their responses were categorised as 'interpreting and applying'. Their responses also indicated that they had performed direct application (dimension) of the principles of stating location in compass points. The
dimensional range of students' responses was along a continuum of being able to apply the principles of reading compass points and not being able to read compass points, which revealed that 83.3% of the students were able to apply the principles of stating location using compass points.

Task management: How did Ms Jamilah interact with the Assessment Task 1.1.1a/1.1.2a (question 1A) and students? ... to class with Ms Jamilah ...

“Class refer to question 1. Read the question. What do you understand by the question?” She called on Nalini. Nalini stood up but said nothing. Ms Jamilah then called Izan. Izan also stood up but said nothing. Amy then raised her hand. Ms Jamilah asked her to explain what she understood by the question. Amy replied, “I’ve won the first prize in the essay writing contest. My prize is an experience to study in California, US. My friends do not know where Malaysia is located. I need to show them where Malaysia is located”.

Ms Jamilah then instructed students to do their task. She told them to write the directions on a sheet of answer paper. She wrote the following sentence on the board: The location of Peninsula Malaysia in relation to Myanmar is. Ms Jamilah instructed students to follow the particular sentence pattern.

... As I walked around the class Norlela told me that she did not know how to read the compass points. I drew the compass points for her on her map and asked her to name them. After that she was able to describe the locations of the other countries.

How did Ms Jamilah’s task management influence students higher order thinking? The students who followed the teacher’s key sentence produced grammatically error free sentences. However, despite their correct sentences, some students made errors in describing the location. Ms Jamilah’s guidance was limited to giving instructions on task procedure and standardizing style of presentation. Coaching was given to individual students according to their needs.
As for Question 1B, Ms Jamilah guided students in naming the continents of the world and in recognising the location of Malaysia in relation to the continents of the world. She then gave instruction to students to answer Question 1B(iv) on a piece of writing paper. Ms Jamilah wrote the key sentence on the board for students to follow, “The continent of ... is located ... of Peninsula Malaysia”.

Ms Jamilah’s management of this question had a similar effect on students’ responses as in the previous question. Students were able to use grammatically correct sentences but their responses to describing locations using compass points had errors. This was because the teacher’s guidance was more towards providing a standardized style of presentation. The teacher did not teach students how to read compass points. Coaching was given to individual students ‘on demand’, that is when they needed it. Therefore students’ performance on the task can be attributed to their own effort and ability.

For question 1C students were required to make at least three observations on the location of Malaysia based on the two maps they had completed in question 1A and question 1B. In order to answer question 1C, students were required to analyse the map of Southeast Asia (map 1a) with regard to the location of Malaysia in relation to the countries in Southeast Asia and they were also required to analyse the map of the world (map 1b) with regard to the location of Malaysia in relation to the continents of the world. Students then made inferences based on their observations concerning the location of Malaysia in relation to the countries of Southeast Asia and the continents of the world and wrote out their comments. In order to answer this question, students had to integrate information from various sources namely map 1a and map 1b and make inferences on the location of Malaysia, for example how its location plays a role in its past and present
development. They were required to present their answers in the form of a graphic organiser. This question was categorised as ‘interpreting and applying’.

Analysis of students’ responses showed that most students were able to make at least one inference (61.8%). Making inferences is a property of the ‘interpreting and applying’ category. The inferences these students made were based on reasons (dimension). However the reasons differed along a dimensional range from reasons that were based on observations made from map 1a and map 1b and reasons that were made not based on observations from map 1a and map 1b.

Suriani in her responses made inferences that provided reasons, which were based on observations made from map 1a and map 1b. She wrote, “...[Malaysia is a] centre of trade because the location is near for them [neighbours] to come and trade”. She continued by saying that, “[Malaysia is a] centre of tourism because it is located in the centre of Southeast Asia, [so it is] easy for the tourist to come to Malaysia”. The next inference she made was, “[Malaysia is a] centre of waterways and has the potential to become a fishing centre”. Amy besides mentioning that Malaysia is a centre of tourism, also wrote, “Malaysia is a business centre because it is easy for many traders from neighbouring countries to come because Malaysia is located in the centre of Southeast Asia and the east and west”. Another inference she made was, “[Malaysia is a] centre of waterways because it is surrounded by seas and rivers and it can also become a fishing centre”.

On the other end of the dimensional range, students made inferences that were not drawn from observations based on map 1a and map 1b. Nalini wrote, “[Malaysia is a] shopping centre because tourist can come and buy things as souvenirs”. Similarly Izan
wrote, 

"[Malaysia is a] centre for shopping because the things in Malaysia are cheap and attractive."

The task required students to make at least three observations on the location of Malaysia by referring to map1a and map1b. So in analysing students’ responses according to task requirements, it was found that only nine of the thirty-four students who did this task were able to make three observations by referring to map1a and map1b. Another twelve students were able to make at least one observation by referring to map1a and map1b.

How did students arrive at their responses? Task management: ...in Year 5 Bijak.

It is 9.00 am, Monday, the 28 January 2002 ... Ms Jamilah began her lesson for the day by getting students to look at the big wall map of the world... she asked Izan "... show the class where Malaysia is located..." The student showed the location of Malaysia correctly. Ms Jamilah then asked the class, "... what observations can you make about the location of Malaysia?" [silence]. "I’ll begin by giving some examples". She pointed out to students the location of Malaysia, which was central in relation to the countries of South East Asia. She mentioned the names of countries located to the North, South and East of Malaysia ...She then used an analogy, "... what if a cake was placed in the centre of the group?" The students replied, "... we will go towards the cake". "That’s true of Malaysia. People from neighbouring countries came to Malaysia for different reasons. Why did they come?" Students shouted, "... to visit Malaysia”, "...to do business". Ms Jamilah wrote on the board “Centre of tourism” and “Business centre”.

Ms Jamilah drew students’ attention to the different races that were present in the class ... she explained that people from different countries came to Malaysia and some married with locals.

Ms Jamilah then drew students’ attention to the seas surrounding Malaysia. She asked students, "... how does this affect Malaysia?" Students replied, "... it provides a means of transport". Ms Jamilah explained that, that was why Malaysia had ports like Port Klang and Port of Kuantan. "What is the likely occupation of the people who live along the coast?" The students replied, “fishing” and she wrote “fishing” on the board.
Ms Jamilah’s lesson provided the stimulus for the students’ responses. There was a close link between what was discussed by Ms Jamilah that morning and the responses that students like Suriani, Amy and nineteen others made. This goes to emphasise that in portfolio assessment, teaching, learning and assessment are linked. Ms. Jamilah provided guidance to students on how to make observations. She also coaxed students for answers by making an analogy and putting forth probing questions.

Besides teacher guidance having an effect on students’ responses, teacher feedback was also found to influence students’ responses.

... stop work. I want you all to listen to what group 6 has written. First, Malaysia is a centre of entertainment. Second, Malaysia is a centre of tourism. Third, Malaysia is a centre of ports. Next Malaysia is a centre of business. Then, Malaysia is a centre of trade. Malaysia is a centre of waterways. Malaysia has become an international centre, and lastly Malaysia is a shopping centre. There are eight points. Okay good work group 6.

The teacher used the work of group 6 as an example for other students to emulate. Although the responses provided by group 6 did not provide any reasons for their inferences, the teacher nevertheless accepted the response as “good”. The teacher’s feedback can be said to have halted students thinking prematurely. This is because by accepting the incomplete response as “good” students did not pursue to think further. They did not make reference to map 1a and map 1b to provide reasons for the inferences made. Suzana in her response to the task wrote, “[Malaysia is a] centre of tourism, centre of trade, neighbouring countries, centre of entertainment, port, multiracial, trade”. Salina also wrote “[Malaysia is a] trade centre, port, business centre, tourist centre”.

Similar responses were repeated by fourteen students as part of their response or as their
entire response. The teacher through her feedback to students had inadvertently discouraged them from performing higher order thinking.

Therefore students’ responses to Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in Southeast Asia, and in the world) did display evidences of higher-order thinking. The evidences of higher-order thinking that students displayed in their responses to Question 1C were found to be closely linked to the teacher’s explanation of the topic and the teacher’s feedback to students.

In order to establish the influence of teacher task management on students’ responses for Assessment Task 1.1.1a/1.1.2a, students’ self-assessment were referred to. In their self-assessment of this task, students wrote that for this task they got their answers by referring to the textbook and atlas. Only Amy and Norah said that they also referred to the teacher to seek clarification, that is, they received individual coaching on demand. Thus, according to students’ self-assessment statements, students felt that their responses were a result of their own effort.

5.1.2 Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast Asia, and the world - cycling expedition)

The next task was Assessment Task 1.1.1b/1.1.2b (cycling expedition) about a group of youths taking part in a cycling expedition that takes them through the various continents of the world. In the process of completing this task, students learned to apply their knowledge and skill of stating the locations of places in compass points. The task involved completing map 2, completing Table 1.1.1b and preparing a report. In map 2, students needed to mark and name some countries, trace the route taken by the cyclist, and name the continents and oceans marked. In order to answer these four parts of
question 2, students merely needed to recall the names of countries, continents and oceans. These four parts of question 2 were categorised as a LOT task. For the fifth part of question 2, students were then required to complete Table 1.1.1b, and to state the location of the cyclist in compass points in relation to Kuala Lumpur. In order to answer this fifth part of question 2, students had to apply their knowledge of stating locations of continents, in compass points, in relation to Kuala Lumpur (interpreting and applying category). Finally in question 2vi, students prepared a report describing the journey of the cyclist around the world. Students needed to describe the journey, which began from Kuala Lumpur and went through several continents, using compass points. In order to prepare the descriptive report (question 2vi), students needed to interpret Table 1.1.1b, which they had completed earlier. They then had to paraphrase information from Table 1.1.1b to prepare a report. Students also needed to organise information from various sources namely map 2 and Table 1.1.1b to prepare an accurate report.

In Assessment Task1.1.1b/1.1.2b (Location of Malaysia - cycling expedition) students first completed map 2 based on the instructions given concerning the route taken by the cyclist (LOT task). Map 2 gave a visual presentation of the journey of the cyclist around the world. Next, students completed Table 1.1.1b (interpreting and applying). Table 1.1.1b gave a tabular presentation of the journey of the cyclist around the world. Here students needed to paraphrase (a property of the interpreting and applying category) information from map 2 to tabular form (a dimension of paraphrasing). The dimensional range of students' responses varied from 100% accuracy (55.6%) to 50% accuracy (86.1%).

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**Task management:** How did Ms Jamilah interact with Assessment Task1.1.1b/1.1.2b: Question 2(v)? Ms Jamilah guided students on the preceding sections to this question. These sections were linked to Question 2(v), particularly completion of map 2. Ms Jamilah gave instructions to students to complete Table 1.1.1b based on information in map 2. Students’ responses to this task were not directly influenced by Ms Jamilah’s task management because besides giving instructions on task procedures, she did not touch on the contents of the topic.

Lastly, based on map 2 and the tabular presentation (Table 1.1.1b), students prepared a written report on the journey of the cyclist around the world. The report gave a descriptive presentation of the journey of the cyclist (interpreting and applying). An analysis of students’ reports on the cycling expedition showed that students were able to perform higher order thinking at the ‘interpreting and applying’ category, when completing this task (86.1%). The students’ responses indicated that their report was a culmination of their ability to paraphrase information from visual and tabular form and applied it to prepare a written report. Based on the categories developed for this study, to be able to paraphrase information is a property of the ‘interpreting and applying’ category and paraphrasing from one form of information to another is a dimension of the paraphrase property. However, the quality of the reports varied on a dimensional range from reports free of errors to reports with some errors. Some students prepared reports that were free of errors. One example was Nalini’s report, “... on 10 January they [the cyclist] arrived at Jakarta, Indonesia. Jakarta is located to the southeast of Kuala Lumpur ...”. Similar responses were given by half of the students. The other students on the other hand had errors in their reports. For example Rafidah wrote in her report, “...
on 10 January 2001 the youth expedition from Kuantan Club arrived at Jakarta (Indonesia). Jakarta is located southeast”. Rafidah left out the word ‘southeast of Kuala Lumpur’. She repeated the same error throughout her report. Students’ responses showed that eighteen of the thirty-six students (50%) were able to produce reports that were free of grammatical as well as location errors.

Task management: ... in Ms Jamilah’s class ...

... look at Question 2(vi). You need to write a report and your report must be written using the correct format. She wrote the word “Title” on the board followed by “Report on the round the world cycling expedition of the cyclist from the Rakan Belia Club Kuantan”.

Some students started to write using their own format but when they saw Ms Jamilah writing on the board they decided to copy her title. Ms Jamilah then drew students’ attention to the Table 1.1.1b. She read out orally how the report should be worded using information from the Table.

Ms Jamilah then wrote on the board “On 1 January 2001, a group of youths from the Rakan Belia Club of Kuantan started their expedition to cycle around the world, from Kuala Lumpur. On 7 January, they arrived at Singapore. Singapore is located southeast of Kuala Lumpur”. “I want you to do the rest of the report on your own. You will need to write your name and the date the report was completed, at the end of the report.”

The teacher’s instructions had an effect on students’ work in terms of style of writing.

Some mirrored the teacher’s style religiously, whereas other students attempted to follow the same sentence pattern but the report was tainted with errors. A few students produced incomprehensible reports as their sentences did not make sense. The information in the report concerning the location of the cyclists was paraphrased from Table 1.1.1b. This saw several students transferring mistakes that they had made in Table 1.1.1b to the reports that they prepared. The teacher’s guidance once again focused on the presentation of the report, when she provided the opening sentences of the report. The teacher emphasised uniformity in the style of presentation. Students were left to read the location
of the continents on their own. This was not a new skill as students had described location using compass points in the previous assessment tasks. However, individual coaching was given to students 'on demand'. This was evident when Priyah wrote in her report, "...on 7 January 2001 they arrived at Singapore located southeast of Kuala Lumpur. On 10 January 2001, they arrived at Jakarta (Indonesia) located southeast of Singapore". Priyah was informed of the error and was told to state her locations in relation to Kuala Lumpur. She redid her report and produced an error free report.

In order to establish the influence of teacher task management on students’ responses for Assessment Task 1.1.1b/1.1.2b, students’ self-assessment were referred to. In their self-assessment of this task students wrote that for this task they got their answers by referring to the textbook and their teacher. This reinforced the evidence that emerged from the observation of teacher’s task management. Students referred to the teacher for the leading sentences to their reports. Students also indicated that the teacher did not teach to the task or coach them in their answers when they said that they were not very confident of their answers because they were not sure if it was correct. For example, Norlene wrote in her self-assessment, "I’m not very confident of my answer because there are some answers I’m not sure if it is correct. I referred to the textbook and my teacher". Salina, Manjeet, Amy, Shazan and several other students also expressed the same thoughts about their work. This indicates that the contents in students' responses were a result of their own effort.

Evidence from students’ responses showed that the students who performed this task were able to perform higher order thinking by interpreting and paraphrasing
tabulated and visual information to prepare a written report. Students’ performance of higher-order thinking in this task was categorised as ‘interpreting and applying’.

5.1.3 Assessment Task 1.2.1a (States of Malaysia – Jigsaw Game)

Assessment Task 1.2.1a was about constructing a map of Malaysia using the jigsaw pieces given. In order to do that, students first needed to fit the different pieces in place so that the map of Malaysia was complete. They then needed to recognise the different states and federal territories and name them. This part of the task was aimed at developing students’ knowledge of the states of Malaysia. It was a LOT task.

Next, students needed to compare the sizes of the various states of Malaysia and complete Table 1.2.1. Here students needed to compare the jigsaw pieces, which represented the states and the federal territories of Malaysia. They then needed to estimate which states were larger or smaller compared to the other states. This part of the task was categorised as ‘organising and creating’. The final part of the question required students to complete Table 1.2.1a. Students were required to refer to any relevant source to obtain information on the sizes of the various states and federal territories of Malaysia and complete the table. Since the information obtained is a figure, which did not require them to paraphrase the information, thus this task was categorised as a LOT task.

Upon analysing students’ responses to Table 1.2.1 it was found that students were able to make logical comparisons between the sizes of the states and federal territories of Malaysia. Making comparisons is a property of the ‘organising and creating category’. Students made comparisons on the similarities and differences of the sizes of the states and federal territories (a dimension of the making comparison property). However, not all
the students’ performances were similar. The dimensional range of students’ responses varied from responses that were at least fifty percent accurate to responses that were less than fifty percent accurate. More than half the students were able to complete Table 1.2.1 with at least fifty percent accuracy (58.3%). Another group of students, comprising more than a quarter of them, completed Table 1.2.1 with less than fifty percent accuracy (30.6%). The remaining students did not complete the task (11.1%). By accuracy it was taken to mean making a logical comparison. This means that students should be able to, for example, state that Sarawak is larger that all the other states in Malaysia, or that the Federal Territory of Labuan is the smallest compared to all the other states in Malaysia.

Task management: ... A peep at Year 5 Bijak...

... "Please refer to Table 1.2.1". On the board Ms Jamilah explained to students "... this symbol < means smaller than, this symbol > means larger than, and this symbol = means the same as. Look at the first state along the vertical column. Johore is larger than Kedah. Johor is smaller than Kelantan. Now I want you to complete the rest of the Table".

Ms Jamilah explained the meaning of the symbols to the students. This probably helped the students understand the different symbols and how to read Table 1.2.1. However, this was an activity-based task. Students were supposed to make their estimated judgment of the sizes of the states and Federal Territories by manually comparing the jigsaw pieces against one another. This procedure was however not emphasised and students were observed to make comparison based on visual judgment. The effect of this on students’ work was evident. Manjeet marked Pahang state as smaller than Kedah, Kelantan, Malacca, Negeri Sembilan, Perak, Perlis, Penang, Terengganu, Kuala Lumpur and Labuan, and larger than Sarawak, and Selangor. She also marked Sarawak as smaller than
all the other states in Malaysia and Labuan as larger than all the other states in Malaysia. Similar responses were given by 41.7% of the students. In other words, they were unable to make a logical comparison. However the problem could also be due to the use of the symbols ‘< ‘ to indicate smaller than and ‘>’ to indicate larger than. Students may have easily been confused with these symbols. When doing the revision for this task, students were guided to use the jigsaw pieces to compare the sizes of the states. When doing her revision for this task, that is, Table 1.2.1, Manjeet was now able to mark Labuan as smaller than all the other states in Malaysia, and Sarawak as larger than all the other states in Malaysia except Pahang, which she marked as equal in size to Sarawak. This was also the case with all the other students who revised their Table 1.2.1. Therefore it is probable that if students had been instructed to follow the procedure of the task they would have been able to make more logical comparisons. Students’ responses revealed that the method of giving instructions had a direct influence on students’ responses.

In order to establish the influence of teacher task management on students’ responses for Assessment Task 1.2.1a, students’ self-assessment were referred to. In their self-assessment of this task students wrote that for this task they got their answers by referring to the atlas, textbook and friends. Only Amy and Nina said that they also referred to the teacher to seek clarification, that is, they received individual coaching on demand. This corroborated with the observation of the teacher’s task management strategies where the teacher gave instructions on the meaning of the symbols used in the task but not the contents of the task. Therefore students performance on the task was a result of their own effort either by seeking answers from the atlas, textbook or from discussions with group members.
Evidence from students work on this task showed that, students were able to perform higher-order thinking at the ‘organising and creating’ category (making comparisons).

5.1.4 Assessment Task 1.2.1b (States of Malaysia – Making a Map of Malaysia)

Assessment Task 1.2.1b required students to construct a map of peninsula Malaysia out of dough made from flour, salt and water. Once the map had been moulded, they needed to draw the state boundaries. The students then needed to colour the various states with different colours and label them. Students also needed to mark the location of the various state capitals, and name them. Besides that the location of at least one other town in each state needed to be marked and named. This task was performed as a group activity.

In order to perform this task, students needed to organise information from the textbook and atlas and apply the information to construct a map of Peninsula Malaysia. This task was categorised as ‘interpreting and applying’.

Upon completion of the task it was found that all the groups (9 groups) were able to integrate information from the atlas and textbook and organise it to create a map made of dough. This means that students had performed at the ‘organising and creating’ category. To integrate and organise information, as well as to create a product are properties of the ‘organising and creating’ category. The dimensions of this task were the selection of relevant information and the organisation of this information in an accurate manner, to create an accurate map of Peninsula Malaysia. Students performed along a dimensional range of being able to integrate and organise information accurately on the
map of Malaysia to not being able to do so accurately. It was found that only one of the
ten nine groups was able to integrate and organise information from the textbook and atlas to
construct a map of Peninsula Malaysia accurately. All the other groups had between one
to eight errors on their maps. Accuracy was taken to mean marking and naming the states
and federal territories, capitals and towns accurately. The accuracy for the location of
towns and capitals were based on their obvious location features and not their exact
location. For example a coastal town should be marked close to the coast and not far
inland. Similarly an inland town should not be marked next to the coastline. The same
applies for towns located close to the state or international boundaries.

All the groups produced maps that were accurate and the states were accurately
marked out and attractively coloured. Students seemed to have given more priority to
making and colouring the map (creating) than organising the information accurately.

Task management: To class with the researcher and Ms Jamilah ... (Ms Jamilah was
going to observe group work and collaboration)

I got students into their groups and instructed them to select a leader. I
also told the group to select 2 students to make the model map and the
remaining 2 students to mark and name the states, capitals and towns on
the paper maps.
I instructed group leaders to collect their material. Gave instructions to
the map-makers to lay the dough. Went from group to group to see how
students were progressing. Some groups needed help. All the groups
completed their maps within 30 minutes. Next students drew the state
boundaries. They traced it from the paper maps. Next students prepared
little flags with the names of the states on it and stuck them on the
respective states. The students looked for the locations and names of
capitals and towns and continued to work on their paper maps.
... Next day
Students painted the model maps ... by the time the lesson ended 3 groups
had completed painting their maps.
... Next lesson
I wrote a check list on the board to remind students of the things they were supposed to complete: paint the different states, paint the seas around Malaysia, write the title of the map, that is, Peninsula Malaysia: States, capitals and towns, prepare a legend for the map, name the states, capitals, and towns, write the names of the group members.

The marking and naming of the towns and capitals was partly hampered by the size of the map. There was a lot of information on the map: names of states, capitals and towns. This probably caused some groups to omit some information like the marking and naming of the Federal Territory of Kuala Lumpur (3 groups) and the towns of some states (3 groups). Also the section of the task that required students to create and paint the map of Peninsula Malaysia out of dough was far more exciting to students than the mundane part of the task that required students to locate and name the states, towns and capitals. This was probably another reason that students did better at creating the map than at filling in the details of the map. Amy wrote in her journal, “I like to make the model map on the plywood and draw the states …but to determine the main towns for each state is quite difficult… The task of painting the states is complete, but we have not yet named the capitals and towns”. Shazan felt similarly about the task as Amy, “…I was chosen to mould the map … our group managed to complete moulding the map but we have not completed marking the locations of the capitals and towns. In my opinion the task was fun … [the next lesson] we completed colouring the map but we have yet to mark the location of the towns and capitals on the map”. On the whole except for one group that had 8 errors on their map, the other groups only made nominal errors. The teacher’s task management strategies were confined to giving instructions on the making of the map. The content aspect of the task was not taught or guided by the instructor. Students’ had to source for their own references on the names and locations of states, capitals and towns.
In order to establish the influence of teacher task management on students’ responses for Assessment Task 1.2.1b, students’ self-assessment statements on how they obtained their answers, were referred to. In their self-assessment of this task, students wrote that for this task they got their answers by referring to the atlas and the textbook. Thus students’ performance in completing the map with the required information should be credited to their effort and ability. Students’ completion of Assessment Task 1.2.1b showed evidence that all the students were able to perform higher order thinking at the organising and creating category with relatively high accuracy.

5.1.5 Assessment Task 1.2.1c (States of Malaysia – Poster Competition)

A ‘Poster Competition’ was the title of Assessment Task 1.2.1c. The task required students to create a poster on the theme “Our Town – Its Past, Present and Future”. In order to perform this task students needed to organise various pieces of information and paraphrase relevant material namely articles from the Internet, printed material handed out by the teacher (from the Internet), brochures and articles from magazines. They needed to cite examples to support their claims. Finally they needed to create an original and creative poster on Kuantan depicting its past, present and future development.

Students needed to perform several higher order thinking skills like paraphrasing relevant information according to the title and sub-heading of the poster. They needed to cite examples where relevant, to support their information. This part of the task, which dealt with the written information on the poster was categorised as ‘interpreting and applying’. Finally students needed to integrate all this information into specific time frames under the sub-heading of past, present and future development and create an original and creative poster. The part of the task that required students to organise
information and pictures to produce a poster was categorised as an ‘organising and creating’ task.

Students’ responses showed that all the students were able to perform higher order thinking at the interpreting and applying category. Students’ responses were placed in this category because all the students showed that they could paraphrase information from several sources namely from magazines, brochures and from the Internet material which the teacher had given to them. Besides that the students were also able to cite examples not mentioned in the textbook. Paraphrasing and citing examples were two properties of the ‘interpreting and applying’ category. The dimension that emerged in paraphrasing was rewriting relevant contents in their own words. The dimensional range for paraphrasing varied from being able to paraphrase in own words material that was sufficient and relevant to paraphrasing material that was insufficient and irrelevant. Students’ responses revealed that seven of the nine groups were able to paraphrase sufficient and relevant material. Group 1 paraphrased the following from a magazine article on to their poster, “Terentum is the original name of Kuantan Town before the 1850s ... the name Kuantan began to be used in 1854. A group of Malays from the district of Kuantan in Sumatra ...””. Group 2’s poster had the following information, which was paraphrased from an Internet article, “The development of the Kuantan Port is carried out so that tankers that carry liquefied chemicals can dock at the Kuantan port. Development has also taken place in the agricultural sector. Agricultural area for planting vegetables, fruits ...have been expended ...”. Of the two groups who were unable to paraphrase sufficient and relevant information, one of the groups paraphrased material that was not relevant to the sub-
headings of the poster while the other group provided insufficient material for two of the sub-headings. As for citing examples the dimension that emerged was citing examples from sources other than their textbook and citing own examples. The dimensional range varied from being able to cite other or own examples to not being able to do so. Students’ responses revealed that eight of the nine groups were able to cite examples from other sources as well as their own examples. Some examples cited by group 9 were, “Teluk Cempedak ... hotels of international standard ... can play water sports...Pantai Sepat ... suitable for recreation and out door activities... Pantai Beserah ... suitable for who ever like fishing ... there is also a batik factory...”. Group 1 on the other hand cited, “Places of attraction ... Cherating Beach, Teluk Cempedak, Balok Beach, Megamall Shoping Complex”.

Another aspect of this task was the creation of the poster. Students’ responses showed that for this part of the task, students were able to perform higher -order thinking at the ‘organising and creating’ category. Students created a poster by organising written information and pictures. Creating is a property of the ‘organising and creating’ category. The dimension of this property that was found in students’ responses was creating a product, which in this case was the poster. The dimensional range varied from being able to produce an informative poster (organising relevant and sufficient material in a systematic and creative way), to not being able to do so. It was found that six of the nine groups were able to organise relevant and sufficient information and pictures to create an informative poster.

Group 4 wrote the following about Kuantan’s past development:
... Terentum was the original name of Kuantan town before the 1850s. The name Kuantan was chosen because there were many Terentum trees ... The name Kuantan began to be used in 1854 ...
Group 5 described Kuantan’s future development as:

... Kuantan town will be more developed than at present ... As evidence ... several projects are being carried out:

1. The development of the Kuantan Port ...
2. The construction of the east coast highway ...
3. The construction of the railway track ...
4. The Gebeng industrial site is going to be expanded ...
5. The agricultural sector is going to be expanded ...

Group 5 had this to write about Kuantan’s present development:

... Kuantan Town at present has several attractions of its own example shopping centres, parks, beaches ... Among the shopping complexes are ... Places of recreation on the other hand are Teluk Cempedak, Cerating Beach ... Among the facilities available in Kuantan are public phones, public toilet ...

Of the three groups that did not create an informative poster, one of the groups had insufficient material, their poster did not have a title and the writing on the poster was small, which made it difficult to read. Another group had irrelevant and insufficient material for two of the sub headings. Besides that, their poster did not have a title and the pictures and information were scattered all over the paper in no definite order or theme. The third group had irrelevant material for one sub heading. Their poster also did not carry a title. The wordings on the poster were big but the poster was filled with pictures and cuttings of coloured paper, some of which were not related to the topic of the poster.

Task management: ...To 5 Bijak for the Poster Competition – 11 March

Ms Jamilah distributed to each of the groups the set of material that I had collected on Kuantan. Ms Jamilah read the question and explained to the class what they were supposed to do. She then drew their attention to the 3 posters on the white board, “These are three examples of how a poster looks. You can use these ideas to design your own poster. Your poster must be about Kuantan, that is, about its past, present and future development”. Ms Jamilah drew 2 other examples on the board, one with the Kuantan River running through the centre of the poster and with three boxes at its side, one for each of the three aspects to be emphasised. She
also drew another example on the board, which was like a graphic organiser with a box in the centre and three boxes branching out from the central box. Ms Jamilah Then distributed the mahjong paper and the marker pen and told students to start their work.

Observation: At this stage most of the groups were seen cutting out pictures from the brochures that were distributed.

(The following lesson was used for revision to prepare students for the Progressive Assessment 1)

The next lesson...(3 days later)

Groups 2 had started making notes on their own. As I walked around the class some groups called out to me. "What do we write on the poster?" I showed them how to extract the important points about Kuantan under the headings of its past, present and future development. I wrote on the board "Kuantan – Present Development: tourism, commerce, administration. I told students to give examples of tourist spots in Kuantan, the commercial centres and activities, and the administrative headquarters that are situated in Kuantan, like the Tengku Ampuan Afzan general Hospital, The Police Headquarters, the State Education Department, and so on.

(Progressive Assessment 1 was being conducted. There were no lessons the entire week).

One week later...

As I walked around the class I observed that group 1 was writing their notes on their poster. Group 2 was also writing their notes but stopped after a while. They had to be reminded to get back to their work. Group 3 was sitting at their desks helping group 6 with their work. Group 4 was pasting, colouring and writing. Group 5's poster was still blank. Salina was making some notes, while the rest of the members were watching her. Group 6 was writing out their notes. Group 7 had written some notes and pasted some pictures on their poster. Group 8 too had written most of their notes and had pasted the pictures but the poster had a lot of blank spaces. I suggested that the spaces be filled up. Group 9 was writing out their notes.

This assessment task was disrupted by the Progress Assessment For Primary Schools (1), which is a school-based assessment. Ms Jamilah used the Local Studies lesson to prepare students for the examination. The time spent away from the assessment task created a gap in students’ work on the task. It stretched the task across almost two weeks. This could have had an effect on students’ performance on the task as students had to ‘switch on’ and ‘off’ the task. Students were also observed to be more interested in cutting and pasting the pictures from the brochures than in organising the poster in some logical or
systematic theme. Amy commented in her journal, "The task is not yet satisfactory because my group has only just done the introduction for the history of Kuantan... no one is writing the notes on the history of Kuantan... I’m cutting pictures of Kuantan". Disinterest in paraphrasing written information on to the poster was also expressed by Nareen, "...I feel I’m not interested in looking for information...on Kuantan’s future development because it is difficult". The teacher used the task management strategy of showing students' examples of posters to stimulate their ideas. The examples of posters shown to students had little effect on students as none of the groups emulated the posters shown. However small group coaching to teach students how to paraphrase information from various sources helped the students to select sufficient and relevant information for the various subtopics on the poster.

In order to establish the influence of teacher task management on students' responses for Assessment Task 1.2.1c, students' self-assessment statements on how they obtained their responses, were referred to. In their self-assessment of this task, students wrote that for this task they got their answers by referring to the material given by the teacher. In other words students felt that their posters were a result of their own effort using the material given to them by the teacher.

Analysis of students' responses in this task revealed that seven of the nine groups were able to paraphrase information from different sources while eight of the nine groups were also able to cite examples that were not found in the textbook. This part of the task was categorised as ‘interpreting and applying’. Further, it was also found that six of the nine groups were able to organise information and pictures to create a poster. The posters created by the various groups showed the creativity of the students in combining written
information and pictures to present an informative and attractive message. The poster provided evidence that students were able to perform higher order thinking skills. Students’ responses to this part of the task were categorised as ‘organising and creating’.

5.1.6 Assessment Task 1.2.2a (States of Malaysia – Flags and Other Symbols)

Assessment Task 1.2.2a was on state flags and other symbols that represent the states. For this task students had to explain the meaning of the symbols and colours of any three state flags of their choice, except that one of the flags had to be that of their own state. Besides that they also had to name the other symbols that represented these states and explain why these symbols were chosen to represent the particular state.

In order to complete this task successfully, students would need to paraphrase information on the state flags. Students would also need to identify what other symbols represent these states and give reasons why these particular symbols were chosen to represent the respective state. This part of the task was placed in the ‘making judgments’ category.

Three groups answered this task. All the three groups were able to paraphrase information on the state flags. Their responses can be categorised as ‘interpreting and applying’, with paraphrasing properties. Students paraphrased material on the state flags from sources other than the textbook (dimension) using their own words. The dimensional range of students’ responses was the extent to which students were able to paraphrase information. Students’ work revealed that all the groups were able to paraphrase information from sources other than the textbook. However when it came to identifying the other symbols that represented the states, none of the three groups was able to name the other symbols that represent the particular states they had chosen nor
were the students from these three groups able to give any reasons as to why the symbols were chosen to represent the state (making judgments category).

Asmah who did this task wrote in her journal, “I was unable to complete the task given today because I do not understand what the task is asking for... [the next lesson] ...Today I was able to complete my task half way ... I understand what to do because the teacher taught me until I understood... [the next lesson] ... today I heard the presentation done by groups 6, 2, and 3. I now understand how important it is to learn about state emblems and flags”. Nareen from the same group wrote, “I feel I’m not very creative at drawing, drawing and colouring the flags and the emblem were done by my group leader... do I need to know how to draw? My task was to read and my friend wrote”. The journal entries showed that students were not clear about the task. Both Asmah and Nareen mentioned the term emblem and not symbols. This indicated that they had taken the two terms, emblems and symbols, to mean the same thing. In their response to this assessment task, students again drew the respective state emblems (not other symbols) and explained its meaning. Perhaps this term needed more explanation and clarification so that the misinterpretation of terms would not have occurred.

Evidence showed that the three groups were able to paraphrase the meaning of the state flags from sources other than the textbooks. Up to this level of the task students had performed at the ‘interpreting and applying’ category. However students failed to proceed with the task successfully because they misinterpreted the term symbols for emblem and their responses reflected this.
5.1.7 Assessment Task 1.2.2b (States of Malaysia - State Emblems)

Another three groups of students performed Assessment Task 1.2.2b. For this task students were required to compare the various state emblems and then prepare a list of common features found on the state emblems. This part of the task was categorised as ‘organising and creating’. The second part of the question required them to select an emblem, which they thought was the most unique and they were then required to explain why they thought the particular emblem to be unique. This second part of the task was categorised as ‘making judgments’.

All the three groups were able to compare the various features found on the state emblems and prepare a list of common features that were found among the state emblems. Students’ responses to this task were categorised as ‘organising and creating’ under the property of categorising. Students listed the common symbols (dimension) according to certain generic terms like animal, crescent and so on. The dimensional range of students’ responses varied from being able to prepare a list consisting of only common features (as required by the task), to preparing a mixed list of features. The mixed list of features comprised features that were commonly found on other emblems as well as features found only on one emblem. Group 9 was the only group able to prepare a list of common features found in state emblems. They grouped the common features under the following generic terms: Paddy stalk (Kedah, Negeri Sembilan, Perak, Perlis); Keris - Malay dagger (Federal Territory, Kelantan, Selangor, Terengganu); Tiger (Johore, Wilayah Persekutuan); Sword (Terengganu, Negeri Sembilan); Jawi script (Negeri Sembilan, Selangor, Kedah, Perlis, Pahang, Kelantan, Perak, Malacca, Terengganu); Tusk (Pahang, Negeri Sembilan); Star (Johore, Terengganu, Malacca, Kelantan, Negeri
Sembilan, Selangor, Sarawak); Crescent (Kedah, Selangor, Terengganu, Johore, Malacca, Kelantan); Crown (Johore, Kelantan, Terengganu); Hibiscus (Sarawak, Federal Territory); Spear (Kelantan, Pahang, Negeri Sembilan, Selangor). Groups 2 and 6 also prepared a mixed list of features which included both common features found in state emblems as well as features that were found in only one state. The list prepared by group 2 contained many features, which were listed under two generic terms. For example bird, barking deer, and mouse-deer were listed as animal and again as individual features. The same with the beetle-nut tree which was listed as plants and again as an individual feature. The symbol ‘bridge’ which is only found on the emblem of Penang was also included in their list. The list prepared by group 6 did not use proper generic terms and thus listed many of the features as appearing in only one state emblem. For example the generic term animals was not used and instead all the different animals were listed individually. Besides that like group 2 they included symbols like the ‘bridge’, which is found only on the Penang emblem.

As for the second part of the task, students from the three groups were able to select an emblem, which they considered special or unique. For example group 2 selected Kelantan, group 6 selected Johore and group 9 selected the emblem of Kedah as a special emblem. However only group 9 was able to give reasons why they thought the emblem of Kedah was special. This task revealed that students were able to select and provide reasons for their selection, which is a property of the ‘making judgments’ category. The dimension of this property was being able to provide logical and relevant reasons. Students’ responses ranged along a dimensional range of being able to provide logical
and relevant reasons to not being able to do so. The reasons written by group 9 for selecting the Kedah emblem were:

*In our opinion, the most special emblem is the Kedah state emblem. We selected it because the state emblem has the symbol of the paddy stalk which produces rice, which is the staple food of Malaysians. This state is the main rice producing state in the country. Its soil is fertile and very suitable for planting paddy. Because of that Kedah is known as the “rice bowl”. The crescent in the emblem represents Islam and the yellow colour shows the state has a sovereign ruler (Sultan).*

The two other groups that could not provide logical and relevant reasons for their selection instead explained the meaning of the features on the emblem.

Evidence from students performance in Assessment Task 1.2.2b showed that all the students who did this task were able to analyse the various state emblems and prepare a list of common features with some errors present (organising and creating - categorising). They were also able to select an emblem, which they considered unique. One of three groups was able to provide reasons for their selection (making judgments category).

**5.1.8 Assessment Task 1.2.2d (States of Malaysia – Designing a Flag and Emblem)**

Assessment Task 1.2.2d was about designing a flag and an emblem for Putrajaya. Students would need to select and integrate features that they thought represented Putrajaya. They would then need to think of a creative design for a flag and an emblem to accommodate the features selected. This part of the task was categorised as an ‘organising and creating’ task. Students were also required to explain the meaning of their design and their choice of colours used in their flag and emblem. The second part of
the task was categorised as ‘making judgments’ as students were required to make selections and provide reasons for their choice.

In analysing students’ responses, it was found that two of the three groups who did this task were able to design a flag and an emblem for Putrajaya. Creating was a property of the ‘organising and creating’ category. In this task students created an idea (dimension), that is, the flag and emblem for Putrajaya. Students’ performance varied along a dimensional range of being able to design a flag and an emblem for Putrajaya and not being able to do so. One of the three groups had only designed a flag for Putrajaya. They did not design the emblem because as Nasihah explained in her journal “my group members and I thought that an emblem is a flag and explaining the meaning of the flag. So, because of that we did not design the emblem”.

In analysing students’ responses to the second part of the task, that is, providing reasons for the selection of their design, it was found that only group 4 was able to explain the design and colours of their flag and emblem for Putrajaya. This was a property of the ‘making judgments’ category. The reasons were relevant and logical (dimension).

Explanations for the design and colour of the emblem for Putrajaya.

- The blue colour represents the strength of technology in Putrajaya.
- The design of the emblem which is shaped like a mosque represents the peacefulness of Islam.

Explanations for the design and colour of the flag for Putrajaya.

- The white colour represents the purity of Islam.
- The globe represents unity and cooperation among the citizens of different races to achieve progress and success.
- The dark blue colour represents the citizens strength and the motivation to work together.
- The red colour symbolises strength, resilience and bravery.
Students’ responses to this task ranged from being able to explain their designs and colours of the flag and emblem of Putrajaya, to not being able to so. Group 3 provided relevant and logical explanation for the design and colours of the flag but failed to explain the design and colours of the emblem. This was probably because the design of the emblem was a combination of the symbols found on the flag (the hibiscus and torch) and so the explanation for the colours and the symbols would logically be the same.

Explanation for the design and colours used on the flag for Putrajaya.
- Red – success
- Blue – citizens
- Yellow – represents the ruler of the state
- The hibiscus flower – unity
- Torch – bravery

Group 8 however only provided an explanation for the design and colours of their flag but could not provide an explanation for the emblem as they had not designed one.

Explanation for the design and colours used on the flag for Putrajaya.
- The star and crescent symbolise Islam as the official religion of the country.
- Blood red stripes symbolise the life and strength of towns.
- Blue stripes symbolise unity.
- White stripes symbolise the purity of Islam.
- Computer and globe symbolise the development of multimedia technology in the world.
- The green background symbolises the implementation of the concept of smart towns and friendly environments.

Evidence from the performance of students’ work showed that they were able to select and integrate features which were representative of Putrajaya. They were also able to create original designs for the flag (three groups) and emblem (two groups) to accommodate these features. Students’ performance in this part of the task was categorised as ‘organising and creating’. Students were also able to explain their design as well as the colours they had used on both the flag (three groups) and the emblem (one
group). These students were able to show evidence of performing higher order thinking, for this part of the task, at the ‘making judgements’ category.

Task management: ... to 5 Bijak with Ms Jamilah and researcher.

"Today’s task is different because different groups will be doing different tasks. I’d like you to pay attention as I explain the tasks. Groups 1, 5, and 7 will do Assessment Task 1.2.2a (State flags and other symbols); Groups 2, 6, and 9 will do Assessment Task1.2.2b (State Emblems) and Groups 3, 4, and 8 will do AT1.2.2d (Designing a flag and an emblem for Putrajaya)". Ms Jamilah distributed the assessment task accordingly. "Please read the task. Now do any one of you have any question" Suriani said she did not understand the task. The task was explained to her. Izan asked if the table should be done on a separate sheet of paper? Ms Jamilah told her, “yes”.

"Attention to groups 1, 5 and 7 who are doing the question on state flags and other symbols. What states have you decided to choose group 1?" Group 1 had chosen Pahang, Sarawak, and Terengganu. "What about you, Group 5?" Group 5 said that they had chosen Pahang, Perlis and Negeri Sembilan. "And Group 7, what states have you chosen?" Group 7 had selected Pahang, Perak and Sabah.

As I walked around the class, Nastiah asked for help. “Teacher can we copy the emblem and flag from other states”. I told her to think about what represented Putrajaya. She replied “multimedia”. I drew a mind map and the group members then made several suggestions of what would represent Putrajaya. Then I told them to think of a design on how they would incorporate these features into their emblem and flag. I showed them the design of the flag and emblem for Kuala Lumpur. I told them to think about what colours to use and why they chose those specific colours. ... the next lesson

Group 9 showed me their response to Assessment Task1.2.2b. Aminah asked if she could type it using her computer. I said yes. Group 8 wanted to know if they needed to create either a flag or emblem or both. I told them that they needed to do both the flag and the emblem. I gave them some examples. Group four didn’t seem to have done much. I explained to them what they were supposed to do and discussed some ideas with them. Group 3 was colouring their flag. Amy said that they were almost finished. I asked her if it was her work or that of the group. She said it was the work of the group.

The teacher’s management of the task was restricted to giving instructions and small group coaching ‘on demand’. The teacher did not teach students the topic on state flags,
state emblems, and other symbols that represent the states. Small group coaching did not eliminate the problem of misunderstanding terminology as despite the coaching that group 8 received they still misunderstood the term 'emblem'. The three tasks created some misinterpretation of terms. For example, groups 1, 5 and 7 who did the Assessment Task1.2.2a (state flags and other symbols) misinterpreted the meaning of the word 'other symbols' and took it to mean state emblems. Again groups 2 and 6 who did Assessment Task1.2.2b (State emblem) didn't fully understand the term 'common features found in state emblems'. They also included in their list individual features found on specific state emblems. Group 8 on the other hand, did not understand the meaning of emblem and took it to mean the features found on the flag. This confusion probably arose because different groups did different tasks. Although students were told and they knew that the group sitting next to them was doing a task different from theirs, they tended to be influenced by the discussions of their neighbouring groups especially when the teacher or the researcher was discussing something with a particular group.

In order to establish the influence of teacher task management on students' responses for Assessment Task 1.2.2, students' self-assessment statements on how they obtained the responses to the task, were referred to. In their self-assessment of this task, students wrote that for this task they got their answers by referring to the textbook/reference books. Their self-assessment statements indicated that students felt they were responsible for their responses, which they obtained by referring to the text and reference books.
5.1.9 Assessment Task 1.3.1a (Identity of the Country – Preparation for School Assembly)

"Preparation for school assembly" was the title of Assessment Task 1.3.1a. As preparation for the next school assembly, students were supposed to sing the national anthem and audiotape it. In order to do that, students had to determine what constitutes proper singing of the national anthem. These would act as the criteria for the singing and recording of the national anthem. Students' responses to this part of the task was categorised as 'interpreting and applying' because students needed to interpret and apply principles of proper singing of the national anthem. Lastly, they were supposed to prepare a talk on patriotism during which they needed explain the meaning of the national anthem and the national flag. This task was placed in the category of 'interpreting and applying'.

In analysing students responses it was found that all the three groups of students who did this task were able to list what in their opinion should be the criteria for proper singing of the national anthem. This was a collective effort of all the members of groups 2, 6 and 8. The members of the three groups decided on these criteria: sing according to the tune of the national anthem; sing the lyrics of the national anthem accurately; and sing with enthusiasm. Next, an analysis of students recording of the national anthem showed that all the three groups of students were able to sing the national anthem in tune, with the correct lyrics and with enthusiasm. Students’ responses to this task were categorised as 'interpreting and applying' as they were able to sing and record the national anthem according to the criteria. In other words they were able to apply what they considered principles of proper singing of the national anthem (property). The dimension of this property was direct application of the principles of proper singing of
the national anthem. The dimensional range of students’ responses was from that of being able to comply with the criteria, to not being able to comply with the criteria.

The next part of the task required students to explain the meaning of the national flag. Students’ responses to this task revealed that only three of the twelve students who did this task were able to paraphrase (property) the meaning of the national flag using their own words (dimension). Students’ responses were therefore categorised as ‘interpreting and applying’. The dimensional range of students’ responses ranged from being able to explain using their own words, to copying the explanation of the national anthem verbatim from the textbook.

Nasihah who explained the meaning of the national flag using her own words wrote:

\[
\begin{align*}
\text{White} & \quad - \text{symbolises the purity of Islam} \\
\text{Blue} & \quad - \text{unity of the people of Malaysia} \\
\text{Red} & \quad - \text{symbolises bravery to defend the country from the enemy} \\
\text{Crescent} & \quad - \text{symbolises Islam}
\end{align*}
\]

Eight of the twelve students copied verbatim from their Local Studies textbook. One student was unable to explain the meaning of the national flag. Her explanation comprised of incomplete sentences and incorrect information. Another dimensional range that emerged from students’ responses was that the drawing of the national flag ranged from accurate flags to no flags being drawn. Six students drew the national flag accurately, two students did not complete the drawing and colouring of the national flag, one student drew the national flag inaccurately, and three students did not draw the national flag.

The third aspect of the task required students to explain the meaning of the national anthem. Students were able to explain quite accurately and logically (property),
the meaning of the national anthem using their own words (dimension). Paraphrasing was a property of the ‘interpreting and applying’ category. Students’ responses ranged from being able to provide accurate meaning of the national anthem, to not being able to do so. Three students explained the meaning of the national anthem quite accurately.

Nina wrote in her explanation:

_Negara ku [My country] means Malaysia is our country_
_Tanah tumpahnya darahku [my native land] means we are willing to sacrifice for our country_
_Rahmat bahagia Tuhan kurniakan [May God bestow blessing and happiness] means we pray to God to safe our King_
_Rakyat hidup bersatu dan maju [The people living united and progressive] means the people in this country should live united and progressive_
_Raja kita selamat bertakhta [May our Ruler have a successful reign] means we should pray to God that our ruler is always safe._

Another six students were able to provide logical explanation of the national anthem.

Their explanation showed they had a general understanding of the national anthem.

One of these students, Rajes wrote:

_Tanah tumpahnya darahku [my native land] means the land of my birth_
_Rahmat bahagia tuhan kurniakan [May God bestow blessings and happiness] means the peace that God has bestowed upon us._
_Raja kita selamat bertakhta [May our Ruler have a successful reign] means can reign peacefully._

Two of the remaining students gave inaccurate explanations while one student failed to explain the meaning of the national anthem.

Priyah who gave an inaccurate explanation of the national anthem wrote:

_Negara Ku [my country] means our country_
_Tanah tumpah darahku [my native land] means I am willing to donate my blood for my country._
_Rakyat hidup bersatu dan maju [The people living united and progressive] means the people of Malaysia are living united and progressively_
_Rahmat bahagia tuhan kurniakan [May God bestow blessing and happiness] means the rulers happiness is created by God_
The evidence from the students’ performance on this task showed that the students were able to collectively determine what in their opinion was the criteria for proper singing of the national anthem. They were also able to comply with the criteria and sang the national anthem in tune, with accurate lyrics and with enthusiasm. These responses indicated that students had performed those tasks at the higher-order level of ‘interpreting and applying’. Next it was found that three of the twelve students were able to paraphrase the meaning of the national flag using their own words. Also six students were able to draw and colour the national flag accurately. As for the third aspect of the task, it was found that nine of the twelve students were able to explain the meaning of the national anthem. For both these tasks, students performed at the higher-order level of ‘interpreting and applying’.

5.1.10 Assessment Task 1.3.1b (Identity of the Country – The Malaysian Flag)

Assessment Task 1.3.1b was on the creation of a souvenir that carries the features of the Malaysian flag. In order to complete this task, students needed to know the features of the Malaysian flag. They then needed to create something purposeful that carried the features of the Malaysian flag. The first part of the task was categorised as an ‘organising and creating’ task.

The second part of this task required students to provide reasons why countries need national flags. They then had to present their answer in the form of a web. In order to perform this part of the task, students would need to examine why and when a country uses its national flag. This part of the task was categorised as ‘making judgments’.

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Three groups of students did this task individually, that is, students from group 5, 7, and 9. First, all the students were able to produce a souvenir. However, nine of the twelve students were able to produce an original, creative and purposeful souvenir. Fatini produced an air-freshener from soap, Asmah on the other hand made an origami apparel, Kamsiah made a castle with a flag on its tower, Aminah made a paper bag, while Faridah made a bicycle flag, Lucy made a wall flag and three students, that is Atisah, Sally, and Julian made bookmarks. This showed that students were able to create (property) a souvenir, which incorporated the Malaysian flag. Students work were categorised as ‘organising and creating’. The dimension of this task was to be able to create a product, which in this task was the souvenir. The dimensional range of students’ responses varied from being able to produce an original, creative and purposeful souvenir to not being able students’ responses that stood at the other end of the dimensional range were a cardboard, a flag drawn in the shape of a pencil, and the drawing of a flag pasted on a paper. These products did not show creativity or purpose. Another dimension range of this task was the degree of accuracy of the Malaysia flag on the souvenir. Five of the students were able to produce accurate flags on their souvenir. The other seven students had at least some minor errors on their Malaysian flags.

As for the second part of the task, seven of the twelve students were able to give reasons (property) that were logical and relevant (dimension) as to why all countries need a national flag. Accordingly, students responses to this part of the task was categorised as ‘making judgments’. Nareen wrote:

*The reason countries have a flag is: to show the participation of the country during some international meet like the Olympics; to give identity to its people; to give motivation to its people like during a march pass; to*
mark the presence of foreign heads of states attending conferences; and so that other people can know us through our flag.

The dimensional range of students’ responses varied from being able to give logical and relevant reasons, to not being able to do so. One student was able to give only one reason, although the question required students to give five reasons. The other four students did not respond to the task.

Analysis of students’ responses showed that for the first part of this task, although all the students were able to create a souvenir, nine of the twelve students who did this task were able to create an original, creative and purposeful souvenir. However, out of these nine students only five of them could produce an accurate flag of Malaysia on their souvenir. For this part of the task students responded at the category of ‘organising and creating’. As for the second part of this task, seven of the twelve students were able to give at least 4 reasons why countries need a flag. For this part of the task students’ were categorised as ‘making judgments’.

5.1.11 Assessment Task 1.3.1c (Identity of the country – Mural)

‘Design a mural for a wall in your school’ was the activity that students did in Assessment Task 1.3.1c. The mural must consist of the national emblem and the other symbols that represent Malaysia. Students must also briefly explain the features of the national emblem, on their mural.

To successfully complete question 1 of this task, students needed to create a mural. They needed to reproduce the national emblem and five of the other symbols that represent Malaysia. They needed to organise the mural so that it was informative as well as attractive. This task was categorised as ‘organising and creating’.
This task was done individually by the members of group 1, 3, and 4. Students’ performance in this task revealed that all the students who performed this task were able to reproduce the national emblem, by either, drawing and colouring or by cutting and pasting a picture of it. However of the twelve students who did this task only six of them were able to select accurately and reproduce five other symbols that represent Malaysia. The other symbols that Suzana selected were, “Parliament House, Kuala Lumpur Towers, Hibiscus, MAS logo, National Monument”. Maliha on the other hand selected “the Kuala Lumpur International Airport instead of the Kuala Lumpur Towers”. Norah had a very different selection of symbols. She drew on her mural, “Paddy stalks, Mount Kinabalu, the Parliament House, the MAS logo and the Hibiscus”. Of these students, only four of them were able to organise the emblem and the other symbols in a creative way so as to produce (property) an informative mural (dimension). This was because two of the students had not completed colouring their murals. Creating a mural was a property of the ‘organising and creating’ category. The dimensional range of students work varied from being able to produce a creative and informative mural to not being able to do so. The work of other students fell along the continuum. Another five students were able to produce mural that were attractive with at least three accurately selected symbols. The remaining one student did not complete her mural.

To complete question 2 of this task, students needed to include in the mural the brief explanation (paraphrasing) of the meaning of features on the emblem. This part of the task was categorised as ‘interpreting and applying’.

Students’ performance in question 2 of this task revealed that ten of the twelve students copied the explanation for the features of the emblem verbatim from the
textbook. This means that students were not able to paraphrase the meaning of features on the emblem. Students responded in this way probably because the task was too direct and the explanation of the features on the emblem was available in their textbook. Students probably did not see the logic or rationale of writing the meaning in their own words and risking making errors. The remaining two students did not explain the features on the emblem.

Students’ performance on the task as a whole showed that none of the students were able to produce a complete mural, that is, with the national emblem, a brief explanation of the features on the national emblem, and five symbols that represent Malaysia.

Students’ responses to this task showed that four students were able to create a mural with the national emblem and five students accurately selected symbols that represented Malaysia. Students’ work for this part of the task was categorised as ‘organising and creating’. However none of the students was able to paraphrase briefly the meaning of the features on the emblem (interpreting and applying category). Consequently, none of the students was able to produce a complete mural according to the requirements of the task.

Task management: The teacher, researcher, the students of 5 Bijak and the task ...

The task was distributed the weekend before the students were supposed to do it. The groups were informed that there were three tasks: the first, required them to sing, the second, required them to prepare craftwork, and the third required them to design and draw. The groups were given a choice to select a task based on the interest of the members. Groups 1, 3 and 4 selected Assessment Task 1.3.1c (mural), Groups 5, 7, and 9 selected Assessment Task 1.3.1b (souvenir), and Groups 2, 6, and 8 selected Assessment Task 1.3.1a (singing). Students were told to bring along the things they need to complete the task.
The next lesson ...

"Groups 1, 3 and 4 who are doing Assessment Task1.3.1c, please take note that designing the mural is an individual task. This means each of you will have to work on your own and produce a mural". The question was explained to the students and they were informed what they were expected to do. "Groups 5, 7, and 9 please listen carefully. Assessment Task 1.3.1b is about making a souvenir. This is also an individual task so each one of you need to produce a souvenir on your own. You can make bookmarks, key chains, vases and so on as your souvenir". Fatini suggested, "an air-freshener"; while Aminah suggested, "a bag". The students were informed that there were coloured paper and cardboard on the teacher's table and that anyone who needed to use them could do so. "Groups 2, 6 and 8 can you all please come to the front of the class. For Assessment Task1.3.1a, you will be required to sing the Negara-Ku and record it. But before you do that you will need to decide how you think the Negara-Ku should be sung. List down the conditions for proper singing of the Negara-Ku so that all the groups will sing according to the same set of conditions. You will need a chair-person" "Lyana" the students suggested. "Lyana, you come to the front and write on the board what conditions the other students suggest". Lyana came forward and asked the students for suggestions. After some discussion among themselves, they suggested the following criteria, which Lyana wrote on the board: singing the lyrics accurately, singing according to the correct tune, and singing with enthusiasm. Students were told to copy these criteria down as they will have to sing according to these criteria. "Take note that the singing and recording of the song is group work. Then each of you also need to do the following on your own: write out the lyrics of the Negara-Ku, explain the meaning of the Negara-Ku, Draw the Malaysian flag, write out the meaning of the different colours and features of the flag, write out the criteria for proper singing of the national anthem." "Class, this task must be completed by Friday this week. All of you can return to your desks and continue doing your task".

The three tasks, Assessment Task1.3.1a (national anthem and flag), Assessment Task1.3.1b (souvenir), and Assessment Task1.3.1c (mural) were done concurrently by three different groups of students. The tasks were distributed to students and the three groups of students were given instructions according to their tasks. Students expressed little problems in understanding the tasks on the national anthem/flag (Assessment Task1.3.1a) and the task on the souvenir (Assessment Task1.3.1b). However, one student
who did Assessment Task 1.3.1c (mural) misunderstood the task requirements and tried
to influence the rest of the group, as group leader. After the task was distributed and
students started doing their respective tasks, Amy wrote in her journal:

"...the task is half completed. Teacher, does group 3 which is doing
Assessment Task 1.3.1c (mural) need to write the lyrics of the song for
each emblem. We are doing the task individually. We divided the task
among group members as follows: Amy – Kedah and Malaysian emblem,
and arrange song; Norah – emblem of Terengganu, Negeri Sembilan, and
Malaysia; Shazan – Perlis emblem; and Shirly – Pahang emblem.

The group leader Amy was influenced by the activities of the neighbouring group who
were doing the task on singing the national anthem (Assessment Task 1.3.1a). Thus, she
asked if she too had to write the lyrics of a song. Being the group leader she then tried to
impose her understanding of the task on the rest of the group. Another student Shazan
from the same group wrote, "... this task is to be done individually. We have to draw the
national emblem and write the meaning of the symbols". Initially Shazan showed that she
had understood the task. However when she did the task the next day:

"... today I drew the emblem of Perlis but teacher said that I have to take a
fresh sheet of paper and do it again because what I’ve done is wrong.
What I need to do is draw the national emblem and the 5 other symbols
that represent Malaysia. I had problems drawing the national emblem but
I’ll try.

Other students had little problems understanding their task. Fatini showed she understood
her task when she wrote in her journal:

"...my task is on doing a souvenir. I want to make a car air-freshener from
soap. I’ve forgotten how to do it. I’ll ask my mother to teach me how to
wrap the ribbon around the soap. I’m not going to ask my mother to do it
for me, although my friends are accusing me of it.

Dini expressed her frustration about doing the task individually, she wrote, "...I don’t
know how to write the meaning of the Negara Ku. Where do I get the meaning of the
Negara Ku from?" A member of group 7, Asmah wrote, "...today I worked on my souvenir and I have decided to do a bookmark. My group is doing their work well. We discussed before starting on the souvenir". Aminah also showed she understood the task when she wrote:

... I did not do what the teacher wrote on the board. I plan to do a bag that can be filled with things... we were told to work individually... teacher told us to bring material that are the colours of the Malaysian flag, irregardless of whether it is cloth or paper.

The teacher did not teach the topic in these three tasks. Task management was restricted to giving instructions.

In order to establish the influence of teacher task management on students’ responses for Assessment Task 1.3.1, students’ self-assessment statements on how they obtained the responses to the task, were referred to. In their self-assessment of this task, students wrote that for this task they got their answers by referring to the textbook and reference books. Their self-assessment statements indicated that students felt the responses they gave were a result of their own effort and ability.

5.1.12 Discussion of Findings

The research question, ‘Is there evidence of higher-order thinking in students’ responses to the portfolio assessment task?’ was examined from three aspects. First, students’ responses to the tasks were examined to see if they were performing higher order thinking when completing the tasks. Second, students’ responses were compared across the different tasks to determine if the nature of the tasks had an effect in influencing or discouraging students from performing higher-order thinking. Third, task management by the teacher was examined to see if it had any effect on students’ higher order responses.
<table>
<thead>
<tr>
<th>Assessment Task (AT)</th>
<th>Evidence of HOT</th>
<th>Extent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 1.1.1/1.1.2 (Location of Malaysia in southeast Asia, and in the world) Question 1A(iv)</td>
<td>Students were able to state the location of countries in Southeast Asia in relation to Peninsula Malaysia. (Interpreting &amp; applying)</td>
<td>86.1%</td>
</tr>
<tr>
<td>Question 1B(iv)</td>
<td>Students were able to state the location of continents in the world in relation to Peninsula Malaysia. (Interpreting &amp; applying)</td>
<td>83.3%</td>
</tr>
<tr>
<td>Question 1C</td>
<td>Students were able to make inferences on the location of Malaysia based on observation. (Interpreting and applying)</td>
<td>61.8%</td>
</tr>
<tr>
<td>AT 1.1.1/1.1.2 (cycling expedition)</td>
<td>Students were able to interpret, and paraphrase information from a map &amp; table to prepare a written report. (Interpreting and applying)</td>
<td>50%</td>
</tr>
<tr>
<td>AT 1.2.1a (States of Malaysia – Jigsaw Game)</td>
<td>Students were able to make logical comparisons between the sizes of the states and federal territories of Malaysia. (Organising and creating)</td>
<td>58.3%</td>
</tr>
<tr>
<td>AT 1.2.1b (States of Malaysia – Making a Map of Malaysia)</td>
<td>Students were able to organise information to create a map Peninsula Malaysia. (Organising &amp; creating)</td>
<td>100%</td>
</tr>
<tr>
<td>AT 1.2.1c (States of Malaysia – Poster Competition)</td>
<td>- Students were able to paraphrase information from different sources, (7 grps)</td>
<td>77.8%</td>
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<tr>
<td></td>
<td>- cite examples, (interpreting &amp; applying) (8 grps)</td>
<td>88.9%</td>
</tr>
<tr>
<td></td>
<td>- organise information and pictures to create a poster. (Organising and creating) (6grps)</td>
<td>66.7%</td>
</tr>
<tr>
<td>AT 1.2.2a (States of Malaysia – Flags and other Symbols)</td>
<td>Students were able to paraphrase information on the state flags.</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>They were also unable* to identify the other symbols that represent the states and</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Table continues
<table>
<thead>
<tr>
<th>Assessment Task (AT)</th>
<th>Evidence of HOT</th>
<th>Extent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 1.2.2b (States of Malaysia – State Emblems)</td>
<td>Students were able to compare and select common features found in the state emblems. (Organising and creating)</td>
<td>100% (3 grps)</td>
</tr>
<tr>
<td></td>
<td>Students were able to select an emblem that they considered unique but were able to provide reasons for their choice.</td>
<td>33.3% (1 grp)</td>
</tr>
<tr>
<td>AT 1.2.2d (States of Malaysia – Designing a flag and emblem)</td>
<td>Students were able to create a flag and emblem for Putrajaya. (Organising and creating)</td>
<td>66.7% (2 grps)</td>
</tr>
<tr>
<td></td>
<td>Students were able to explain their design. (Making judgments)</td>
<td>33.3% (1grp)</td>
</tr>
<tr>
<td>AT 1.3.1a (Identity of the Country – Preparation for School Assembly)</td>
<td>Students were able to develop criteria for singing National Anthem (Interpreting and applying)</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Students were able to paraphrase the meaning of the national anthem. (Interpreting and applying)</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Students were able to paraphrase the meaning of the national flag. (Interpreting and applying)</td>
<td>25%</td>
</tr>
<tr>
<td>AT 1.3.1b (Identity of the Country – The Malaysian Flag)</td>
<td>Students were able to create a souvenir carrying the features of the Malaysian Flag accurately. (Organising and creating)</td>
<td>41.7%</td>
</tr>
<tr>
<td></td>
<td>Students were able to give reasons why countries have national flags. (Making judgments)</td>
<td>58.3%</td>
</tr>
<tr>
<td>AT 1.3.1c (Identity of the country – Mural)</td>
<td>Students were able to produce the national emblem and other symbols that represent the country and organise it in the form of a mural. (Organising and creating)</td>
<td>75%</td>
</tr>
<tr>
<td></td>
<td>Students did not* paraphrase information on the national emblem. (Interpreting and applying)</td>
<td>0%</td>
</tr>
</tbody>
</table>

Note. * Researcher's emphasis
tasks in which students' higher order thinking responses were relatively good were Assessment Task 1.2.1b (Making a map of Peninsula Malaysia), Assessment Task 1.2.1c (Poster Competition), and Assessment Task 1.2.2d (Designing a flag and emblem). Besides other properties that these tasks characterised, these three tasks saw students creating a product or an idea, which included a map of Peninsula Malaysia, a poster of Kuantan Town, and a flag and emblem for Putrajaya. The common features among the three tasks were that they were group tasks, and also activity based tasks. Also for two of the three tasks, that is 'making a map of Peninsula Malaysia' and the 'poster of Kuantan Town', materials were provided by the teacher. In fact these were the only two tasks for which the teacher supplied the students with material. This could have had an effect on the students' higher order thinking responses on the task. They were not hindered by a lack of materials or inaccurate resources. However, for the task on 'making a map of Peninsula Malaysia' (AT1.2.1b), the teacher only supplied materials for making the map and not the contents of the map.

The tasks in which students' higher order thinking responses were weak were Assessment Task 1.1.1a/1.1.2a – Question 1c (Location of Malaysia in Southeast Asia and the world, Assessment Task 1.1.1b/1.1.2b - Question 2 vi (Cycling expedition report), Assessment Task 1.2.1a (Jigsaw Game), Assessment Task 1.2.2a (Flags and other symbols), and Assessment Task 1.3.1c (Mural). These were all individual tasks except for 1.2.2a, which was a group task. In all these tasks, students had to source for their own material. This could have been one factor for students' weak responses especially for Assessment Task 1.2.2a (Flags and other symbols) and for Assessment Task 1.3.1c (Mural). For both these tasks students were unable to furnish accurate and sufficient
material to answer the task effectively. Of the five tasks in which students higher order thinking were weak, three were paper and pencil tasks and two were activity based tasks (Jigsaw game, and Mural). This goes to show that in the Portfolio Assessment Package, the nature of the tasks did not conclusively influence students’ higher order thinking performance on the task.

The task management strategies used by the teacher when interacting with the students and assessment tasks is summarised in Table 5.3. The most popularly used task management strategy was giving instructions. Giving instructions referred to the teacher giving students instructions on task completion procedures. This strategy was followed by ‘on demand’ coaching for individual students and small groups. ‘On demand’ coaching referred to the help the teacher rendered to individual students or groups of students when they encounter problems with the assessment tasks. The term ‘on demand’ indicates that this sort of assistance was given by the teacher based on the needs of the student or group. Another task management strategy used by the teacher was providing guidance. Guidance referred to a discussion of the task with the class but did not include teaching the topic. The teacher also occasionally provided students with key sentences or opening sentences as a task management strategy. This referred to the teacher providing students with standard leading sentences to ensure uniformity in the students’ style of presentation of the task. The teacher also gave feedback as a task management strategy. This referred to the teacher providing students with feedback on their work while they were doing the task. Lastly the teacher taught the topic in class as a task management strategy.
Table 5.3

Task Management Strategies and Consequences on Students' Higher Order Thinking (HOT) Responses

<table>
<thead>
<tr>
<th>Assessment Tasks</th>
<th>Task Management Strategy</th>
<th>Consequences on Students' HOT responses</th>
</tr>
</thead>
</table>
| Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in Southeast Asia and in the world) Question 1A(iv) | - providing key sentences  
- giving instructions  
- coaching individual students 'on demand' | Students able to produce grammatically error free sentences but had errors in stating location. |
| Question 1B(iv) | - providing key sentences  
- giving instructions  
- coaching individual students 'on demand' | Students able to produce grammatically error free sentences but had errors in stating location. |
| Question 1C | - providing guidance on how to make observation  
- providing students continuous feedback | Students able to make inferences and give reasons based on observation. Close link to teacher's discussion.  
Teacher’s feedback halted students’ higher order thinking prematurely. Students made inferences but did not give reasons based on observation. |
| Assessment Task 1.1.1b/1.1.2b (cycling expedition) Question 2(v) | - providing guidance on sections preceding Q2(v)  
- giving instructions | Students' responses not directly influenced by teacher's task management strategy. |
| Question 2(vi) | - providing opening sentences to report.  
- individual coaching 'on demand' | Students able to mirror teacher’s style of presentation but made errors in stating location.  
Students able to produce error free report.  
... Table continues |
<table>
<thead>
<tr>
<th>Assessment Tasks</th>
<th>Task Management Strategy</th>
<th>Consequences on Students' HOT responses</th>
</tr>
</thead>
</table>
| Assessment Task 1.2.1a (States of Malaysia – Jigsaw Game) | - teaching topic on States of Malaysia – names and locations of states  
- giving instructions on meaning of symbols used in task | Strategy used did not match task. Students faced problems making logical comparisons between sizes of states and federal territories of Malaysia. |
| Assessment Task 1.2.1b (States of Malaysia – making a map of Malaysia) | - Giving instruction on making map | Students' responses on contents of map due to group effort and ability. |
| Assessment Task 1.2.1c (States of Malaysia – Poster Competition) | - providing guidance by showing examples of posters.  
- Small group ‘on demand’ coaching | Students did not emulate the examples of posters shown.  
Students able to paraphrase information from different sources for the poster. |
| Assessment Task 1.2.2a (States of Malaysia – Flags and other symbols) | - Giving instructions | Did not influence students’ responses. Students misinterpreted terminology in task. |
| Assessment Task 1.2.2b (States of Malaysia – State Emblem) | - Small group ‘on demand’ coaching. | Despite coaching, group 8 still misinterpreted terminology in task. |
| Assessment Task 1.2.2d (States of Malaysia – Designing a Flag and Emblem) | | |

... Table continues
<table>
<thead>
<tr>
<th>Assessment Tasks</th>
<th>Task Management Strategy</th>
<th>Consequences on Students’ HOT responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment Task 1.3.1a (Identity of the Country – Preparation for school assembly)</strong></td>
<td>Giving instructions</td>
<td>Students’ responses due to own effort and ability.</td>
</tr>
<tr>
<td>Assessment Task 1.3.1b _ Identity of Country – The Malaysian Flag</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment Task 1.3.1c _ Identity of Country – Mural</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
What consequences did the teacher’s task management strategy have on students’ higher order thinking responses? Assessment Task 1.1.1a/1.1.2a Question 1C (Location of Malaysia in Southeast Asia, and in the world) showed a close link between the teacher’s task management strategy and students’ higher order thinking responses. The teacher discussed the topic on Malaysia’s location with the class showing students how to make observations based on maps. The consequences of the teacher’s guidance were that students were able to make inferences, and provide reasons based on observation. For the same task the teacher also gave feedback on students’ work as a task management strategy. Here again it was found that the feedback given by the teacher influenced students’ responses. The consequences of the teacher’s feedback unfortunately halted students higher order thinking prematurely because the teacher had accepted students responses there were ‘incomplete’ as ‘good’. This influenced students into making inferences that did not provide reasons based on observation.

The teacher’s task management strategy of providing key sentences also had a direct influence on students work in terms of style of presentation. However, it had little influence on the contents of the responses. Another strategy that had an influence on students’ higher-order thinking responses was ‘on demand’ coaching. Individual students and small groups who asked for help or were given help because the teacher identified them as having problems, managed to produce responses that were error free or relevant. This was with the exception of Assessment Task 1.2.2d (Designing a flag and emblem) where despite receiving small group coaching, group 8 was the only group that misinterpreted the question.
In general, the teacher's task management strategies had little influence on the students' higher order thinking responses except for their style of presentation. This is because the strategy most popularly used by the teacher was giving instructions on task procedures. The teacher's task management strategy conferred with the findings of Newmann's (1990) research, which showed that teachers seldom emphasised higher order thinking in the classroom. In fact, the task management strategies that had a positive influence on students' higher order thinking were 'guidance' and 'on demand' coaching. It was also found that the intensity of teacher's involvement with the task diminished as the use of the Portfolio Assessment Package progressed. Newmann (1990) said that one of the reasons teachers did not teach higher order thinking in the classroom was because of large class enrolment and that teachers have a heavy work load, which made it difficult for teachers to interact with students. The teacher monitored and interacted more closely with the task and students in the initial phases of introducing the Portfolio Assessment Package. However for later tasks like Assessment Tasks 1.2.2a, 1.2.2b, 1.2.2d and Assessment Tasks 1.3.1a, 1.3.1b, and 1.3.1c, the teacher left students on their own to understand and complete the tasks. This could be interpreted as giving students more autonomy over their learning, as students became more familiar with the Portfolio Assessment Package. Collins, Brown, and Newman (1989), and Casey (1996) referred to this as scaffolding and fading.

What then were the factors that influenced students' higher order thinking when using the Portfolio Assessment Package? One factor was selecting relevant material to suit the topic in the task. Using irrelevant material would be tantamount to giving an incorrect response, which means the student would not be performing higher order
thinking. Another factor was sourcing for sufficient material to answer the task effectively. Providing insufficient contents would also constitute a weak response, which would mean that the students were not performing higher order thinking. These two factors point to students’ knowledge of the topic. In other words, for students to perform higher order thinking, they need to have a sound knowledge of the topic. This was emphasised by Newmann (1990) when he stressed that without knowledge of the specific domain or the subject, students would not be able to manipulate information. A third factor was the nature of the question. Vague or unfamiliar terminology create misinterpretation, which in turn affect students higher order thinking because students will then not respond to the task according to the task requirements. A fourth factor was the structure of the task. Challenging tasks encourage students to think at higher levels compared to simple tasks. This is especially so when answers are readily available in the textbook. Students tend to copy verbatim from the text. Teacher’s task management constituted the fifth factor, as it also had an influence on students’ higher order thinking responses. When the teacher provided guidance as a task management strategy by stimulating their thinking and coaxing them with probing questions, this opened students’ minds into thinking and making connections beyond what was available in the book. This was seen in Assessment Task 1.1.1a/1.1.2a, Question 1C (Location of Malaysia in Southeast Asia and in the world). In this task students were found to be able to make inferences and provide reasons for their inferences based on observation, after the teacher guided students by stimulating their thinking with her probing questions. Another task management strategy that influenced students’ higher order thinking was ‘on demand’ coaching. When the teacher coached students either individually or in small groups, it
was found to influence students’ higher order thinking responses. This was evidenced in Assessment Tasks 1.1.1a/1.1.2a -Question 1A, and Question 1B (Location of Malaysia in Southeast Asia, and in the world), Assessment Task 1.1.1b/1.1.2b Question 2(vi) (Cycling expedition – report), and Assessment Task 1.2.1c (Poster Competition). The only exception was with group 8 who did Assessment Task 1.2.2d (Designing a flag and emblem) where despite receiving small group coaching this group still said that they misunderstood a certain term in the task. Coaching is a characteristic of cognitive apprenticeship (Collins, 1991). Collins describes it as a process whereby the teacher offers students assistance when they need it to complete their tasks. Coaching can help students by broadening their perspectives on how to solve problems by looking at things from different angles suggested by the teacher.
5.2 Analysis of Students' Self-Assessment Statements: Evidence of Self-Assessment

According to Boud (1991), self-assessment requires students to judge their own work to see if it has met the criteria and/or standard, which they themselves have set. For the purpose of this study, self-assessment is taken to include but is not limited to students' ability to recognise their strengths, their weaknesses, and ability to make recommendations and suggestions to overcome weaknesses, and their ability to reflect on their tasks in order to select a best piece of work, a most unsatisfactory piece of work and a piece of work from which they learned the most and gained the most experience. Besides examining students' self-assessment statements, students' peer-assessment statements were also examined to confirm if students were able to identify strengths and weaknesses and make suggestions to overcome these weaknesses. The third piece of evidence was drawn from students' self-reflection statements. These three sources of data were used to answer the research question, "What evidence of self-assessment do students exhibit when performing portfolio assessment?" The analysis of students' self-assessment was done using Strauss and Corbin's (1990) coding procedure, namely open and axial coding.

5.2.1 Self-Assessment

In examining students' self-assessment (phenomena) it was found that two categories of responses emerged: statements identifying students' strengths, and statements identifying student's weaknesses. Statements identifying strengths would be referred to as statements of strength, and statements identifying weaknesses would be referred to as statements of weaknesses.
I. Students' Awareness of their Strengths

Students self-assessed their work based on the task completion criteria, which were found at the end of each task. In their statement of strengths (category), they wrote about what they thought or felt they were good at in the particular task. When analysing the data, it was found these self-assessment statements had two properties (Table 5.4). One was labelled 'general responses' and the other 'task-specific responses'. The general responses comprised self-assessment statements that were general, that is, they were not specifically related to the task being assessed (dimension) (Appendix 20 – Table 1). On a dimensional range of often to seldom, it was found that students seldom made this type of statements compared to task-specific statements. The dimensional range is determined by the number of statements made, whereby often signifies fifty percent or more of the statements made whereas seldom signifies less that fifty percent of the statements made. Suriani whose self-assessment statement was categorised as general response wrote, “While completing Assessment Task 1.2.1a (Jigsaw Game), I found that I'm good at all the tasks”. Similarly, Leena wrote in her self-assessment statement of strength, “While completing Assessment Task 1.3.1c (Mural), I found that I'm good at pasting pictures”. Leena did not say anything more about her skill to paste pictures to link it to the task. These statements labelled general statements were found in 24.1% of the self-assessment statements of strengths.

The second property of the self-assessment statements of strengths was labelled task-specific responses. These task-specific responses mentioned skills that were task related, that is, the skills mentioned in these responses were skills that were necessary for
### Table 5.4

**Analysis of Students Self-Assessment Statements Identifying Strengths**

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
<th>Dimensional range (often – seldom)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Statements of strengths</td>
<td>General responses</td>
<td>Statements of strength do not identify skills related to the task being assessed.</td>
<td></td>
<td>Seldom (24.1% of statements made)</td>
</tr>
<tr>
<td></td>
<td>Self-assessment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements of strengths</td>
<td>Task-specific responses</td>
<td>Statements of strength mention skills that are necessary for task completion.</td>
<td></td>
<td>Often (75.8% of statements made)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements of weaknesses</td>
<td>General responses</td>
<td>Statements of weakness do not identify skills related to the task being assessed.</td>
<td></td>
<td>Seldom (25.8% of statements made)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Statements of weaknesses</td>
<td>Task-specific responses</td>
<td>Statements of weakness mention skills that are necessary for task completion.</td>
<td></td>
<td>Often (72.5% of statements made)</td>
</tr>
</tbody>
</table>

On a dimensional range of often to seldom, it was found that students often made this type of responses. Amy whose self-assessment statements were categorised as task specific wrote, "**While completing Assessment Task 1.1.1b/1.1.2b (cycling expedition), I found that I’m good at completing Table 1.1.1b and map 2**”. She continued to say that for Assessment Task 1.2.1a “**... I found that I’m good at stating the size of the states and naming the states in the jigsaw**"
map”. Nashiah expressed her strengths in Assessment Task 1.2.1c (Poster competition) as “... writing the title and pasting pictures and drawing trees and the Teruntum River”. These statements identified skills that were directly linked to the task. Similar statements comprised 75.8% of the self- assessment statements.

The difference between the characteristics of the general responses and the task specific responses was students’ ability/ inability to mention skills that relate to the task. Darrow, Johnson, Miller and Williamson (2002) concur with the importance of recognising skills when they mentioned that students are able to recognise their strengths and weaknesses better when they are made to recognise skills. Stating their strengths in relation to the tasks performed indicates that students have an understanding of the task processing skills and are aware of their performance in relation to these skills. This is an attribute of metacognition. Flavell (1979) referred to this as metacognitive knowledge about task. This attribute of metacognition was displayed by students doing self-assessment using the Portfolio Assessment Package.

In the previous section when analysing students’ responses for evidence of higher order thinking, it was found that students performed ‘poorly’ in two tasks. None of the students who did Assessment Task 1.2.2a (States of Malaysia – Flags and other symbols) were able to identify the other symbols that represented the individual states. Instead students explained the emblems of the states. How did these students respond in their self-assessment of Assessment Task 1.2.2a? Six of the eleven students who did this task identified either drawing the symbols, looking for information on the flags and emblems, or explaining the meaning of the flags and emblems, as their strengths. These six students mentioned the term ‘emblem’ in their self-assessment although the task was
about 'other symbols that represented the state' and not state emblem. However it would not be fair to these six students to say that they had poor understanding of the task completion processes. This is because, as it was mentioned in the previous section (analysis of students' responses to assessment tasks), the students were unable to perform the task according to the requirement due to a misinterpretation of terminology. Therefore the weakness lay in the task and not so much in the students. Another task in which students performed poorly in the sense that their responses did not show higher order thinking, was Assessment Task 1.3.1c (Mural). In this task students were asked to explain the meaning of the features in the national emblem. Students explained the meaning of the features in the national emblem except that it was taken verbatim from the textbook. How did these students respond in their self-assessment of Assessment Tasks 1.3.1c? None of the twelve students who did this task mentioned explaining the meaning of the features in the national emblem as their strength. In this case students were aware that explaining the meaning of the features in the national emblem was not one of their strengths and therefore did not mention it as such. In other words these students who did this task were aware of their strengths in relation to the task completion skills of the task. Therefore, students were generally able to show, through their self-assessment statements, that they were able to identify their strengths in relation to the task, and this was evident even in 'poorly' performed tasks.

In comparing students' self-assessment responses for all the tasks, it was found that their ability to identify strengths did not improve with practice. Improvement in this case is taken to mean students being able to write more task specific statements of strengths. It was found that students self-assessment statements of strengths were more
task specific for earlier tasks in the Portfolio Assessment Package like, Assessment Tasks 1.1.1a/1.1.2a - Location of Malaysia (87.5% were task specific statements), Assessment Task 1.1.1b/1.1.2b - cycling expedition (85.3% were task specific statements), Assessment Task 1.2.1a - Jigsaw Game (93.3% were task specific statements), and Assessment Task 1.2.1b - Making a map of Malaysia (88.2% were task specific statements). These tasks were the first four tasks of the Portfolio Assessment Package to be completed by students. On the contrary, students self-assessment statements for the latter three tasks, that is, Assessment Tasks 1.2.1c - Poster competition (44.4% were task specific statements), Assessment Task 1.2.2 - States of Malaysia (71.4% were task specific statements), and Assessment Task 1.3.1 - Identity of the country (64.7% were task specific statements), were less task specific compared to the four earlier tasks.

The analysis of students' self-assessment statements show that there was evidence that the majority of the students were able to perform self-assessment by recognising their strengths in the tasks that they performed. The students' self-assessment statements were divided into two categories based on their ability/inability to mention skills related to the task. The general response category comprised self-assessment statements of strengths that were not task specific while the task specific response category comprised statements of strengths that were related to task completion skills.

II. Students' Awareness of their Weaknesses

Students' awareness of their weaknesses includes students' ability to identify what they are weak in or what they did not do well in the task. Students' statements of weaknesses (category) had two properties, that is, general responses and task specific
responses (Table 5.4). These were the same properties that emerged in students’ responses of strengths. General responses comprised weaknesses that were general (dimension), that is, the responses were not specifically linked to the task being assessed (Appendix 20 – Table 2). On a dimensional range of often to seldom, it was found that students seldom wrote general responses compared to task specific responses, as only 25.8% of the statements were general responses. Shirly, in identifying her weakness in Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in Southeast Asia and in the world) wrote, “While doing this task, I need to improve myself and work hard at Local Studies”. Nina on the other hand was of the opinion that for Assessment Task 1.2.2b (States of Malaysia – State emblem), “... for this task, I feel I do not have any weaknesses”. A similar statement was repeated for Assessment Task 1.2.1c (States of Malaysia – Poster competition), and Assessment Task 1.3.1a (Identity of the country – Preparation for school assembly). Shirly’s and Nina’s self-assessment statements of weaknesses were general and did not relate to the task they were assessing.

Task specific responses on the other hand comprised statements of weaknesses that mentioned task related skills (dimension), that is, the skills mentioned were necessary for task completion (Appendix 20 – Table 2). On a dimensional range of often to seldom, it was found that students’ often wrote task-specific responses (72.5%). Izan for example wrote that she was weak in “marking the location of the towns and capitals” for Assessment Task 1.2.1b (States of Malaysia – Making a map of Malaysia). Norah whose statement was labelled as task specific, wrote “While completing Assessment Task 1.2.1c (States of Malaysia – Poster competition) I found that I need to improve myself in
extracting important points from the material given by the teacher”. Other students whose responses were labelled task specific, made similar statements.

How did students who did Assessment Task 1.2.2a (States of Malaysia – Flags and other symbols) and Assessment Task 1.3.1c identify their weaknesses in these tasks? It was identified in the previous section on analysis of students’ responses for higher order thinking, that these were two tasks that all the students who did it did not perform according to the task requirement. It was found that for Assessment Task 1.2.2a, five of the eleven students who did this task identified, drawing the emblem (four students) and explaining the emblem (one student) as their weakness. These students who had mentioned emblems in their weaknesses instead of symbols, had misinterpreted the task. However as mentioned earlier, this problem arose not because students did not understand the task completion skills but because of a misinterpretation of terminology. In other words the weaknesses lay with the question, which used ambiguous terms. As for Assessment Task 1.3.1c only one student identified “writing the meaning of the symbols [features] in the national emblem” as her weakness. Students who did this task showed their understanding of the task completion processes by either identifying ‘writing the meaning of the features in the national emblem’ or by mentioning other weaknesses in relation to the task. This showed that students, including those who performed ‘poorly’ in the two tasks discussed, were able to identify weaknesses in relation to the task. This emphasised the fact that students had an understanding of the tasks completion skills of the Assessment Tasks, and were aware of their weaknesses in relation to these skills. In other words students displayed attributes of metacognition.
In comparing students' self-assessments for all the Assessment Tasks, the analysis showed a worrying pattern that students did not get better at identifying their weaknesses with practice. This pattern was similar to the one that emerged with students' self-assessment statements of strengths. Students were found to make more task specific statements of weaknesses for Assessment Tasks 1.1.1a/1.1.2a - Location of Malaysia (75.8% statements were task specific), Assessment Task 1.1.1b/1.1.2b - cycling expedition (78.8% statements were task specific), Assessment Tasks 1.2.1a - Jigsaw Game (89.3% statements were task specific), and Assessment Task 1.2.1b - Making a map of Malaysia (91.7% statements were task specific), which were completed earlier. Assessment Tasks 1.2.1c - Poster competition (61.1% statement were task specific), Assessment Tasks 1.2.2 - States of Malaysia (60.7%), and Assessment Tasks 1.3.1 - Identity of the country (51.4%) which were completed later, were found to record fewer task specific responses.

The analysis of students' self-assessment statements showed that there was evidence that, the majority of the students were able to perform self-assessment by recognising their weaknesses in the tasks they performed. Their statements ranged from general responses to task specific responses. The general responses were statements that did not relate to specific skills of the task being assessed. Task specific responses on the other hand were statements identifying weaknesses, which were linked to task completion skills of the task being assessed.
III. Students’ Ability to Make Suggestions to Overcome Their Weaknesses

Students’ ability to identify their weaknesses was further examined to see whether students were able to make suggestions to overcome their weaknesses. In examining students’ statements associated with making suggestions in overcoming weaknesses, it was found that two properties emerged: related suggestions and general suggestions. Related suggestions are suggestions that address the weaknesses identified (dimension). General suggestions on the other hand are suggestions that are general solutions to problems (dimension). A third property also emerged which was labelled non-related suggestions. This meant either no suggestions were given at all or the suggestions given were not related to the weakness. This property was not explored further. The dimensional range of students’ responses for the related suggestion was seldom (40.9% of the statements) which was the same as the dimensional range of students’ responses for the general suggestions (39.6% of the statements). The dimensional range was based on the number of suggestions made, which ranged from often (50% and more) to seldom (less than 50%).

Amy whose self-assessment response to Assessment Task 1.2.1b (States of Malaysia – Making a map) were labelled related suggestions had initially identified her weakness as, “While completing this task I found that I need to improve in marking the location of the capitals and towns,” She then made the suggestion, “I can improve myself by reading reference books and Local Studies books so that I’ll know where the states are located”. Dini had initially identified her weakness for Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast Asia and the world – cycling expedition) as, “... writing the report”. She then suggested, “I can improve myself by understanding
the contents of Table 111b and by practicing writing the report”. Similarly other students too made related suggestions (40.9% of the suggestions made were related suggestions).

Norlene’s self-assessment response to Assessment Task 1.2.1b (States of Malaysia – Making a map) was labelled as a general suggestion. She had initially identified her weakness to that task as, “... marking the location of the capitals of the states and the main towns”. She suggested, “I can improve myself by learning conscientiously”. This suggestion although not irrelevant is a general solution to most learning problems. Similarly, Manjeet said that her weakness in Assessment Task 1.2.1a (States of Malaysia – Jigsaw Game) was, “... doing the jigsaw”. She suggested that, “I can improve myself my reading”. Manjeet did not mention what she should read to improve her weakness in fixing the jigsaw map. Therefore by suggesting reading her response was a general suggestion. Similar suggestions were also made by other students (39.6% of the suggestions made were general suggestions).

In comparing the suggestions made by students, it was also found that students’ suggestions generally emphasised effort as a solution to overcome their weaknesses (34.5% of suggestions). Suggestions like “working harder”, “study conscientiously”, “doing more exercises”, “reading more reference books and Local studies books” were recommended for the different weaknesses identified. This pattern of suggestions show that according to students, ‘putting in more effort’ was a way to resolve the weaknesses identified.

The analysis of students’ statements revealed that the majority of the students were able to make suggestions to overcome their weaknesses. Students’ statements ranged from related suggestions to general suggestions. Related suggestions referred to
self-assessment statements that made suggestions to overcome weaknesses that were related to the weaknesses mentioned by students earlier. The general statements on the other hand refer to suggestions that are general in the sense that they are applicable to any situation or weaknesses and not specifically to the weaknesses mentioned by student for the particular task.

5.2.2 Peer-Assessment

Peer-assessment is the assessment of students’ work by their classmates. Peer-assessment was conducted based on the same set of task completion criteria as self-assessment. When analysing students’ peer-assessment statements two categories of students’ peer-assessments emerged: statements informing students of their strengths which will be labelled as statements of strength; and statements informing students of their weaknesses which will be labelled as statements of weaknesses (Table 5.5). All the statements of strength depicted only one characteristic. They were general statements (property). General statements were assessment statements that did not give students specific examples of strengths that were present in the work assessed (dimension) (Appendix 21 – Table 1). These peer-assessment statements depicting strengths in the work assessed did not show a range of occurrences, as they were all general statements. Leena’s peer assessor in assessing her Assessment Task 1.3.1c (Identity of the country – Mural) wrote, “... the information is accurate and complete ... the task is well done because the work is neat”. Similarly, Group 7’s peer assessor for Assessment Task 1.2.2.a (States of Malaysia – Flags and other symbols) commented, “...the work is well done because the answers are complete”. The other general statements of strength were
Table 5.5

*Analysis of Peer-Assessment Statements*

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
<th>Dimensional Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peer-Assessment</td>
<td>Statement of strength</td>
<td>General statements</td>
<td>No specific examples quoted from the task.</td>
<td>Often (100%)</td>
</tr>
<tr>
<td></td>
<td>General statements</td>
<td>No specific examples quoted from the task.</td>
<td>Seldom (43.5%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Statement of weakness</td>
<td>Task specific statements</td>
<td>Specific examples of the task were quoted.</td>
<td>Often (56.5%)</td>
</tr>
</tbody>
</table>

similar in that they did not indicate to the author of the assignment what was well done in the assignment. In the case of the statements of weaknesses, two properties emerged. The statements were either general statements, or they were task specific statements (property) (Appendix 21–Table 2). General statements, as mentioned earlier, were assessment statements that did not make reference to the task being assessed. Task specific statements, on the other hand, provided specific information about the task being assessed (dimension). The dimensional range of occurrence for general statements were seldom (43.5%), while that for task specific statements were often (56.5%). The dimensional range was based on the number of statements made which ranged from often (50% or more) to seldom (below 49%).
Nalini's peer-assessment of her Assessment Task 1.2.1c (states of Malaysia – Poster Competition) was categorised as a task specific statements of weakness. Her peer assessor wrote:

... in this assignment the title and the related contents are not written together. ...the title is written else where and the contents in some other place. ...the answer is complete. ...the material and pictures are not well arranged and there is a lot of empty space.

Norlela’s peer-assessment of her Assessment Tasks 1.2.2d (States of Malaysia – designing a flag and emblem) was also categorised as a task specific statement of weakness. Her assessor wrote, “...in this assignment only one of the four criteria has been covered. ...the question on the emblem was not answered. The assignment was poorly done because it was not attractive and not neat”. The other peer-assessment statements that were similarly categorised as task specific statements of weakness, also made references to the task being assessed in their assessment statements. General statements of weaknesses, on the other hand, were those that appeared on Faridah’s peer-assessment form for Assessment Task 1.1.1b/1.1.2b (cycling expedition). The peer assessor commented, “... the assignment covers the facts but explanation is not complete ... it is not very neat”. Suzana’s peer assessor for Assessment Task 1.2.1a (States of Malaysia – Jigsaw map) wrote, “... the answer is not complete ... the answer does not contain the necessary information. The assignment was poorly done because almost all the answers are wrong”.

In comparing the two categories of peer-assessment statements, that is statements of strengths and statements of weakness, it was found that students made more statements identifying weaknesses (57.6%) than statements identifying strengths (42.4%). Also in making statements of strength, peers did not make specific reference to the task being
assessed by saying what it is that was well done. Statements like "answer is complete" "assignment is well done" "assignment is neat" were written to inform the author of the assignment that the work was acceptable. In other words in peer-assessment, statements of strength did not offer any task specific comments. In the case of statements of weakness, students offered more task specific statements than general statements. The general statements for statements of weakness were similar to those made in relation to statements of strength like "...this assignment is poorly done because it is not complete", or "... in this assignment there are a few mistakes". However, what was not completed or not well done was not stated. The task specific statements of weakness inform students of their errors evident in the task being assessed, like "... the information on Kuantan – Past and Present are not relevant and not accurate ... the pictures pasted are not according to what is written", or "... she wrote the state in place of the capital in the key". These task specific statements offered students information about their weaknesses.

In comparing students peer-assessment statements, it was found that whether students wrote statements of weaknesses or statements of strength, or whether these statements were task-specific or general, the peer-assessment statements touched on three issues: completion of task, accuracy of responses, and neatness of product. Peer assessors also provided suggestions for improvement of weaknesses that ranged from related to general suggestions. The following anecdotal responses show peer-assessment statements of weaknesses that focused on the three different issues, completion, accuracy and neatness, and the related suggestions that were made to overcome the weaknesses.

The peer-assessment in Salina’s Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world) was labelled as a task-specific
statement of weakness. The peer assessor wrote, "... in the mind map, some of the points have no elaboration ... the mind map is not very accurate". In response to identifying this weakness, the peer assessor suggested, "This assignment can be improved by improving the mind map and by doing more exercises in mind maps". Salina's peer-assessment emphasised accuracy of response and the suggestion for improvement was task related. The peer-assessment for Assessment Task 1.2.1b (States of Malaysia – Making a map) for Group 3 was labelled a task-specific statement of weakness. The assessor wrote, "... Penang is not named, ... Perlis is not coloured and KL is not named". The assessors then suggested to the Group 3 that the task could be improved by, "... referring to the textbook". This peer-assessment of Group 3's task, focused on incompletion of the task and the suggestion for improvement was related to the weakness identified. Dini's peer-assessment for Assessment Task 1.3.1a (Identity of the country – preparation for school assembly) was labelled as a task-specific statement of weakness. The assessor wrote, "... she did not colour the Malaysia Flag completely ... the way she coloured the flag is not neat". The peer assessor than suggested to Dini, that she could improve her task by, "... practising to colour and to write". Dini's peer assessor focused on neatness of the task and made a suggestion for improvement of the task that was related to the weakness identified.

It was mentioned a little earlier on that peer assessors also made suggestions for improvements of weaknesses that were general. In other words they were not directly related to the weaknesses identified. This was found in Nalini's peer-assessment for Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast and the world), which was labelled as a task-specific statement of weakness. The peer assessor
wrote, "... in the mind map, for some of the points the elaboration is not complete". The peer assessor then suggested, "This assignment can be improved by doing a lot more references". The peer assessor focused on incompletion of task but the suggestion for improvement, although not irrelevant, was not directly related to weakness identified. Rafidah's peer assessor on the other hand focused on accuracy, when assessing Assessment Task 1.1.1b/1.1.2b (cycling expedition). She wrote, "... the report is almost all wrong". The assessor suggested, "The assignment can be improved by paying more attention". The suggestion made, again did not directly address the weakness identified.

What suggestions did peers offer as ways to improve weaknesses in the task responses? In comparing the types of peer suggestions made by students, it was found that the five most popular suggestions offered were: doing corrections, improving neatness and handwriting, no need to improve work, doing references, and task related suggestions for improvements.

5.2.3 Assessment Portfolio – Students' Reflection of Their Work

Another aspect of self-assessment examined, was students' reflections. When one theme of the Portfolio Assessment Package is completed students were required to select three pieces of work, from among all their tasks, to be kept in the Assessment Portfolio. In compiling their Assessment Portfolio, students' were required to select from among their work kept in the Process Portfolio, a piece of work each that reflects their best work, their most unsatisfactory work, and a piece of work that contributed to the most learning and experience. For each of these pieces of work, students were required to reflect on them and write why they had selected the said piece as being their best work, most
disappointing work, or the work that contributed to most learning. These student self-reflections constituted self-assessment because students were involved in judging their own work. Students selected their particular pieces of work based on their own standards and not by comparing their work to that of others. They also explained in their reflections, their reasons for selecting what they considered was work best done, or most unsatisfactorily done or contributed to most learning.

Students’ reflective statements were categorised into three characteristics based on the selection criteria for the three pieces of work (Table 5.6). In other words the three categories were best work, most unsatisfactory work and work that contributed to most learning and experience, were predetermined. Students’ reflective statements from these three categories showed three characteristics. The first characteristic was labelled self-knowledge (Appendix 20 – Table 3). This referred to the knowledge that the student had

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<td>Best task</td>
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<td>Extent</td>
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<td>Self-reflection task</td>
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<td>Task that contributed to most learning</td>
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of her own ability in relation to the task. For example, the student selected a task as her
best task because the task suited her abilities or was within her abilities. It could also be
the opposite case, where a student chose a task as her most unsatisfactory task because
the task did not suit her abilities or was not within her abilities. The second characteristic
of the reflective statements made was labelled task knowledge (Appendix 20 – Table 3).
Task knowledge referred to the knowledge that the student had of the task requirements.
In other words, the student selected a task as her best/ most unsatisfactory/ contributed to
most learning, because she understood/ did not understand the task requirements. The
third characteristic that was exhibited was labelled knowledge of contents (Appendix 20
– Table 3). This refers to knowledge that the student had gained from the task. In other
words the student selected a task as her best/ most unsatisfactory/ contributed to most
learning, because she had/ had not learnt something from the task. The dimension of
characteristic or property of the reflective statements was extent, that is the extent of self-
knowledge, task knowledge, or knowledge of content that the students displayed in their
reflective statements. The dimensional range varied from more to less. For example the
reflective statements were said to show more (extent) task knowledge when at least three
examples or incidences of task knowledge were mentioned in the reflective statement.
However, the reflective statements were said to show less (extent) task knowledge when
less than three examples or incidences of task knowledge were mentioned in the
reflective statements. Anecdotes of students’ reflective statements will be used to show
the three categories and their properties.

For the best task category, three properties that are self-knowledge, task
knowledge, and knowledge of content emerged from students’ responses. For self-
knowledge most of the responses displayed less (dimensional range) awareness of self-knowledge. Leena chose Assessment Task 1.2.1b (States of Malaysia – making a map) as her best task. In her reflection she displayed less (dimensional range) awareness of self-knowledge (dimension). Leena wrote, "I was able to complete this task within the time given although there were a lot of mistakes". Leena’s reflective statement displayed self-knowledge like being able to complete task on time and that not all her answers were correct. Having displayed only two incidences of self-knowledge, the extent of her reflections showed less awareness of self-knowledge.

For task knowledge, on the other hand, most of the responses displayed more awareness of task knowledge. For example Julian selected Assessment Task 1.2.1b (States of Malaysia – making a map) as her best task. The extent of her reflections displayed more (dimensional range) task knowledge. She wrote, "...it is very interesting. I can know the states, capitals, and towns. My group and I did the task with the help of the teacher. This task needed material like dough, water-colour, and coloured paper. I felt happy to name the states, capitals and towns". Julian’s task knowledge was displayed when she mentioned the need to collaborate with others to complete the task, the materials needed for the task, as well as the content needed to complete the task. As Julian had mentioned three incidences to show her awareness of the task requirements, the extent of her reflections showed more task awareness.

For reflections on students best task, that displayed the characteristics of knowledge of content, there were more responses that showed a lesser extent of awareness of knowledge of content. Priyah selected Assessment Task 1.2.1c (States of Malaysia – Poster competition) as her best task. The extent of her reflections displayed
less knowledge of content. In her reflection, Priyah wrote, "I could get to know information about our town’s past, present, and future development”. Priyah’s response only provided little elaboration of what she had learned, therefore displaying less knowledge of content.

The analysis of students’ reflections on their most unsatisfactory task revealed that the dimensional range of students’ reflections were balanced. This means that about half the students’ reflection showed more self-knowledge while the other half showed less self-knowledge. However, students’ reflections that displayed task knowledge were more reflective in that students mentioned more (extent) incidences of task knowledge in their reflective statements. Maliha selected Assessment Task 1.2.2d (States of Malaysia – Designing a flag and emblem) as her most unsatisfactory task. She wrote in her reflections, “I did not enjoy doing this task because my group did not complete the task within the time given. We were not able to complete the task for the presentation”. The extent of Maliha’s reflections revealed less task knowledge because in her reflections she mentioned only one reason, that is, not completing the task on time for the presentation. Kamsiah on the other hand selected Assessment Task 1.2.1c (States of Malaysia – Poster competition) as her most unsatisfactory task. In her reflections, which displayed more task knowledge, she wrote:

...the information on Kuantan’s present development is not complete. I feel that the poster that is produced is disjointed. Some of the pictures too are not linked to the task. Besides that too many pictures have been pasted as decorations. The writing is not very neat and nice. Examples of the tourist spots in Kuantan are not many. There is also no information on Kuantan as an administrative centre. The title was not written on the poster. Information on Kuantan’s present development is too little. We only wrote about the tourist places in Kuantan at present. The poster is not neat. The poster is also not attractive. I don’t like to see the pictures that are not related to the task which were pasted on the poster.
Kamsiah’s reflections on her unsatisfactory task highlighted several issues. She mentioned that the task was incomplete, disjointed, too many unnecessary decorations and pictures, not neat, and lacked information in specific areas. Therefore her reflections displayed more task knowledge.

Next, students reflected on a task that they selected as having contributed to most learning and experience. Those reflections that displayed self-knowledge were mostly less reflective compared to those reflections that displayed task knowledge, and content knowledge. Noriela selected Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world) as the task from which she learned the most. In her reflections she wrote, “It is a topic that is difficult to understand. I like this task because I can learn a lot and get knowledge”. Noriela’s reflection revealed knowledge about herself, in that she found the topic difficult but it offered her a chance to learn a lot. Norah on the other hand, said that she learned the most from Assessment Task 1.2.1a (States of Malaysia – Jigsaw Game). She wrote in her reflections:

*I joined the states and got to see the sizes of the states of Malaysia. I also named the states and the federal territories accurately and marked them with red and green dots. Table 1.2.1a was completed 100% correctly. I also arranged the states and federal territories correctly to form a map of Malaysia.*

Norah gave several reasons in her reflection for selecting this task. Norah revealed her knowledge of the task when she wrote that the task required her to join the states in order for her to see the sizes of the states, name the states …and mark them… and complete the table…and the jigsaw map. The extent of her reflections revealed more task knowledge. The task that Fatini chose as having contributed to most learning for her was Assessment Task 1.2.1b (States of Malaysia – Making a map). Her reflections displayed knowledge
of content. She wrote, "I got to know the locations of towns and capitals in Malaysia and learn to work together. I gained experience in making maps using dough". Fatini's reflections mentioned that by doing this task she had learned about the contents of the topic, about working together, and about making maps. The extent of her reflections displayed more knowledge of content.

In comparing students’ reflections on their best task, most unsatisfactory task, and the task that contributed to most learning, it was found that students made more statements relating to self-knowledge, followed by task knowledge and lastly knowledge of contents. However, students were more reflective in their task knowledge and knowledge of content compared to self-knowledge. In other words students were more aware of the task requirements and what they learned from the task. They were less aware of their ability/ inability in relation to the task. Students’ reflections revealed that they had knowledge of themselves, of the task and of their learning. Flavell (1979) referred to these as metacognitive knowledge. These attributes of metacognition emerged when students were asked to do reflection. Selecting tasks and reflecting, like self- and peer-assessment is an integral part of the Portfolio Assessment Package. Therefore in using the Portfolio Assessment Package, students are given an opportunity to self-assess, peer-assess and reflect thus making students more metacognitive.

The next stage of analysis will examine how students performed self- and peer-assessment. Self- and peer-assessment were two components that were built into the Portfolio Assessment Package. This means that all students using the portfolio Assessment Package needed to self-assess and peer-assess the tasks that they had completed. This practice is in line with the conceptual framework of the Portfolio
Assessment Package, that is, portfolio assessment develops metacognition and encourages collaboration. Darrow et al. (2002) commented that according to Kusnic and Finley (1993), self-assessment encourages an environment for collaboration, and that collaboration occurs between the parties in the learning process. This includes the teacher and the student, the learner and the learning, and between learning and knowledge. Darrow et al. also said that when we ask students to self-assess we are asking them to take responsibility for their learning. Students need to think about what they have learnt and done (the product) and how they did what they did (the process). These are attributes of metacognition that students can develop by doing self-assessment.

The context for doing self-assessment, peer-assessment and reflections is determined by the specific conditions for doing these activities when using the Portfolio Assessment Package. These conditions were stated in the ‘Guide to using the Portfolio Assessment Package’, which is part of the Portfolio Assessment Package. These conditions were made known to the students. Self-assessment was carried out after each task was completed. Students self-assessed their work based on the task completion criteria that accompanied each assessment task. The standard was determined by the fulfilment of the criteria. As this was the first time this Portfolio Assessment Package was being used there were no examples to use as standards. Students did their self-assessment by answering some open-ended questions about their work, in a self-assessment form. After doing their self-assessment, students did peer-assessment. When doing peer-assessment the portfolios were exchanged among students and again using the open-ended questions in the peer-assessment form, students assessed their peer’s work based on the task completion criteria. Peer-assessment for group work was the joint effort of
group members. One assessment was done of each piece of group work. Both self- and peer-assessment were done after each task was completed. However, reflections were done only when all the assessment tasks for a theme were completed. When a theme from the Portfolio Assessment Package was completed, students reflected of all their assessment tasks completed and selected pieces of work to be placed in their Assessment Portfolio. Students' reflections provided justification for their selection. The selection was based on the criteria that one task should represent their best work, one task should represent their most unsatisfactory task, and the third piece should represent the work that contributed to the most learning. However students used their own criteria for what they considered best, most unsatisfactory, or contributing to most learning. These criteria were revealed in their reflections. Therefore the difference between the conditions of self- and peer-assessment and students reflections is that, self- and peer-assessment were done after each task, whereas student reflections were done at the end after all the tasks were completed. Another difference was that self- and peer-assessment were based on the task completion criteria accompanying each task whereas students reflections were based on students own criteria and standards.

The intervening condition that hampered students' self-assessment, peer-assessment and reflections was that there was no built-in time in the Local Studies curriculum for students to do assessment and reflection. It was a hurried process for students to complete their self- and peer-assessments as these were done at the expense of completing the other assessment tasks and the Local Studies syllabus.

What strategies did students use to do self-assessment? Students' whose self-assessment statements were inconsistent with the task were interviewed to determine how
they did their self-assessment. Several of Dini’s self-assessments were found to be inconsistent with the task being assessed. For example when she assessed Assessment Task 1.2.1c (Poster competition), she made reference to Assessment Task 1.2.1b (Making a map). After Dini had completed her Assessment Task 1.2.2b (State emblems), she said that the task was about, “making a poster”. After reading the assessment task and looking at her group response, she replied, “... my role in the task was to read the explanation for the unique emblem and my friend wrote what I read”. Dini needed to be reminded of the task she was assessing every time she did self-assessment. She also kept reverting to her previous self-assessments probably looking for statements to write rather than assessing her present work. Nareen’s self-assessment statements were consistent with the task. However, she cited as her strengths things that she did not actually do. During the interview, she said that her role in doing Assessment Task 1.2.1b (Making the map) was to help her friend mark the location of towns in Pahang. When asked if she was good at it, she replied “yes”. Then she realised it was her strength. Similarly when asked to identify her weakness, she could not do it. When she was asked, “... do you know where towns and capitals of the different states in Malaysia are located?” She said, “No”. When asked if she thought it was important to know them, she replied, “Yes”. Then she recognised it as her weakness. Nareen was looking for ‘acceptable’ statements to write as her strengths and weaknesses. She did not know that she needed to look at her role in completing the task until it was pointed out to her. When Manjeet handed in her Assessment Task 1.3.1c (Mural) it was found to be not coloured. When asked about it she replied that she did not have colour pencils. At the same time she did not suggest colouring it at home. In her self-assessment form she wrote, “I had no weaknesses in this
task”. She was told to look at her task again and to see if there was anything she could do to improve it. She then said, “I could colour my work and write the names of the other symbols in my mural”. Manjeet was in a hurry to complete both her assessment task and her self-assessment of the task. By saying that she did not have any weaknesses, she then didn’t have to suggest ways to overcome the weaknesses. In this way she had less to write in her self-assessment form. It was found that students who had problems doing self-assessment either couldn’t focus on the task, looked for ‘acceptable’ statements to write, or found it tedious to do self-assessment and so derived short cuts around it.

5.2.4 Discussion of Findings

How did the data collected and analysed answer the research question, “What evidence of self-assessment did students exhibit when performing portfolio assessment?” To answer this research question data was collected and analysed from three sources. First, students’ self-assessment statements were analysed. Next, students peer-assessment statements were analysed, and third students reflective statements were analysed. This was further corroborated with student interviews to establish how students with problems conducted self-assessment. Also the ‘Guide to using the Portfolio Assessment Package’, which contains instructions on using the Portfolio Assessment Package, was used to establish the context in which self-assessment, peer-assessment, and student reflections were conducted.

In comparing the categories of self-assessment, it was found that students through their self-assessment were able to identify their strengths and weaknesses. Students were also able to relate their strengths and weaknesses specifically to the task they assessed.
However, a disturbing pattern emerged, that is, it was found that students did not improve their self-assessment skills with practice. This was drawn from the evidence that students did not write more task specific statements relating their strengths and weaknesses to the task, progressively as they did more self-assessment. More disturbing is the implication of this finding. It implies that students’ understanding of the tasks in relation to themselves did not show any improvements with practice. This could be attributed to complacency and the routine nature of the activity after the first few practices. Every time students were asked to do self-assessment after they had completed their task they would comment “again?”. This findings were in contrast to the findings of Juwah’s (2003) study on peer-assessment, which found that students’ confidence in assessing and the quality of their assessment improved with practice as students’ assessment statements became more focused and constructive.

When comparing students’ self-assessment statements of strengths and weaknesses it was found that although students were able to write task specific statements, not all these statements provided the same amount of elaboration. Many students provided only brief statements identifying their strengths and weaknesses. For example Manjeet in her self-assessment statement of weakness wrote, “While doing Assessment Task 1.2.1a (Jigsaw game), I found that I needed to improve in doing the jigsaw”. Aini identified her weakness in Assessment Task 1.2.1b (Making a map of Malaysia) as, “... naming the states”. Similarly, Faridah identified her strength in Assessment Task 1.3.1b (Identity of the country - the Malaysia flag) as “... making the flag”. While Rajes identified her strength in Assessment Task 1.2.2b (States of Malaysia –State Emblem) as, “...making flags”. These self-assessment statements were brief but
they were task specific as the skills identified were related to the task being assessed. One reason that could be attributed to these brief statements was students’ language deficiency, which inhibited their ability to elaborate. This is coupled with the fact that self-assessment is a new experience for all the students and therefore many were unsure of what was expected of them. Besides this, time to conduct self-assessment and to write their self-assessment statements within a short time was another possible reason. Students were made to complete their self-assessment in the shortest possible time because other tasks needed to be done and there was no ‘built-in’ time in the present Local Studies syllabus for self-assessment. Therefore self-assessment was done during Local Studies lessons, which meant that self-assessment was being carried out at the expense of completing the Local Studies syllabus. This caused anxiety among the students and teacher as every time self- and peer-assessment was being conducted, it placed the class at a disadvantage in comparison to the other classes. This was because they were slower at completing the syllabus compared to the other classes. Juwah’s (2003) study on peer-assessment however indicated that the peer-assessment greatly contributed to reducing the teacher’s assessment workload. Yet another factor that possibly contributed to students writing brief statements was the fact that some students were given menial tasks by their group leaders. Therefore they could only comment on those tasks that they were involved in. Manjeet when interviewed about her participation in Assessment Task 1.2.1c (Poster competition) said, “... I do not like the task because the group did not give me many things to do. I would have liked to write the information on Kuantan on the poster”. Manjeet had identified her strengths in this task briefly as “cutting and pasting the pictures” and her weaknesses as “looking for important points and writing it on the
poster”. Priyah also made similar comments in her self-assessment statements. In her self-assessment statement of her strengths, she wrote that for Assessment Task 1.2.1b (States of Malaysia – making a map of Malaysia), “... I did not contribute anything. I was only an observer”. Again in her self-assessment statement of strengths for Assessment Task 1.2.2b (States of Malaysia – State emblems) she wrote, “While doing this task I found that I am good at helping my friend to write the meaning of the state emblems”.

Besides being able to self-assess, students were able to make suggestions that addressed the weaknesses that they had identified. These characteristics were further displayed when students conducted peer-assessment. They were able to identify the strengths and weaknesses of the tasks that they assessed. However, their statements of weaknesses were more task-specific compared to their peer-assessment statement of strengths, which did not make specific reference to the tasks that were assessed. As part of peer-assessment, students also made suggestions to improve the task that were related to the weaknesses identified. When assessing their own work, students suggested that ‘putting in more effort’ was a solution to overcome their weaknesses in the tasks. However, when assessing the work of their friends, they offered a wider variety of suggestions including doing corrections, improving neatness, doing references, and other more specific task related suggestions. Also in assessing their own work, students made both positive (statements of strength) and negative (statements of weakness) statements about their work. However in assessing their friends’ work, they made more negative (statements of weakness) statements than positive statements. This finding has one point in common with the findings in Stipek’s (1981) study. Stipek’s study showed that children were able to critically assess the work of their peer at an earlier age than they
could assess their own performance. It was interesting to note that in this study students generally made more negative statements about their friends’ work than statements about their strengths, which means that they were more critical of their friend’s work, but it did not show that they were less critical of their own work. In fact their self-assessment was balanced with both statements of strength and weaknesses about their own work whereas their peer-assessment comprised more statements of weaknesses than strengths.

Students’ ability to self-assess was further confirmed by examining their reflective statements. Their reflective statements were categorised into three categories: best task, most unsatisfactory task, and task that contributed to most learning. This categorisation can be likened to students’ ability to identify their strengths and weaknesses. Their best task reflected their strengths, while the most unsatisfactory task on the other hand reflected their weaknesses. In addition to these two categories, students’ reflections also identified another category, that is, tasks that contributed to the most learning. Students’ reflective statements also displayed three characteristics, that is self-knowledge, task knowledge, and knowledge of content. These characteristics showed students’ awareness about themselves as learners in relation to the task, awareness about the task requirements, and awareness about the learning that took place through the task. Collins (1991) said that reflection was a characteristic of cognitive apprenticeship. Through reflections, according to Collins, students are able to look back their work and analyse their performance. Besides that, students could use reflections to compare the process that they had used to solve problems, with those that their peers and their teacher had used and ultimately with their own “expert” model that they had internalised. In linking self-assessment, peer-assessment and students’ reflections, one factor that
emerges in all the three practices is that, students by practicing self-assessment, peer-assessment and reflections become more aware of themselves as learners, aware of their tasks requirements and their learning. This awareness of self, task and learning makes them metacognitive. Besides that the practice of self-assessment, peer-assessment and reflections also nurtures an environment of collaboration where students interact with themselves, peers, teacher, and learning material.

Students' self-assessment practices were similar to what Flavell (1979) referred to as metacognitive knowledge. Flavell said that metacognitive knowledge influenced students learning and thinking when there were interactions between three factors, that is, the student, the tasks, and the strategies used to solve the tasks. Metacognitive knowledge about the self was revealed when students identified their strengths, weaknesses and skills in their self-assessment statements as well as reflective statements (Flavell and Wellman, 1977). Students indicated their metacognitive knowledge about task, when they talked about their task knowledge in their self-reflections. Third, students revealed their metacognitive knowledge about strategy when they mentioned in their self-assessment statements how they responded to their assessment tasks.
5.3 Analysis of Teacher Assessment and Feedback

One important purpose of assessment is to provide information. This information, gathered from assessment, is used by teachers to provide students with responses. These responses that the teacher gives students are called feedback. Feedback is the transfer of information from the teacher to the student based on an assessment (McMillan, 2001). However, for feedback to be effective it has to be of use to the students to help them improve their work. For that to happen, the teacher needs to inform the student about his/her mistakes, what needs to be rectified, and how the student should rectify these errors. In this study three aspects of teacher assessment and feedback were examined, that is, types of teacher feedback, frequency of teacher feedback and student utilisation of teacher feedback. The findings from these three aspects will answer the research question, “What are the characteristics of teacher feedback available to students during portfolio assessment?”

5.3.1 Types of Teacher Feedback

The data to examine teacher feedback was obtained from three sources: written comments that were written on the teacher assessment form, which was a separate sheet of paper detached from the students’ work that was being assessed, comments and markings written in the margins and at the end of the assignment, and oral feedback. These data were processed using Strauss and Corbin’s (1990) data processing method.

1. Teacher’s Written Feedback on Assessment Forms

First we will examine the written comments that the teacher made in the separate assessment form. An analysis of the teacher’s written comments revealed that teacher’s comments could be grouped into three categories. They were labelled
criticise, praise, and advice (Table 5.7). Each of these categories had its own properties. The 'criticise' category includes negative statements, or statements that showed disapproval of some aspect of the work being assessed (Appendix 22). Also included in this category were statements that mentioned if answers were incorrect, inaccurate, incomplete, or irrelevant (property). The teacher's feedback statements varied according to the nature of feedback given to students. They were either general or specific statements. General statements were abstract and the feedback did not specifically relate to the task assessed, for example it did not quote examples from the responses. Specific statements on the other hand, address the weaknesses, or strengths, of the responses, or its needs for revision, for example by quoting example from the responses. The critical feedback statements were found to comprise both specific statements and general statements. This means that when the critical feedback given by the teacher was specific, it addressed the weaknesses inherent in the work assessed, or mentioned needs for revision. The feedback that the teacher provided group 1 for Assessment Task 1.2.2a (States of Malaysia – Flags and other symbols) was, "... answer was not complete. There was some attempt to explain but because it was not completed and there were no headings it was difficult to understand. Answer was not organised under specific headings...". This feedback was labelled as critical feedback because it mentioned what was not completed and lacking in the response. This was a specific statement because it informed students of the weaknesses in their response. The feedback on Dini's Assessment Task 1.3.1a (Identity of the country – Preparation for school assembly) was also a critical feedback. The teacher wrote, "... explanation of the meaning of the Malaysian flag is accurate. However, the meanings of the red and white stripes on the flag are not explained. The Malaysian flag is not
Table 5.7

Analysis of Teacher’s Written Feedback on Assessment Forms

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
<th>Dimensional range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criticise</td>
<td></td>
<td>Consists of negative statements. Shows disapproval of some aspect of work assessed. Mentions that answers are incorrect, inaccurate, incomplete, or irrelevant.</td>
<td>Specific and General statements</td>
<td>Specific statements and general statements</td>
</tr>
<tr>
<td>Teacher’s Feedback (written on the assessment form)</td>
<td>Praise</td>
<td>Consists of positive statements. Shows approval of some aspect of work assessed. Mentions that answers are correct, accurate, complete, or relevant.</td>
<td>Specific and General statements</td>
<td>Specific statements and general statements</td>
</tr>
<tr>
<td>Advice</td>
<td></td>
<td>Offers suggestions for improvement or mentions aspects of work that needs attention.</td>
<td>Specific and General statements</td>
<td>Specific statements</td>
</tr>
</tbody>
</table>

...complete. Explanation of the meaning of the Negara Ku is not accurate ...”. This feedback is also a specific statement because it informs Dini of what is lacking and incorrect in her response. The feedback that the teacher provided Suriani for Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast Asia and the world) was also a critical feedback. However, in this feedback the nature of the statement was different. The teacher wrote, “... shows limited understanding and knowledge of topic. Shows limited mastery of facts and concepts on the topic”. The feedback that the teacher gave Suriani did not mention specifically what was lacking or incorrect in her response. This feedback is therefore a general statement. The feedback that the teacher provided group 3 for Assessment Task 1.2.1b (States of Malaysia – Making a map), was a critical feedback. However the teacher’s feedback
did not provide students with specific cues on what was lacking in their group effort. The teacher wrote, "...collected and shared little information, some related to the topic. Sometimes task is completed but needs to be reminded". This feedback was a general feedback.

The next category of teacher's feedback was labelled praise. The teacher's feedback that were included in this category were positive statements about the work assessed, statements that showed the teacher's approval of some aspect of the work assessed, and statements that mentioned if the work was correct, accurate, complete or relevant (property) (Appendix 22). The praise feedback also comprised both specific statements and general statements (dimension). After assessing Kamsiah's Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world), the teacher wrote on the assessment form, "... shows a well formed knowledge base in the topic including an overall view of the topic". This statement was categorised as praise as it was a positive statement. The feedback was abstract and did not inform Kamsiah about the strengths of the response. The statement is in other words general. Teacher's feedback to Julian's Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast Asia and the world - cycling expedition) was, "... uses accurate language and vocabulary to describe the specific situation". This feedback was labelled praise because it showed the teacher's approval of the language used. However, the teacher's feedback did not specifically relate Julian's strengths to her task. Specific praise feedback, was feedback that was geared to the task being assessed. For example, teacher's feedback to Sally's Assessment Task 1.3.1b (Identity of the country - The Malaysian Flag) stated, "...the souvenir produced carries the features of the Malaysian flag accurately. The souvenir is neat and has creative characteristics". This feedback is a positive statement and it informs
Sally of what is good about her response. Similarly the teacher in assessing Nina's Assessment Task 1.3.1a (Identity of the country – Preparation for school assembly) wrote, "... explanation of the meaning of the Malaysian flag and the meaning of the Negara Ku are accurate and clear. The presentation of the Negara Ku is clear and according to the criteria set". The feedback is a praise statement because it mentions that Nina's work is accurate and at the same time it is specific because it informs Nina of what is good in her response.

The third category of feedback was labelled advice. These feedback statements provided suggestions for improvements or mentioned aspects of work that needed attention (property) (Appendix 22). The advice feedback was mostly specific statements. For example the feedback that group 5 received for Assessment Task 1.2.1c (States of Malaysia – poster competition) stated, "... section on Kuantan's Present Development can be improved by adding more material example on tourism, commerce, and administration". This feedback offered group 5 suggestions for improvements and the suggestions addressed the need for revision of the response.

For Assessment Task 1.2.1a (States of Malaysia – Jigsaw game), the teacher’s feedback suggested to Izan that "...jigsaw map is not completed. Assemble it!". This feedback informed Izan that her jigsaw map needed attention and suggested that she completed fixing it. The feedback was therefore a specific feedback.

II. Teacher's Written Feedback on Students' Assignments

The teacher also provided feedback through comments and indicators that the teacher wrote either in the margins of the assignment or at the end of the assignment. This is the second source of teacher feedback that will be examined. This feedback also displayed similar categories as were found in written feedback that the teacher
wrote in the assessment forms. The categories of teacher feedback that appeared were criticise, praise, and advice (Table 5.8). The criticise category comprised negative statements or indicators that informed students that their answers were either incorrect or had some weaknesses (property). The indicators used by the teacher were crosses, circles around the incorrect answers, and underlining the incorrect answers. For example on Amy’s Assessment Task 1.3.1c (Identity of the country — Mural), the teacher had marked ‘X’ to indicate the other symbols that were wrongly included in the mural. Similarly on Dini’s Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in Southeast Asia and the world), the teacher had circled two locations written in Table 1.1.1b, to indicate that the answers written by Dini were incorrect. In the criticise category both general and specific feedback were displayed (dimension). General feedback statements were either abstract or they did not specifically relate to the task assessed whereas specific feedback statements addressed weaknesses and needs for revision. The feedback that both Amy and Dini received in the form of indicators (crosses and circles) informed them that their answers were incorrect but the cross and circles did not furnish them with further information about what was wrong with their answers. The feedback that Amy and Dini received was therefore general feedback. The feedback that Rafidah received was different from Amy’s and Dini’s because the teacher had written a comment at the bottom of Rafidah’s response to Assessment Task 1.2.1a (States of Malaysia — Jigsaw game). The feedback that the teacher wrote was, “The fixing of the map of Peninsula Malaysia is not accurate”. This feedback informed Rafidah that in her jigsaw map, the states in Peninsula Malaysia were not accurately fixed. The feedback that Rafidah received was therefore a specific feedback.
Table 5.8

*Analysis of Teacher’s Written Feedback on Students’ Assignments*

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
<th>Dimensional range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Criticise</td>
<td>Consists of negative statements and indicators.</td>
<td>Specific and General</td>
<td>Specific statements and general statements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shows disapproval of some aspect of work assessed.</td>
<td>statements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mentions that answers are incorrect, inaccurate, incomplete, or irrelevant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher’s</td>
<td>Feedback</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(written in the margins or at the end of the assignment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Praise</td>
<td>Consists of positive statements and indicators.</td>
<td>Specific and General</td>
<td>General statements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Shows approval of some aspect of work assessed.</td>
<td>statements</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mentions that answers are correct, accurate, complete, or relevant.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advice</td>
<td>Offers suggestions for improvement or mentions aspects of work that needs attention.</td>
<td>Specific statements</td>
<td>Specific statements and general statements</td>
</tr>
</tbody>
</table>

The second category of teacher feedback that emerged comprised positive statements and indicators (property). This category was labelled praise. The feedback that was grouped in this category was general (dimension). That is to say the feedback did not specifically relate to the task that was assessed. For example the feedback that Aminah received for her Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world) mentioned, “*the explanation is related to the points mentioned. Good*”. The feedback did not inform Aminah about what was good about her response. Similarly the feedback that June received for the same Assessment Task stated, “*Your answer is related to the question*”. This feedback also did not inform June about her strengths in the response that she gave. The feedback
that Aminah and June received were general. It was also found that the teacher did not relate any of her praise feedback to the tasks she was assessing. Therefore the teacher’s praise feedback consisted only general statements.

The third category of feedback that emerged from the teacher’s feedback written in the margins and at the end of the assignment was advice. Advice comprised feedback statements that offered suggestions, answers, or mentioned aspects of the work that needed attention (property). The feedback in this category comprised both specific statements as well as general statements (dimension). For example, the feedback that Shirly received for Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast and the world - cycling expedition) stated, “Location of places need to be specified by using compass points. Please redo the report”. This is a specific statement because it informs Shirly about what is wrong with her report and what she needs to do. The feedback that the teacher wrote on Manjeet’s Assessment Task 1.2.1a (States of Malaysia – Jigsaw map) was, “Complete this table again. Use the jigsaw pieces to compare the sizes of the states and the federal territories”. This feedback provides Manjeet with advice on how to complete the table. It is therefore a specific feedback. The feedback that the teacher wrote on Norah’s Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world) was, “Your answer needs to be related to the question”. This feedback was an advice to Norah but it did not specifically tell her what to do to improve her weakness. Similarly the teacher wrote on Vimala’s Assessment Task 1.1.1a/1.1.2a, “complete it”. The feedback advised Vimala to complete her work but does not offer her any specific suggestions on how to complete it. These two examples of feedback, received by Norah and Vimala were general feedback statements.
III. Teacher’s Oral Feedback

Yet another type of feedback that the teacher frequently communicated to students was oral feedback. This was given ‘on demand’ when students needed immediate feedback. The oral feedback was obtained from transcriptions of observations and audiotapes. The oral feedback also displayed the same categories, that is, criticism, praise and advice (Table 5.9). They were all specific as they addressed issues raised by students or the teacher that needed immediate clarification.

For example for Assessment Task 1.1.1a/1.1.2a (Location of Peninsula Malaysia in relation to Southeast Asia and the world), Julian was observed marking Peninsula Malaysia in the South China Sea between east and west Malaysia, on Map1a. Julian then drew lines joining this point, which she had wrongly marked as peninsula Malaysia, to other countries of Southeast Asia. The teacher then asked Julian, “Where is Peninsula Malaysia? This is wrong”. Julian pointed to the dot marked on Peninsula Malaysia. The teacher told her, “... erase this and do it again”. This feedback that the teacher gave Julian was a critical feedback as it pointed out to Julian her mistake. It was also a specific feedback as the teacher had informed Julian to “erase and redo the task”. For Assessment Task 1.1.1b/1.1.2b (Cycling expedition), Ms Jamilah instructed students to use a red pen to mark the route taken by the cyclist, that is, from Kuala Lumpur to Singapore to Jakarta and then to continue to C1, C2, C3, C4, C5 and C6 (Map2). Ms Jamilah noticed that Sally had marked her route beginning from Jakarta to Singapore to Kuala Lumpur and then to C1 (Australia). Ms Jamilah then gave Sally a new blank Map2 and told her to redo the route. Sally had received critical feedback about her work when Ms Jamilah pointed out to Sally her mistake and offered her specific feedback when she gave Sally a new blank map and told her to redo the route.
Table 5.9

*Analysis of Teacher’s Oral feedback*

<table>
<thead>
<tr>
<th>Teacher’s Feedback (oral feedback)</th>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
<th>Dimensional range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criticise</td>
<td></td>
<td>Specific statements</td>
<td>Specific statements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consists of negative statements and indicators. Shows disapproval of some aspect of work assessed. Mentions that answers are incorrect, inaccurate, incomplete, or irrelevant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Praise</td>
<td></td>
<td>Specific statements</td>
<td>Specific statements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consists of positive statements and indicators. Shows approval of some aspect of work assessed. Mentions that answers are correct, accurate, complete, or relevant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice</td>
<td></td>
<td>Specific statements</td>
<td>Specific statements</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Offers suggestions for improvement or mentions aspects of work that needs attention.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The teacher also offered praise in her oral feedback. For example on checking Norlene’s Assessment Task 1.1.1a/1.1.1b, question 1C (Location of Malaysia in Southeast Asia and the world), Ms Jamilah read Norlene’s answer, “... lots of foreigners come to Malaysia because Malaysia is developed ...”. Then she commented, “That is correct”. Ms Jamilah had made a positive statement about Norlene’s work. This feedback was specific because the Ms Jamilah’s feedback was directed specifically at the statement she read. In another example, Ms Jamilah offered feedback to group 8 for Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world) question 1C. Ms Jamilah told the class, “Listen. I’m going to read the answer prepared by Group 8. (I) Lots of tourist from
neighbouring countries come to holiday in Malaysia, (2) Centre of trade, (3) Centre of ports – can develop the ports, (4) Many races – marry people from Malaysia, (5) Entertainment centre, (6) Shopping centre. Tourist can buy a variety of goods, (7) Centre of commerce – a lot of neighbouring countries come to trade in Malaysia. Is the answer correct or incorrect? Can we accept the answer?” The students replied, “Can”. This was a specific positive feedback as the teacher had accepted the response written by group 8 and the acceptance was specifically related to the answer that Ms Jamilah read out to the class. Ms Jamilah also offered students advice through the oral feedback. When Norlela told Ms Jamilah that she did not know how to read the compass points (Assessment Task 1.1.1a/1.1.2a – Location of Malaysia), Ms Jamilah drew the compass points for her on the map and asked her to name them. Then she asked Norlela, “Now what is the location of North America from Malaysia?” Norlela replied, “North west”. Ms Jamilah gave Norlela specific advice on how to read compass points. Ms Jamilah also provided Group 8 advice, when they were doing Assessment Task 1.2.2d (States of Malaysia – Designing a flag and emblem). Nasihah wanted to know if she could use the design of the emblem and flag of other states for the emblem and flag of Putrajaya that she was suppose to design. The teacher told her to think about what represented Putrajaya. She replied “multimedia”. The teacher then asked group 8 what they would associate with Putrajaya. The students replied, “computer, satellite, technology, multimedia, administrative centre”. The teacher then told group 8 to think of a design that could incorporate these features into their emblem and flag. The feedback that the teacher gave group 8 advised them on how to chose a design for an emblem and flag. The feedback was specific because it was related to the question the students had asked.
Three sources of feedback were examined to determine the type of feedback the teacher offered students when using the Portfolio Assessment Package. The three sources of feedback were feedback written on assessment forms and given to students after assessing their work, feedback written at the margin and at the end of the assignment assessed, and oral feedback. The data were obtained from teacher assessment forms, students' written work, as well as field notes and audio-tapes. From all these three sources of feedback three types of feedback were found to be offered by the teacher to students, that is, feedback that criticised, praised or advised, the students on their work. Feedback that criticised were those that contained negative statements or indicators like crosses, or in which the teacher mentioned disapproval of some aspect of the work assessed. Feedback that praised were those statements that contained indicators like ticks or positive remarks in which the teacher mentioned approval of some aspect of the work being assessed. Finally feedback that provided advice were those statements that offered suggestions for improvement or mentioned aspect of the work that needed attention. The feedback statements were either specific or general. Specific feedback was feedback that addressed the weaknesses, strengths, and need for revision, of the task assessed. General feedback on the other hand was abstract and did not specifically relate to the task assessed. In comparing the type of feedback given by the teacher, it was found that feedback that provided advice and feedback that criticised were generally more specific compared to feedback that praised. Also the teacher offered more specific feedback to students orally. This is because oral feedback was provided on demand or when the need for it arose and it was used to address specific issues pertaining to the completion of the task. Therefore they always appeared to be specific. Feedback that were written in the assessment forms were also more specific than feedback that were written in the margins and at
the end of the assignments. Feedback written or marked in the margins and at the end of the assignments were usually general because the indicators used, like crosses, ticks, circles, and underlining did not provide explanation about its use. It only indicated that an error had occurred or an accepted answer was given.

In comparing the types of feedback given for particular tasks, it was found that teacher’s feedback for Assessment Task 1.1.1a/1.1.2a (Location of Malaysia) was mostly general statements. This was found in feedback that was written on the assessment forms. Assessment Task 1.1.1a/1.1.2a (Location of Malaysia) was incidentally the first task that the teacher assessed. Providing written comments was a new practice for the teacher. In Assessment Task 1.1.1a/1.1.2a, the teacher used statements directly from the assessment criteria of the Portfolio Assessment Package without relating them to the task. For example the feedback for Assessment Task 1.1.1a/1.1.2a that repeatedly appeared on the assessment form were, “Gives answers that are not complete, accurate or relevant”, “Answer is almost always accurate and relevant”, and “Shows a well formed knowledge base in the topic. Has overall view of the topic”. Students when interviewed said that they could not understand the teacher’s written comments. Nalini related this by saying, “... I don’t understand what the teacher means by her comments”. Asmah reiterated by saying, “I don’t understand the written comments but the oral comments I can understand”. A similar sentiment was echoed by more than half the students interviewed. After discussions were held with the teacher and guidelines were provided to the teacher on assessment of students’ work, and coupled with feedback from students that they did not understand the teacher’s feedback, the teacher’s assessment of students’ work became more focused. The feedback that was provided for the remaining assessment tasks showed more specific statements being written. For Assessment Tasks 1.1.1b/1.1.2b more
specific feedback appeared, like the feedback that Aini received, which stated, "Evidence shows understanding of basic concepts are weak. Did not state compass points in the Table 1.1.1b and in the report". Specific statements were also evident in the feedback that Shazan received, which stated, "Some countries in Southeast Asia were marked and named inaccurately". The teacher's feedback written on the assessment forms became more specific than general as the assessment process progressed. In fact for Assessment Task 1.2.2 and Assessment Task 1.3.1 almost all the feedback given were specific statements. When students were interviewed again towards the end of the semester, it was found that more than three quarter of the students interviewed said that they could understand the teacher's comments. In fact Nalini who had earlier said that she did not understand the teacher's comments, now said:

*I understand the teacher's assessment. I read it to see what mistakes I've made. I prefer the teacher to write comments rather than put crosses and ticks. If I'm wrong I'd like the teacher to tell me why I'm wrong.*

Asmah also shared Nalini's views when she said:

*I read the teacher's comments. I can understand. When the teacher writes 'some answers are not very accurate' it means the answer is not very accurate. I like the teacher to write comments on what I should improve.*

This pattern of feedback, that is, feedback for Assessment Task 1.1.1a/1.1.2a, being mostly general statements, was also found in the feedback that was written in the margins and at the end of the tasks. In fact most of the feedback that appeared at the end of the task for Assessment Task 1.1.1a/1.1.2a, question 1C was, "The explanation to your answer is not related to the question", and "Your answer is not related to the question". However for Assessment Task 1.1.1b/1.1.2b the feedback became more specific when the teacher wrote, "Report incomplete. Redo your report."
Borrow your friends’ answers as a guide”, or “Improve the line joining Australia to South America”. Similarly the feedback given to the other assessment tasks became specific after the teacher was made more aware of the need to provide specific feedback and the need to relate them to the task being assessed. This pattern of general feedback for Assessment Task 1.1.1a/1.1.2a, however did not appear in the teacher’s oral feedback to students as the oral feedback was always directed to a specific problem.

In comparing the language used in the feedback written on the assessment form, feedback written in the margins and at the end of the task, and oral feedback, it was found that the feedback written in the assessment forms were more formal compared to the other two types of feedback. The feedback in the assessment forms used proper sentences like the feedback that Nina received for Assessment Task 1.2.1c (Poster), which mentioned, “Information is relevant to the topic. Information is presented clearly and in a structured manner. Shows ability to use information from various sources. Presentation can be understood. Students explain the question”. By comparison, the feedback that was written at the end of Dini’s Assessment Task 1.2.1a, “Improve the fixing of your map” was more direct and informal. The oral feedback was also informal and conversational, like when Izan asked Ms Jamilah, “what is this continent?” pointing to Antarctica on Map 1b. Ms Jamilah replied, “Please take your textbook out. Refer to the names of the continents”. Oral feedback were also direct or specific.

5.3.2 Frequency of Teacher Assessment and Feedback

The next aspect of teacher assessment and feedback that this study examined was the frequency of teacher assessment and feedback. In other words how quickly
did the teacher offer students' feedback when using the Portfolio Assessment Package.

First, let us examine the frequency with which the teacher gave students written feedback. The written feedback was transmitted to students in two ways: through written comments in the assessment form, and through short comments or remarks and by using indicators like ticks, crosses, circles around the incorrect answers or by underlining words. The short comments were written in the margins or at the end of the assignment, while the indicators were found in the assignment itself. The frequency of teacher feedback is summarised in Table 5.10.

Table 5.10 shows that Assessment Task 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast Asia and the world – cycling expedition) took the longest to be returned to the students followed by Assessment Task 1.2.1a (States of Malaysia – Jigsaw game) and Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world). This is because Assessment Task 1.1.1b/1.1.2b (Cycling expedition) required students to write a report on the cycling expedition. This was the only task that contained a piece of written response that was about 250 words long or approximately one page long. Besides that it also required students to complete one map (Map 2) and one table (Table 1.1.1b). This was probably why the teacher took forty days to complete assessing the task. Assessment Task 1.2.1a (Jigsaw game) was another tedious task to mark. The teacher apparently did not enjoy assessing this task. She commented, “What I dislike most is checking for accuracy. Besides that I did not enjoy marking the task that asked students to compare the sizes of the different states in Malaysia [Assessment Task 1.2.1a]”. This task required students to compare the sizes of the different states by comparing the jigsaw pieces, which represent the different states. It was therefore tedious to check the answers in
<table>
<thead>
<tr>
<th>Task</th>
<th>Completion date</th>
<th>Collected by teacher</th>
<th>Returned to students</th>
<th>Time taken to provide feedback</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world)</td>
<td>31/1/02</td>
<td>4/2/02</td>
<td>21/2/02</td>
<td>21 days</td>
</tr>
<tr>
<td>AT 1.1.1b/1.1.2b (Location of Malaysia in relation to Southeast Asia and the world – cycling expedition)</td>
<td>7/2/02</td>
<td>20/2/02</td>
<td>19/3/02</td>
<td>40 days</td>
</tr>
<tr>
<td>AT 1.2.1a (States of Malaysia – Jigsaw Game)</td>
<td>25/2/02</td>
<td>8/3/02</td>
<td>19/3/02</td>
<td>22 days</td>
</tr>
<tr>
<td>AT 1.2.1b (States of Malaysia – Making a Map)</td>
<td>6/3/02</td>
<td>11/3/02</td>
<td>14/3/02</td>
<td>8 days</td>
</tr>
<tr>
<td>AT 1.2.1c (States of Malaysia – Poster Competition)</td>
<td>27/3/02</td>
<td>27/3/02 – 1/4/02</td>
<td>27/3/02 – 1/4/02</td>
<td>Immediate</td>
</tr>
<tr>
<td>AT 1.2.2 (States of Malaysia – Flags and symbols, state emblem, designing a flag and emblem)</td>
<td>8/4/02 – 12/4/02</td>
<td>8/4/02 – 15/4/02</td>
<td>15/4/02</td>
<td>Immediate</td>
</tr>
<tr>
<td>AT 1.3.1 (Identity of the country – Preparation for school assembly, The Malaysian flag, Mural)</td>
<td>22/4/02 – 23/4/02</td>
<td>29/4/02</td>
<td>29/4/02</td>
<td>6 days</td>
</tr>
</tbody>
</table>
Table 1.2.1. Besides that the teacher also had to check the jig saw map that the students had fixed, and the sizes of the different states in Malaysia as in Table 1.2.1a. This accounted for the twenty-two days that the teacher took to assess the task. Assessment task 1.1.1a/1.1.2a on the other hand required students to complete two maps (Map1a, and Map1b) and write the locations of countries and continents in relation to Malaysia. The teacher needed to check that the locations were correctly stated in relation to the lines drawn on the map by the students. This task probably took twenty-one days because it was the first task that the teacher assessed and she was unsure of how to write the comments. Ms Jamilah commented, when asked if she had completed assessing the task, she replied, “I’ve checked the answers but I’ve not written the comments yet”.

Table 5.10 also showed that Assessment Task 1.2.1c and Assessment Task 1.2.2 took the shortest time to assess. This was probably because Assessment Task 1.2.1c and Assessment Task 1.2.2 were both group tasks. For group tasks the assessment on the contents of the tasks was done as a group but assessment of group work and collaboration was done individually for each students to show their participation in the task. This reduced the amount of tasks to be assessed drastically as there were only nine groups. This means the teacher had only nine pieces of assignment to comment on as opposed to thirty-six if they was assessed individually. In addition to Assessment Task 1.2.1c and 1.2.2, Assessment Task 1.2.1b was also a group task. Besides that Assessment Tasks 1.2.1b, 1.2.1c, 1.2.2a, 1.2.2d, 1.3.1a, 1.3.1b and 1.3.1c were activity based tasks. This probably made it easier for the teacher to assess as there was not much written work to read and assess. This accounted for the shorter time the teacher took to assess the tasks.
Next we will examine the frequency with which the teacher gave students oral feedback. In the case of oral feedback, the teacher offered students immediate feedback on demand or when deemed necessary. This behaviour concurred with McMillan’s (2001) views that teachers are said to provide immediate feedback when the nature of the activity requires it. For example, when Maliha was completing Map 1b for Assessment Task 1.1.1a/1.1.2a (Location of Malaysia) the teacher found that Maliha was doing her work incorrectly. She told Maliha, “... use straight lines. Join the dot in Malaysia to the dots in the other continents. Erase this and do it again”. This is because one of the characteristics of effective feedback is that it should be offered frequently; in fact, if possible, as the students perform their task (McMillan, 2001). This is because it was found that students find it difficult to change once they have learnt something compared to when they are learning it for the first time. Besides that the teacher also offered immediate feedback when mingling with the students while they went about completing their task. For example Izan from group 2 asked the teacher, “... is this how you draw it [graphic organiser]?” Ms Jamilah’s feedback to her was, “Draw a mind map, for example like this [Ms Jamilah draws a cloud shaped mind map]. Each group do it on a separate sheet of paper. One student writes, the others will contribute ideas”. The teacher also showed students the work that their friends had done and drew students’ attention to exemplary work. This is yet another way the teacher provided students with quick feedback. For example for Assessment Task 1.2.1c (Poster Competition) Ms Jamilah showed students the poster created by one group of students who had painted the poster. Instead of using only pictures cut from brochures the group drew pictures that depicted what was written on the poster. Ms Jamilah commented that the students were bold enough to try something different.
5.3.3 Utilisation of Teacher Feedback

The story of deploying feedback to students is not complete if students do not utilise the feedback. This study examines the utilisation of feedback by students. First, the frequency of utilisation of feedback was examined. How often did students revise their work after receiving feedback from the teacher? Table 5.11 shows the utilisation of teacher feedback compared with the time taken to provide feedback, type of teacher feedback, and the nature of the tasks. It must be noted here that not all the students who did a task needed to do revision to their responses as they were satisfactorily done on the first attempt.

From Table 5.11 it can be seen that for Assessment Task 1.2.2a (Flags and other symbols) all the twelve students who did this task needed to do some revision to their work. Upon checking their portfolios, it was found that all the twelve students had done revision to their task. It was also found that for this task the students had received immediate written feedback from the teacher. In terms of the type of feedback that students received, it was found that the feedback that the teacher gave comprised statements of criticism, praise and advice that were specific. For example group 5’s teacher feedback stated, "...question 2 is not answered. Do corrections". This was a suggestion that was specifically related to the task and students revision revealed they had complied with the suggestions given.

Another task that saw many students utilising the feedback that they received was Assessment Task 1.1.1b/1.1.2b (Cycling expedition). For this task it was found that twenty-two students needed to do revision and of these students eighteen of them completed their revision. This task had recorded the longest incubation period for students to receive feedback from their teacher. The teacher took forty days to offer
<table>
<thead>
<tr>
<th>Assessment Task (AT)</th>
<th>Utilisation of teacher feedback</th>
<th>Time taken to provide feedback</th>
<th>Type of feedback</th>
<th>Nature of task</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 1.1.1a/1.1.2a</td>
<td>N = 21</td>
<td>21 days</td>
<td>General</td>
<td>Paper &amp; pencil task, Individual work, Use own resources.</td>
</tr>
<tr>
<td>(Location of Malaysia in relation to Southeast Asia and the world)</td>
<td>D = 16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT 1.1.1b/1.1.2b</td>
<td>N = 22</td>
<td>40 days</td>
<td>General &amp; Specific</td>
<td>Paper &amp; pencil task, Individual work, Use own resources.</td>
</tr>
<tr>
<td>(Location of Malaysia in relation to Southeast Asia and the world – cycling expedition)</td>
<td>D = 18</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT 1.2.1a (States of Malaysia – Jigsaw game)</td>
<td>N = 21</td>
<td>22 days</td>
<td>General &amp; Specific</td>
<td>Activity task, Individual work, Use own resources.</td>
</tr>
<tr>
<td>AT 1.2.1b (States of Malaysia – making a map)</td>
<td>D = 14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT 1.2.1c (States of Malaysia – Poster competition)</td>
<td>N = 16</td>
<td>Immediate</td>
<td>General &amp; Specific</td>
<td>Activity task, Group task, Resources supplied.</td>
</tr>
<tr>
<td>AT 1.2.2a (States of Malaysia – Flags and other symbols)</td>
<td>D = 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT 1.2.2b (States of Malaysia – State emblem)</td>
<td>N = 8</td>
<td>Immediate</td>
<td>Specific</td>
<td>Paper &amp; pencil task, Group task, Use own resources.</td>
</tr>
<tr>
<td>AT 1.2.2d (States of Malaysia – designing a flag and emblem)</td>
<td>D = 0</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AT 1.3.1a (Identity of the country – preparation for school assembly)</td>
<td>N = 11</td>
<td>6 days</td>
<td>Specific</td>
<td>Activity /paper &amp; pencil task, Group work, Use own resources.</td>
</tr>
<tr>
<td>AT 1.3.1b (Identity of the country – preparation for school assembly)</td>
<td>D = 1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

... Table continues
<table>
<thead>
<tr>
<th>Assessment Task (AT)</th>
<th>Utilisation of teacher feedback</th>
<th>Time taken to provide feedback</th>
<th>Type of feedback</th>
<th>Nature of task</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT 1.3.1b (Identity of the country – The Malaysian flag)</td>
<td>N = 9 D = 4</td>
<td>6 days</td>
<td>Specific</td>
<td>Activity/paper &amp; pencil task, Individual work, Use own resources.</td>
</tr>
<tr>
<td>AT 1.3.1c (Identity of the country – Mural)</td>
<td>N = 8 D = 0</td>
<td>6 days</td>
<td>Specific</td>
<td>Activity task, Individual work, Use own resources.</td>
</tr>
</tbody>
</table>

Note. N = number of students who need to revise their work; D = number of students who revised their work.

students feedback. The kind of feedback that students received for this task comprised critical, praise and advice feedback that was sometimes specific and sometimes general. However the four students who did not do their revision had not received any advice feedback on their teacher assessment forms from the teacher. When Salina was interviewed about the feedback she received, she said, “I don’t read the teacher’s comments”. Both Shazan and Zena on the other hand said, “I don’t understand the teacher’s comments. Sally said that she read the comments but shrugged her shoulders and said, “I don’t know what to do”.

Assessment Task 1.2.1b (making a map) was another task to which many students responded to the feedback they received from the teacher by doing revisions to the work. It was found that thirty-two students needed to do revisions and twenty-five of them did their revisions. Students received their feedback from the teacher eight days after they had completed their task. The type of written feedback that they received in their assessment forms comprised critical, praise and advice feedback. These feedback statements were sometimes specific and sometimes general. Interestingly, one characteristic that was common in the feedback received by all the
groups was that they all received feedback that gave them suggestions for improving their work. This was probably one factor that contributed to the high incidence of feedback utilisation by students to correct their mistakes.

Besides Assessment Task 1.2.1b, Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world), also saw many students utilising their feedback and doing revisions to their task. It was found that twenty-one students needed to revise their work and sixteen of them responded to their feedback by doing revisions. The teacher provided students with feedback after twenty-one days. The feedback that students received was glaringly different from the previous task in the sense that none of the thirty-six students received feedback that provided them advice or suggestions to improve their work. Also all the feedback received was general and did not relate to the weaknesses or strengths of the work. In spite of that this task saw a relatively large number of students responding to their feedback by doing revisions probably because the teacher kept reminding students to adhere to the teacher's feedback. The teacher also supervised students’ revision of their task. This probably compensated for the lack of specific feedback or feedback that provided advice to students on how to improve their work. For example four days after the task was returned to the students the teacher reminded students to do their corrections. Two weeks later the teacher checked students portfolios and found that Rafidah, Manjeet, Nalini, Suriani, Leena, and Vimala had not yet completed their feedback. She reminded them to complete their corrections. The teacher had to supervise Manjeet’s, Rafidah’s and Vimala’s corrections. Manjeet’s revision was satisfactory after the teacher returned her work to her four times, because each time she revised her task there were still mistakes in it. The teacher commented that, “Manjeet keeps making mistakes with the compass points”. Vimala’s work was returned to her three
times before the corrections she made were satisfactory. Similarly, Rafidah needed to
do her corrections twice before they were satisfactorily done. Thus the reminders and
the attention that students' received ensured the relatively high rate of response to
teacher feedback for this task.

The next task that found an average number of students utilising their feedback was assessment task 1.2.1a. For this task the teacher responded by giving students feedback within twenty-two days. The type of feedback that students received comprised critical, praise, and advice feedback that were sometimes specific and sometimes general. Many students did not respond to their feedback because the feedback that they received for this task, which was an activity task, suggested that they make changes to the jigsaw map, which they had fixed. The feedback Zena received from the teacher said, “Improve the fixing of your map of Peninsula Malaysia”. Nevertheless Zena did not respond to this advice, which was written at the end of the task as it involved undoing the jigsaw map and then redoing it, which required time.

Assessment Task 1.3.1b (Identity of the country – The Malaysian Flag), saw a slightly below average response rate to teacher feedback. For this task nine students received suggestions to revise their work but only four responded positively by doing revisions. For this task the teacher offered students feedback six days after they had handed in their work for assessment. The type of feedback that students received comprised critical, praise, and advice feedback, that were specific, that is they were related to weaknesses and strengths of the work being assessed. Despite receiving specific feedback many students still did not do any revision to their task. This is probably because this task is an activity task and students whose souvenirs had errors were reluctant to do a new one as it required time and resources like coloured paper,
cardboard and other material. Students also need more time to complete an activity task.

Besides Assessment Task 1.3.1b, Assessment Task 1.3.1a (Identity of the country – Preparation for school assembly) also had a very small number of students utilising their feedback to revise their work. For this task eleven students needed to revise their responses but only one student responded positively by doing the revision. The teacher took six days to offer students feedback. The type of feedback that students received was critical and praise feedback that was specific. None of the students received advice feedback, that is feedback that provided them with advice or suggestions to improve their work. This was probably one of the reasons why only one student utilised her feedback as students did not received as specific suggestions to help them with their revision.

For four assessment tasks, that is, Assessment Task 1.2.1c (Poster competition), Assessment Task 1.2.2b (State emblems), Assessment Task 1.2.2d (Designing a flag and emblem), and Assessment Task 1.3.1c (Mural), none of the students responded to the feedback that they received. For three of these four tasks, that is, Assessment Task 1.2.1c (Poster competition), 1.2.2b (State emblems), and Assessment Task 1.2.2d (Designing a flag and emblem), students had received immediate feedback while for Assessment Task 1.3.1c (Mural), the students received their feedback within 6 days after handing in their work for assessment. The type of feedback that students received for Assessment Task 1.2.1c (Poster competition) was critical, praise and advice feedback that were sometimes specific and sometimes general. The reason why none of the students utilised their feedback to revise their work could probably be attributed to the nature of Assessment Task 1.2.1c (Poster competition). This was a group activity task where the resources for the task were

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supplied by the teacher. Thus students when doing their revision would need to get
their own resources like brochures, mahjong paper, and materials from the Internet.
This is because the teacher did not supply the resources for revision. The group
members would also need to find time to meet together to do the corrections
according to the suggestions given. This probably deterred students from doing their
revision to the task. For Assessment Tasks 1.2.2b (State emblems), and 1.2.2d
(Designing a flag and emblem), the type of feedback that students received comprised
critical and praise feedback that was specific. What was distinctly missing was
feedback that provided advice. This could be one reason that contributed to the low
utilisation of teacher feedback. These two tasks also did not provide students with any
feedback written in the margins or at the end of the task. The nature of these two tasks
could also be another contributing factor to low utilisation of teacher feedback. The
tasks were group tasks. Assessment Task 1.2.2b (State emblem) was a pencil and
paper task while assessment task 1.2.2d (Designing a flag and emblem) was a
combined activity and pencil and paper task. Being a group task students could have
found it difficult to meet to do their revisions and coupled with that, assessment task
was also a activity task which means students would have had to get resources like
coloured paper, and cardboard to redo their task. For Assessment Task 1.3.1c (Mural),
the type of feedback that students received was critical and praise feedback that was
sometimes specific and sometimes general. However, again none of the students
received advice feedback. Besides that Assessment Task 1.3.1c (Mural) was also an
activity task. These factors, that is, no suggestions to help students with their revisions
and the nature of the task, which needs materials like pictures and coloured pencils
and time to do the activity, were probably the reasons why students were reluctant to
revise their tasks.
Several patterns emerged concerning the utilisation of teacher feedback. Firstly it was found that the time taken by the teacher to assess students' work and offer them feedback did not influence students' utilisation of feedback. This was evidenced in Assessment Task 1.1.1b/1.1.2b (Cycling expedition), which took the teacher forty days to assess the task and provide students with feedback. But despite this long incubation period a large number of students were found to have responded to the feedback given by the teacher by revising their work. The opposite however was true for Assessment Tasks 1.2.1c, 1.2.2b, and 1.2.2d. The students who received immediate feedback for these tasks did not respond to them and did not make changes to their responses. This goes to show that when using the Portfolio Assessment Package, the length of time taken by the teacher to offer students feedback had little influence on students' utilisation of the feedback.

Secondly it was found that the type of feedback students received had an influence on students' utilisation of teacher feedback. The evidence from students' work showed that students who did not receive written advice feedback on their teacher assessment forms, that is, feedback that provided students with advice and suggestions on improving their work, demonstrated a poor response towards the feedback that they received and did not do revision to their work. This was evident in Assessment Task 1.1.1a/1.1.2a (Location of Malaysia), Assessment Task 1.1.1b/1.1.2b (Cycling expedition), Assessment Task 1.2.2b (State emblems), Assessment Tasks 1.2.2d (Designing a flag and emblem), Assessment Task 1.3.1a (Preparation for school assembly), and Assessment Task 1.3.1c (Mural) where students' response to their feedback was low because they did not receive feedback that provided advice or suggestions for improving their work. On the other hand for Assessment Task 1.2.1b all the groups had received feedback in the form of advice
and suggestion to improve their work. Students showed a good response to their feedback by doing revision to their task. Interviews with students further emphasised this point when students like Shazan and Zena said that they did not understand the teacher’s comments.

The third pattern that emerged was related to the time when the task was implemented in the classroom. It was found that the earlier tasks, that is tasks that students had done earlier in the semester like Assessment Tasks 1.1.1a/1.1.2a (Location of Malaysia), 1.1.1b/1.1.2b (Cycling expedition), 1.2.1a (jigsaw game) and 1.2.1b (Making a map), showed better response from students in utilising teacher feedback. This was compared to tasks that were done later in the semester like Assessment Task 1.2.1c (Poster competition), 1.2.2b (State emblem), 1.2.2d (Designing a flag and emblem), 1.3.1a (Preparation for school assembly), 1.3.1b (The Malaysian flag), and 1.3.1c (Mural), which showed a poor rate of response from students in utilising teacher feedback. This pattern that emerged from students’ utilisation of teacher feedback could be attributed to the unavailability of time. Students found little time outside their Local Studies time to do revision to their tasks. This was because students were busy preparing for their mid semester examination which was to take place about three weeks before the end of the semester. The teacher was also found to supervise students in their revisions and correction of task earlier in the semester. This was evidenced by the reminders that the teacher gave to students and the coaching sessions that the teacher held with students who encountered problems, like Manjeet and Rafidah. However, with the tasks that were done towards the end of the semester, the teacher left students to do their revision on their own. This resulted in the students responding poorly to teacher feedback by not doing their revisions and corrections.
The fourth pattern that emerged was related to the nature of the task. It was found that group tasks recorded a lower rate of student utilisation of teacher feedback compared to individual tasks. This was evident in Assessment tasks 1.2.1c (Poster competition), 1.2.2b (State emblems), and 1.2.2d (Designing a flag and emblem) where none of the students who received feedback did any revision to correct or improve their tasks. These three tasks were group tasks. However the exception to this was in the case of Assessment Task 1.2.1b and Assessment Task 1.2.2a. These were also group tasks but students had responded well to their feedback by doing their revision to their work. For both these group tasks students did their revision individually and not as a group. Besides group work it was also found that students seldom did their revision to activity tasks compared to paper and pencil tasks. This was evident in Assessment Tasks 1.2.1a (Jigsaw game), 1.2.1c (Poster competition), 1.2.2d (Designing a flag and emblem), 1.3.1a (Preparation for school assembly), 1.3.1b (The Malaysian flag), and 1.3.1c (Mural) which were activity tasks or a combination of activity and paper and pencil tasks. For these tasks students had not fully utilised their feedback to do correction and to improve their task. By comparison tasks that were individually done like Assessment Tasks 1.1.1a/1.1.2a (Location of Malaysia), 1.1.1b/1.1.2b (Cycling expedition), and 1.2.2a (Flags and other symbols) showed that students responded better to teacher feedback by doing their revision. Students responded poorly to feedback for activity tasks because they were reluctant to repeat the activities whether individually or in groups. This is because most activity tasks were time consuming and required particular resources like Assessment Task 1.2.1c (Poster competition), which required tourist brochures, Internet material, and mahjong paper, while Assessment Task 1.3.1b (The Malaysian flag) required coloured
paper, cardboard and other material, and Assessment Task 1.3.1c (Mural) which required pictures, and colour pencils.

5.3.4 Discussion of Findings

To answer the research question, "What are the characteristics of teacher feedback available to students during portfolio assessment?" data from various sources were examined namely teacher’s written feedback on assessment forms, teacher’s written feedback found in the margins and at the end of students’ work, audio tapes, interviews with students, interview with the teacher, and field notes. Data from these sources were analysed and coded into three components that is types of teacher feedback, frequency of teacher feedback, and student utilisation of teacher feedback. These three components described the characteristic of teacher feedback that was available to students during portfolio assessment.

In analysing the types of teacher feedback that emerged when using portfolio assessment, it was found that teacher feedback could be categorised into three categories, that is statements of criticism, praise and advice. Critical feedback comprised negative statements or statements that showed disapproval of some aspect of the students’ work. Praise feedback, on the other hand, comprised positive statements or showed approval of some aspect of the students’ work. Advice feedback comprised statements that offered advice or suggestions for improvements or mentioned aspects of work that needed attention. These statements again showed differences in that they were sometimes general and sometimes specific. The general statements were abstract and did not specifically relate to the task being assessed while specific statements addressed the weaknesses, strengths, and needs for revision of the tasks being assessed. These categories emerged after data from three different
sources were examined. They were teacher feedback that was written on the assessment forms, feedback that was written in the margins and at the end of the task, and oral feedback that was given to students on demand and when the need for it arose. These were the types of teacher feedback available to students during portfolio assessment.

In comparing the different types of feedback it was found that feedback that offered advice and that were critical were generally more specific compared to feedback that praised students’ work. Also it was found that oral feedback that the teacher offered students on demand and when deemed necessary was always specific. Besides that feedback that the teacher wrote in the assessment forms were more specific than feedback that the teacher wrote in the margins and at the end of the students’ assignments. Giving students specific and descriptive feedback is one of the characteristics of effective feedback (McMillan, 2001). It was mentioned that teachers should comment on the mistakes that students make and that statements of criticism should be balanced with positive statements about the students’ work. In other words, the feedback that the teacher provided students using the Portfolio Assessment Package had characteristics of effective feedback. Also studies by Carroll (1984), and Gere, Schuessler and Abbott, (1984) showed that teachers who were trained in the subject offer more constructive feedback to students. This could be one reason why the teacher provided students with few constructive feedback in the form of specific advice and suggestions to help students improve their work, compared to critical and praise feedback, that is, the teacher was not well versed in the contents of the subject. Dwyer’s (1994) research found that teachers paid more attention to ‘completing’ the syllabus compared to the knowledge and content that they taught. Dwyer concluded that before the teacher could use assessment evidence to understand the students’
learning progress, they needed to understand the relationship between the concepts of the topic being taught and other aspects of curriculum structure. Dwyer, however, found that teachers seldom reflected this in their classroom assessment. This highlights the importance of linking curriculum, and learning to assessment.

The analysis also found that the teacher needed training, support and experience before she could administer feedback to students in the form of comments especially written comments. This was evident when teacher feedback for Assessment Task 1.1.1a/1.1.2a (Location of the Malaysia), which was the first Assessment Task that the teacher assessed, consisted wholly of general statements. The teacher had used statements that were taken from the assessment criteria of the Portfolio Assessment Package without relating them to the task. However, after the teacher received further training the feedback for the subsequent tasks became progressively more specific, that is they were related to the task that was being assessed. Cohen and Cavalcanti (1987) in their studies showed that teachers need to be trained to produce feedback.

The analysis of teacher feedback also found that teacher feedback written on assessment forms was usually more formal, in the sense that they used proper sentences, compared to feedback that the teacher wrote in the margins and at the end of the assignments, as well as oral feedback.

On the issue of frequency of teacher feedback, it was found that the time taken by the teacher to provide students with feedback had little influence on students’ utilisation of the feedback when using the Portfolio Assessment Package. This was probably because students themselves were most of the time dependent on the teacher to remind them and to supervise them when doing revision. Thus whether the feedback given was early or late did not matter so much to them compared to the
teacher’s reinforcements of the feedback. Crooks (1988), however is of the opinion that the timing of feedback does matter. Crooks suggested that feedback should be delivered as soon as the task was completed. This opinion concurred with the meta-analytic review on timing of feedback by Kulik and Kulik (1988) which found that in the case of complex tasks, providing immediate feedback was more advantages than providing delayed feedback. The findings of Kulhavy’s (1977) study on the other hand differed from that of Crooks and Kulik and Kulik. It was indicated in Kulhavy’s study that if a student made an error and was given immediate feedback, the student was likely to repeat the error but if there was a delay in delivering the feedback the students was likely to forget the incorrect response and hence learn the correct response from the feedback.

In terms of utilisation of teacher feedback, it was found that the teacher played an important role in influencing students to utilise the feedback they received. When the teacher reminded students to read their feedback, and do their revision, and supervised students with problems while doing their revision, students responded by doing their revision but when they were left to do their own revision they responded poorly to teacher feedback. This shows that students need to be trained to use feedback. This was emphasised by Cohen and Cavalcanti (1987). Sadler (1998) strongly agreed that students needed training to understand the feedback that they received. He also said that students needed to learn how to relate the feedback that they received to the work that they produced. In addition to that students also needed to learn how to utilise the feedback received to improve their work. He emphasised that it should not be assumed that students would know what to do with the feedback that they received. Zellermayer (1989) in his review of studies concerning feedback found that it was insufficient for the teacher to merely provide written feedback to
students. What was also necessary was student-teacher collaboration to ensure that students are doing their work and at the same time to make sure that the task and feedback that students receive are suited to the students' level of understanding.

The analysis also showed that students' utilisation of teacher feedback were influenced by the type of feedback they received from the teacher. Students who did not receive advice feedback showed a poor response to the feedback they received and did not do revision to improve their task. Besides type of feedback, the nature of the task also influenced students' utilisation of feedback. Students responded poorly to feedback when the task was a group task compared to when it was an individual task. This was because students found it difficult to meet to discuss their corrections. However when corrections were done individually, the response rate to teacher feedback was better. Also students responded better to paper and pencil tasks compared to activity tasks. This was because activity tasks took longer to redo and needed material like coloured paper, cardboard according to the task. This deterred students from making revisions to the task.
5.4 Analysis of Student's Perception of the Portfolio Assessment Package

The next research question investigates students' perception of the Portfolio Assessment Package. Students' perception was viewed from several aspects namely their perception of: assessment, the assessment tasks, self-assessment, peer-assessment, teacher assessment and feedback, and finally the Portfolio Assessment Package as a whole. Students were interviewed and their views were analysed to determine students' perception of the Portfolio Assessment Package. The interviews were held in two phases: the first round of interviews was held seven weeks after students started using the Portfolio Assessment Package. This was when students were mid-way through Theme A of the Portfolio Assessment Package. During this time students had completed four assessment tasks. The second round of interviews was conducted towards the end of the semester after students were almost completed their seventh task. This was done to validate the categories of students' perception.

The students who gave their perception of the Portfolio Assessment Package were Year Five students. Their average age is eleven years. These students were exposed to the Portfolio Assessment Package for a period of four months. During this period they had completed one theme of the Package. Their experience with the package included doing the assessment tasks, self-assessing their work upon completing each task, peer-assessing the work of their friends at the end of each task, receiving teacher assessment and feedback for each of the task, and doing revisions to their work according to the feedback received. Besides these, the students also had the experience of putting together an assessment portfolio. The assessment portfolio is made up of three pieces of work: one representing their best work, another representing their most disappointing work, and the
third representing work that contributed to most learning. In addition to these three pieces, the assessment portfolio also included students' reflections on the three pieces. In the reflection students explained why they chose the particular pieces of work from among their work contained in the process portfolio to be places in the assessment portfolio as representative of their learning experience. Based on these experiences with the Portfolio Assessment Package for a period of four months, the students formed their perception of the Portfolio Assessment Package.

First, students were asked what they understood by the word assessment. Students gave their replies as assessment is about informing:

- my view on something;
- look for our mistakes ...;
- like the teacher marking, she looks at our work to see if it is okay;
- writing what we understand about the work we have done.

Assessment is about who does assessment on whom:

- teacher marking our work;
- we need to assess our work;
- someone assesses our work - ourselves, friends, parents, and teachers;
- we are like teachers assessing our own work;
- friends and ourselves can assess. The teacher too can assess;
- we assess our work together with the teacher and friends;
- assess someone’s work including our own work.

Assessment is about learning:

- correct our mistakes;
- what is correct we continue doing it;
- if our work is not too good we need to do more assessment tasks;
- need to read books and do our revision;
- answer according to the needs of the question.

Assessment is normal:

- no particular feelings;
- a little scared. Is the answer correct or wrong?
- feel afraid when I don’t know how to do;
- fun, happy;
- I like it. It is comfortable and not stressful;
don't feel afraid or anxious;  
afraid if I make a mistake with my work;  
not afraid.

From the responses given by students, it can be summarised that according to students' perception, assessment is a low anxiety activity that is used by teacher, friends, and themselves, to inform them about their work. The students use the information to learn by improving their work.

Next, students were interviewed on their perception of the assessment tasks in the Portfolio Assessment Package. Their impromptu remarks indicated that students' initial perception of the Portfolio Assessment Tasks were that they were easy, interesting, fun, contributed to learning, and challenging. Nevertheless some students also described the Portfolio Assessment Tasks as difficult. Their interview statements were coded and categorised. It was found that students' perception of the assessment tasks fell into two categories, that is, students sometimes perceived assessment tasks as positive, and sometimes they perceived it as negative (Appendix 23 –Table 1). Those who perceived it positively mentioned positive attributes about the tasks, for example, the tasks were interesting, easy, different or that they liked the tasks (property). Those who perceived it negatively mentioned negative attributes about the tasks, for example the tasks were difficult. Their statements ranged from specific (giving reasons to support their views) to general (no reasons to support their views) (dimension) (Table 5.12).

During the first interview, Aminah's perception of the assessment tasks was positive (category). She mentioned, "The assessment tasks are fun (property) because we have not learned anything like this and we get to learn ... the names of the continents, and countries, compare the sizes of the states. The activities are challenging". Aminah's
### Table 5.12

**Students' Perception of the Assessment Tasks**

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ perception</td>
<td>Positive perception</td>
<td>Mentions positive attributes about the tasks.</td>
<td>Specific – general</td>
</tr>
<tr>
<td>of Assessment Tasks</td>
<td>Negative perception</td>
<td>Mentions negative attributes about the tasks.</td>
<td>Specific – general</td>
</tr>
</tbody>
</table>

Perception was specific because she gave reasons to support her views (dimension). Izan too perceived the assessment tasks positively (category). She said, “I can do the tasks and it is not very difficult (property) especially making the model map. There are friends to help me”. Izan’s perception was specific as she gave reasons to support her views. June’s perception of the assessment tasks was positive (category). However, her perception was general (dimension) as she did not give reasons to support her views. June said “I like the tasks. I feel happy doing the tasks. They are easy (property)”. Not all the students’ perception towards the assessment tasks was positive. A small number of students had a negative perception towards assessment tasks. Shazan was one of them. She said, “some tasks are difficult. This is because we don’t do it in groups”. Shazan’s perception of the assessment tasks was negative because she found them difficult (property). She also gave a reason to support her view (specific dimension). Besides Shazan, Asmah also had a negative perception towards the assessment tasks (category). Asmah said, “...the assessment tasks are difficult (property). If the teacher does not help I can do only a little”. Asmah’s perception was specific as she gave a reason to support her perception (dimension).
In the second interview held towards the end of the semester, students' perceptions still formed the same categories. Aminah’s perception of the assessment tasks remained positive (category). She mentioned that the tasks were, “challenging and interesting (property) and while doing the work by myself I can learn a lot”. Her perception was specific as she gave a reason to support her views. Izan also maintained that to her the assessment tasks were positive (category). She said, “I’ve learned a lot (property) by doing the assessment tasks. I learn a lot by looking for information. I can do activities like making crafts on my own without the help of anyone else. I can learn to be independent”. Her perception was specific as she mentioned reasons to support her views. Nina’s perception of the assessment tasks was positive. However they were general as she did not explain why she said so. Nina mentioned during the interview that, “I feel happy doing the assessment tasks because they are easy (property). It encourages me to think”. Besides Aminah, Izan, and Nina, other students too voiced their perceptions. However not all the students had a positive perception towards the assessment tasks. For example Maliha expressed that, “I can’t do some assessment tasks. The one that is difficult (property) is designing the flag for Putrajaya because I don’t know how to design and how to draw the design. I’ve no ideas”. Maliha’s perception of the assessment tasks was negative (category). Her perception was specific because she gave reasons to support her perception. Besides Maliha, Amy also found the assessment tasks difficult (property). Amy’s perception of the assessment tasks was also negative (category). Amy explained (dimension), “Some tasks are difficult. If they are difficult then I discuss them with my friends. When I do the tasks I think there are mistakes. That’s when I’ll ask the teacher”.

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During both the first and second interviews, students’ perception of the assessment tasks was distinctly positive. In comparing the reasons (dimension) that students gave to support their views, it was found that students generally mentioned two types of reasons. One reason that students cited was concerning the tasks. The other reason that students cited was related to the method they used to do the tasks. For example Rajes mentioned, "The assessment tasks are easy. I like doing them. It is interesting because there are activities to do like the jigsaw map". The reasons Rajes cited to support her perception was concerning the task, that is, Assessment Task 1.2.1a (Jigsaw map). The reason Kamsiah gave to support her perception was also related to the task. Kamsiah’s reason was, "... I’m learning by doing the poster. I got to know about Kuantan’s past". Kamsiah reason was concerning the task, that is, Assessment Task 1.2.1c (Poster competition). The reason Aminah gave to support her perception was "... while doing the task by myself I can learn a lot". This reason was different from Rajes’s and Kamsiah’s because it was about the method Aminah used to do the task, that is, she worked individually. Similarly, the reason cited by Nina to support her perception was, "... because I have friends to help me". This reason is related to the method Nina relied on to do her task, that is, group work.

Students’ perception of the Portfolio Assessment Package also examined the perceptions of students concerning self-assessment. Students’ perception through their interview statements showed that their perceptions belonged to two categories (Appendix 23 – Table 2). Some students had a positive perception towards self-assessment. This category of students mentioned that they found it easy to do self-assessment, liked to do self-assessment, could do self-assessment and encountered no problems. Some other
students, on the other hand, had a negative perception towards self-assessment. This category includes students who said that they encountered problems while doing self-assessment, or found it a difficult activity, or did not like doing self-assessment. The students' perceptions varied from specific to general statements. Students whose perceptions were specific were able to give reasons to support their statements. Those whose perceptions were general did not provide relevant reasons to support their statements (Table 5.13). In order to gather data about students' perception on self-assessment students were interviewed in two phases. The first phase was conducted seven weeks after students used the Portfolio Assessment Tasks and after students had conducted self-assessment on four of their completed tasks. The second phase was conducted towards the end of the semester when students were about to complete the assessment tasks of Theme A of the Portfolio assessment Package.

Table 5.13

*Students' Perception of Self-Assessment*

<table>
<thead>
<tr>
<th>Phenomena of self-assessment</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive perception</td>
<td></td>
<td>- easy,</td>
<td>Specific - general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- like to do,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- can do,</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>- had no problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>doing self-assessment</td>
<td></td>
</tr>
<tr>
<td>Negative perception</td>
<td></td>
<td>- didn't like,</td>
<td>Specific-general</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- difficult,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>- had problems</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>doing self-assessment</td>
<td></td>
</tr>
</tbody>
</table>
During the first interview, Aminah said:

I like doing self-assessment. I feel I've learned a lot while doing it because I can assess my own work. I'm more aware of my work, what is correct and what is wrong. When I'm older I'll be able to assess my own work. I have no problems. I can follow the guide.

Aminah's perception of self-assessment was positive (category). This is because she mentioned that she liked doing it and faced no problems doing it (property). Her perception was specific because she gave reasons to support her views. Vimala's perception of self-assessment was negative (category). She said, "I have problems doing it (property). I'm not sure of the correct answer. When this happens I check my answer with that of my friends or the book". Vimala's perception was specific because she gave reasons to support her views. Vimala also went on to say that, "I like doing self-assessment. I feel it is important because by doing it I can know the correct answer even if I did not know it earlier". Thus, although Vimala had a negative perception towards self-assessment because she had problems doing it, she nevertheless found it an important activity. Tazini's perception of self-assessment was also negative (category). Tazini said, "I like doing it but it is difficult. At first it is difficult but once you have done it, it is easy. What I don't understand I discuss with my friends". Although Tazini said that self-assessment was easy with practice, she indicated that she faced problems understanding answers. Her perception of self-assessment was general (dimension) because she did not explain what was difficult. Similarly Rajes's perception of self-assessment was also general (dimension). She said, "I like doing it. I think it is not time wasting. It is interesting to do. I have no problems". Rajes's perception of self-assessment was positive
(category) because she said that she liked to do it and had no problems (property) but she did not explain her statement.

The second interview was conducted towards the end of the semester after the seventh assessment task was near completion. During the interview Nalini said:

Assessment is the work of the teacher. Actually the students should not be involved in assessing. The teacher should be doing assessment... I don't believe in my own assessment of my work. When I assess my own work I'm afraid that I've made a mistake but I'll write that everything is okay. I'm honest but I don't know how to write. I'm not aware that I've made a mistake. I check my answers but sometimes I'm not sure if my answer is correct or not.

Nalini’s perception of self-assessment was negative (category) because she mentioned several problems like not trusting her own assessment, and not being sure of the answer (property). Her perception of self-assessment was specific because she explained her statements. Fatini’s perception of self-assessment was also negative (category). Fatini expressed her views on self-assessment by saying, “I don’t like it (property) because I can’t see what my mistake is when I assess myself. It is difficult to do”. Fatini’s perception was specific because she gave reasons to support her views. Izan perception of self-assessment was positive (category). She mentioned that she liked doing it (property). It was also specific as she explained her perception. Izan mentioned that:

I like doing self-assessment. We can assess our own work. The benefit is that if we are correct we can continue doing as we did and if we are wrong then we can avoid making the mistake in future. I trust my self-assessment that I do. I use the feedback that I give myself to make alterations and improve my work. ... by doing self-assessment I’m more aware of my strengths and weaknesses.

Norah’s perception of self-assessment was positive (category). During her interview she said:
I like doing self-assessment (property). I’ve used my self-assessment to make changes to my task if there are mistakes. I believe in what I write. ... I prefer if I’m given the chance to do self-assessment. The benefits of self-assessment are that I can assess, make changes, and I get to know my weaknesses and strengths. I’m aware of my mistakes.

Norah’s perception was specific because she gave reasons to support her perception.

When examining the reasons (dimensions) that students gave to support their perception, it was found that students who had a positive perception towards self-assessment felt that way because they found that doing self-assessment was a useful activity. They said that by doing self-assessment it raised their awareness about their mistakes, their strengths and weaknesses. It also gave them a chance to correct their mistakes. This view that students’ had about self-assessment was evidenced by their actions. The findings in the previous section on self-assessment, found that students through their self-assessment were able to identify their strengths and weaknesses. Besides that they were also able to make suggestions to address the weaknesses that they had identified. A small number of students pointed out that although they found self-assessment useful, they however did not use their self-assessment to make alterations to their work. Students who on the other hand had a negative perception towards self-assessment felt that way because they were usually unsure of their answers, that is, if their answers were accurate or inaccurate. In other words they felt that their lack of knowledge in the topic affected their ability to perform self-assessment efficiently. This view probably explains why some students were found to be dependent on the teacher, when doing revision to their work. When analysing students’ utilisation of teacher feedback (previous section) it was found that when the teacher supervised students in revising their work, students responded by doing their revision, but when the students
were left to do their own revision they responded poorly to feedback. This was probably because they were unsure of the acceptable answers to the assessment tasks and were therefore not confident of doing revision on their own. Thus, they depended on the teacher to supervise them.

Next, students' perception of their practice with peer-assessment was also examined. Data for students' perception on peer-assessment were gathered through interviews. The interviews were conducted in two phases. The first phase, like in self-assessment, was conducted after students had four practices doing peer-assessment. The second phase was conducted after students had nearly completed their seventh task, which was towards the end of the semester. Data from students' interviews showed that students' perception of peer-assessment formed two categories, which were similar to those found in their perception of self-assessment. These categories were positive perception of peer-assessment and negative perception of peer-assessment (Appendix 23 – Table 3). Students who had a positive perception towards peer-assessment mentioned that they found peer-assessment easy, liked doing it, or believed in it. Students who had a negative perception towards peer-assessment, on the other hand, mentioned that they found it difficult, did not like doing it, or did not believe in it. Students' perception ranged according to whether their statements were specific or general. Specific statements were those statements that gave reasons to support their views, while general statements were those statements that did not give reasons to support their views.

During the first phase of interviews, Nalini said that she perceived peer-assessment negatively (category). In her interview she mentioned that, "I don't like doing (property) it because I don't like to check other people's work. Sometimes I don't
understand their handwriting. Sometimes I'm unsure of my own answers, so how can I be sure of other people's answers". Nalini's perception was specific as she had given reasons to support her views. Vimala's perception of peer-assessment is also negative (category). Vimala in her interview said that, "I have problems doing peer-assessment (property). I'm not sure if the answers are correct or not. Also when we assess as a group and I give my views, the group leader does not accept it. She will write what she wants to write, for example the assessment task on the model map". Vimala perception was specific because she explained her problems when doing peer-assessment. However, not all the students had a negative perception towards peer-assessment. Among those who thought positively of peer-assessment were Suzana and Nina. Suzana's positive perception of peer-assessment was also specific when she explained that, "I like doing peer-assessment (property) because I can know about my friend's work. I can get ideas after looking at my friend's work. I have no problems doing peer-assessment". Nina's positive perception was however general, when she only said, "Peer-assessment is easy because my friend's work is complete. I've no problems doing it". Nina did not give reasons to support her perception.

During the second interview Nalini was adamant about her negative perception towards peer-assessment (category). She emphasised that:

I don't believe in peer-assessment (property) because they are probably not honest. When I make a mistake they say it is correct and when my answer is correct they say it is wrong. I'm not sure if my friend refers to the books when she is assessing my work, but when I do peer-assessment I refer to the book to check their answers. Peer-assessment is a waste of time. Let the teacher assess. It does not raise any awareness. I'm aware of my weaknesses when I do my task.
Nalini's perception was specific as she had explained her views. Another student who felt the same way as Nalini was Nasiha. Nasiha's perception of peer-assessment was also negative (category). She explained:

I feel it is not important because we want to know about our own work not about our friend's work. Sometimes when my answer is correct she says it is wrong. Then when it is wrong, she says it is correct. My friend does not check the answer by referring to the text or reference books. They only guess.

Nasiha apparently did not believe in the peer-assessment she received from friends (property). Nasiha's perception was also specific as she explained the reason for her negative perception. Amy felt differently about peer-assessment from Nalini and Nasiha.

Amy in her interview said:

...we can see how our friends do their work. Sometimes I believe in the peer-assessment done by my friends (property). For example group 8 assessed my task on the model map (Assessment Task1.2.1b). They wrote that Penang Island was not named on the map. So I checked it and it was true. If my friend checks my work and says that this and that is not correct, then I do the corrections. I like people to give me their opinion...

Amy had maintained her positive perception towards peer-assessment (category), as she had in the earlier interview mentioned that she liked doing peer-assessment. Her perception was also positive as she cited an example when her friend gave her accurate feedback, which she then used to revise her work. Besides Amy, Nina also maintained her positive perception towards peer-assessment (category). Nina told the interviewer that, "while doing peer-assessment I get to see my friends' work. It is beneficial. I believe in my friends' comments (property). They check before assessing. I've used the peer feedback to make adjustments to my work". Nina's perception was specific because she gave reasons to support her views like, she gets to see her friend's work, she believes in her friend's comments and uses them to revise her work.
When comparing the reasons (dimensions) students gave to support their perceptions, it was found that students who had a positive perception towards peer-assessment generally said that they liked doing it because they could see their friends work and get ideas from their work. More than half the students who had a positive perception towards peer-assessment said that they used the feedback from the peer-assessment they received to make changes to their task. Amy for instance said, “I see it and read it. If there are changes to be made, then I’ll do it”. Similarly, Shazan said, “I read the comments. If my friend writes, “Your answer is not complete”, then I’ll try to complete it”. Students who had a negative perception towards peer-assessment indicated that their perception was influenced by the fact that they were unsure of the answers. As a result, they too did not trust their friends’ assessment of their work because their friends were also unsure of the answers and their friends did not check to verify the correct answers.

In investigating students’ perception of the Portfolio Assessment Package, students were asked about their opinion on teacher’s assessment of their work and feedback that they had received. Data were collected through interviews, which were also conducted in two phases. The first phase was conducted after students had completed their fourth assessment tasks. However, at this point the teacher had only assessed and provided feedback for one assessment task. The second phase was conducted towards the end of the seventh task. By this time the teacher had assessed and provided feedback for all the seven tasks that the students had completed. Students’ perception of teacher assessment and feedback also fell into two categories, which were similar to the categories that emerged for students’ perception of self- and peer-assessment (Table
5.14). The categories were positive perception and negative perception (Appendix 23 – Table 4). Students’ who expressed a positive perception towards teacher assessment and feedback mentioned or indicated that they understood the teacher’s comments (property). Students’ whose perception towards teacher assessment and feedback were negative mentioned or indicated that they did not understand the comments. Students’ perception varied between specific and general comments (dimension). Specific comments were those that gave reasons to support or explained the views of the students, while general comments were those that did not give reasons to support or explain the views of the students.

Table 5.14

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Category</th>
<th>Property</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students’ perception of teacher assessment and feedback</td>
<td>Positive perception</td>
<td>Able to understand teacher’s comments.</td>
<td>Specific-general</td>
</tr>
<tr>
<td></td>
<td>Negative perception</td>
<td>Unable to understand teacher’s comments.</td>
<td>Specific - general</td>
</tr>
</tbody>
</table>

During the first interview, Izan explained, "I understand the teacher’s comments. The teacher wrote that I’ve showed creativity in the topic and have given my views on all the aspects. Teacher did not ask me to do corrections. I like comments that give suggestions for corrections". Izan’s perception of teacher assessment and feedback were positive (category) as she indicated that she understood the teacher’s comments (property). Izan’s perception was specific (dimension) as she explained her views.
Aminah's perception of teacher's assessment and feedback were also positive (category) as she indicated specifically (dimension) that she understood the teacher's comments (property). Aminah during her interview said, "I understand the teacher's comments. The teacher said that I understood the topic. She also said that the information in my answer is correct. After getting the feedback I read it and try to understand it. Teacher did not ask me to do corrections. I like comments that are directly related to the task". Rajes's perception of teacher assessment and feedback was also positive (category) but it was general (dimension) because she was unable to explain specifically her views. Rajes only mentioned, "I can understand the teacher's comments (property)". Unlike Izan and Aminah some students had a negative perception towards teacher assessment and feedback. For example Shazan said:

I don't understand the teacher's comments. After getting the feedback I read it but I did not do anything because I did not understand. I thought that those the teacher marked wrong did not need corrections to be done. I like comments that give suggestions to improve the answer.

Shazan's perception of teacher assessment and feedback were negative (category) because she indicated that she did not understand the teacher's comments (property). Her perception was also specific (dimension) as she had explained her views. June's perception of teacher assessment and feedback were similar to Shazan's. June mentioned during the interview that, "I don't understand the comments written on the form. After getting the feedback I read and keep it. I like the teacher to give advise on how to do [the task]". Salina's perception towards teacher assessment and feedback was not only negative (category) but also general (dimension) as she was unable to explain her perception. During the interview she only said that, "I don't read the teacher's comments (property)".
During the second interview Izan still indicated that she maintained her perception of teacher assessment and feedback. Izan mentioned:

*I understand the teacher's comments for example when the teacher marked the map, I will see what is not complete and then I'll do what the teacher recommends. I usually do the corrections based on the teacher's comments. I prefer the teacher to give marks ...*

Izan's perception of teacher's assessment and feedback was positive (category) because she said that she understood the teacher’s comments. They were also specific (dimension) as Izan explained her views. Like Izan, Aminah maintained her perception of teacher assessment and feedback though out the period she was using the Portfolio Assessment Package. She reiterated:

*I can understand the teacher's comments. I usually use the teacher's comments. For example when the teacher writes 'need to improve your work' I will try to improve myself. I find oral comments useful. I like both oral and written feedback. Because in this way I won't forget what the teacher said about my work as I can refer to the written comments.*

Aminah’s perception of teacher assessment and feedback was positive (category). She indicated specifically (dimension) that she understood the teachers’ comments (property). After receiving teacher assessment and feedback for the seven tasks that she had completed, Nasiah’s perception of teacher assessment and feedback was negative (category). Nasiah in her interview said:

*I don't understand the teachers' comments (property). When the teacher writes 'answer is not complete', I have to think what do I need to complete. I have to check my answers to see what is not complete because I don't know what the teacher is referring to. So I don't do correction. This is because the comments are written far away from the assignment. If the comments were written next to the assignment it is more effective. I prefer the teacher to write sentences that explain something rather than just write one word like good, weak, or satisfactory.*
Nasihah's perception was specific (dimension) because she explained her reasons by saying she did not understand the teacher's comments because the teacher did not elaborate or explain the statements she wrote. Furthermore she found it difficult to relate to the comments because she could not determine the context in which the comments were made as the comments appeared on a separate sheet and not on the assignment itself. Nina also explained (dimension) why her perception towards teacher assessment and feedback were negative (category) when she said:

I don't understand the teacher's assessment (property). It depends on the sentences. For example when the teacher writes sentences like 'shows a deep understanding concerning the facts, skills and principles ...', I don't quite understand. If the teacher writes 'the explanation for the flag and national anthem were ...', I can understand. I prefer the teacher to write brief comments, for example what I can and cannot do.

Nina's perception was specific because she explained the types of feedback statements that she could understand and those that she could not understand.

Students' perception towards teacher assessment and feedback made in the beginning of semester was compare with their perceptions made towards the end of the semester. It was found that during the first interview, which was conducted after the teacher had returned only one assessment and feedback to students, that is, Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in relation to Southeast Asia and the world), more than half the students interviewed expressed their perception towards teacher assessment and feedback as negative. This finding concurred with the finding made during the analysis of teacher feedback, which found that teacher feedback for Assessment Task 1.1.1a/1.1.2a was mostly general feedback. General feedback was taken to mean feedback that was abstract and did not specifically relate to the task assessed. This was probably why students could not understand the teacher's comments. Not
surprisingly, during the second interview, the majority of the students' perception towards teacher's assessment and feedback changed and they began to view teacher's feedback positively.

On the type of feedback that students preferred the teacher to give them, most of the students mentioned that they liked feedback in the form of advice. For example Maliha mentioned, "I like comments where the teacher gives suggestions to improve the answer". Besides advice feedback, the students next preferred feedback in the form of praise. During the first interview none of the students interviewed, mentioned that they liked feedback in the form of criticism. However, during the second interview a few students mentioned that they would like the teacher to tell them their weaknesses. This finding also relates to the finding made during the analysis of teacher assessment and feedback (previous section), which showed that there was evidence from students' work that students who did not receive advice feedback showed a poor response to the feedback and did not do revision to improve their tasks. Advice feedback referred to feedback that provided students with advice and suggestions on improving their work. Conversely, students who received advice feedback were found to show good response to their feedback by doing revision to their tasks. These two findings showed that students usually responded to the type of feedback that they liked to receive and can understand.

Lastly, students were asked to give their perception of the Portfolio Assessment Package as a whole. They responded by saying what they liked and disliked about the package. Students' perceptions of the Portfolio Assessment Tasks were recorded in two phases: the first phase was after they had completed their fourth task and the second phase towards the end of the seventh task. During the first interview students' perception
of the Portfolio Assessment Package was more positive than negative. This is because students mentioned more things they liked about the Portfolio Assessment Package than they disliked. The majority of the students said that they liked doing the assessment tasks that were activity tasks. They mentioned activities like labelling the map, making the model map, and naming the compass points. However there was no particular task that the students showed preference for. Besides that a small number of students said that they liked doing peer-assessment and an even smaller number said they liked doing self-assessment. However students did not say why they liked the activities they had chosen.

About their dislikes, the majority of the students interviewed said that they did not have any dislikes about the Portfolio Assessment Package. Three students said they disliked doing self-assessment and another three students said they disliked doing peer-assessment. Again students did not elaborate on why they disliked self-assessment or peer-assessment.

During the second interview, which was conducted towards the end of semester, students still maintained their positive perception towards the Portfolio Assessment Tasks. This is because students mentioned more things that they liked about the Portfolio Assessment Package than they disliked. Most of the students mentioned specific Assessment Tasks as activities that they liked about the Portfolio Assessment Package. For example Sharifah commented, "What I like most about the Portfolio Assessment Package is doing the poster because it is about the history of Kuantan so I got to know about the history of Kuantan". Maliha on the other hand said, "In doing the Portfolio Assessment Package, I like doing the mural the most. I got the references from the textbook and the reference book. It is easy to get references". The assessment task that
students seemed to have liked most was Assessment Task 1.2.1b (States of Malaysia – Making a map). About their dislikes, students again mentioned assessment tasks as what they disliked in the Portfolio Assessment Package. There was no one particular task that emerged as the generally disliked task. Amy mentioned Assessment Task 1.3.1c (Mural) as the task she disliked when she said, “What I dislike most about the Portfolio Assessment Package is making the mural because I didn’t know where to look for symbols. It was difficult”. On the other hand Maliha said that she disliked doing the flag and emblem for Putrajaya. However students’ were unable to say exactly why they disliked the assessment tasks. Some students also mentioned that they had no dislikes concerning the assessment tasks in the Portfolio Assessment Package. For example Fatini said, “there was nothing that I disliked”. Similar expressions were made by Priyah, “There is nothing that I don’t like”, and Kamsiah, “There are no assessment tasks that I dislike”.

Thus it can be said that students’ perception towards the Portfolio Assessment Package was generally positive as was indicated by the number of positive statements made about the package. Assessment Task 1.2.1b (making a map) emerged as the assessment tasks that students liked most about the Portfolio Assessment Package. There was no one particular activity that students generally disliked about the Portfolio Assessment Package. In fact some students specifically mentioned that there was nothing that they disliked about the Portfolio Assessment Package.
5.4.1 Discussion of Findings

The research question on students’ perception of the Portfolio Assessment Package was examined from various aspects. First, students expressed their perception of assessment. Next, students expressed their perceptions of the assessment tasks, self-assessment, peer-assessment, and teacher’s assessment and feedback. Finally, students expressed their perception of the Portfolio Assessment Package as a whole by stating what they liked and disliked about the package. A group of students were interviewed and their views were analysed to determine students’ perception of the Portfolio Assessment Package. Students were interviewed in two stages to see if their perceptions changed as they used the Portfolio Assessment Package. In the first phase the interviews were held seven weeks after the Portfolio Assessment Package was introduced. By this time students had completed four assessment tasks, four self-assessments, and four peer-assessments. Students had also received one feedback from the teacher.

According to students of Year 5 Bijak, assessment is a low anxiety activity that is used by the teacher, friends, and themselves to inform them about their work. The students used the information to learn by improving their work. On students’ perception of the Portfolio Assessment Package, first, it was found that most of the students perceived the assessment tasks positively. That is students felt positively towards the assessment tasks, for example they liked the tasks, found it easy, interesting or enjoyable. The reasons students cited to support their perception were because they liked the Assessment Tasks themselves, and they liked the methods used to complete the Assessment Tasks, like being involved in group work, working individually, or receiving help from the teacher.
The Portfolio Assessment Package also comprised self-assessment practice. Students’ perception of self-assessment was found to be positive. Students said that it raised their awareness about their mistakes, their strengths, and weaknesses. It also gave students a chance to correct their mistakes. Students whose perception of self-assessment was negative said that they were unsure of their answers, which made self-assessment a difficult task. Peer-assessment was also a part of the Portfolio Assessment Package. Students’ perception of peer-assessment was positive. Students said that they liked doing peer-assessment because it gave them the opportunity to see how their friends did their work so that they could get ideas from their friends’ work. Those students who had a negative perception towards peer-assessment said that they were unsure of their answers and therefore did not trust peer-assessment. This points to the fact that students perceived their lack of knowledge in a topic as affecting their efficiency in performing self-assessment and peer-assessment.

Teacher’s assessment and feedback are an integral part of the Portfolio Assessment Package. Students’ perception of teacher’s assessment and feedback was positive except for the feedback students received for Assessment Task 1.1.1a/1.1.2a (Location of Malaysia in Southeast Asia and the world). For this task, students said that they could not understand the teacher’s feedback. This finding coincided with the finding from the analysis of teacher assessment and feedback (previous section), which showed that teacher’s feedback for Assessment Task 1.1.1a/1.1.2a was general. That means the feedback was not specifically related to the task that the teacher was assessing. That is why students could not understand the feedback. Students also mentioned that they preferred feedback in the form of advice. This preference in the type of feedback received
by students also coincided with the finding on students’ utilisation of teacher’s feedback.
In the analysis on teacher assessment and feedback (previous section), it was found that,
students who did not receive feedback in the form of advice and suggestions from the
teacher did not revise their work. Conversely when they received feedback that provided
advice they showed a good response to the feedback by revising their work. These two
findings point to the fact that students’ preference for type of feedback that they receive
affected their utilisation of the feedback to revise their work.

Lastly, on the whole, students’ perception of the Portfolio Assessment Package
was positive, that is, more students mentioned things they liked about the Portfolio
Assessment Package than things they did not like about the package. What students liked
most about the Portfolio Assessment Package was the Assessment Tasks, especially those
that were activity tasks. Assessment Task 1.2.1b (States of Malaysia – Making a map)
was generally liked by the students. What some students disliked most about the Portfolio
Assessment Package was also some Assessment Tasks. However there was no particular
Assessment Task that was generally disliked by these students. In addition, some students
also specifically mentioned that there was nothing that they disliked in the Portfolio
Assessment Package. Therefore based on students’ perception of the Portfolio
Assessment Package, students liked the Portfolio Assessment Package and accepted it
well.

5.5 Summary

In this chapter four research questions were examined: Is there evidence of higher
order thinking in students’ responses to the portfolio assessment tasks? What evidence of
self-assessment do students exhibit when performing portfolio assessment? What are the characteristics of teacher assessment and feedback available to students during portfolio assessment? What are students’ perceptions of the Portfolio Assessment Package? To answer these research questions data were collected from various sources namely, students’ work on the various assessment tasks; students’ self-assessment, peer-assessment, and students’ reflective statements; teacher’s assessment of students’ works; students’ journals; teacher’s journal; the researcher’s field notes; and interviews with students and the teacher. The data collected were then analysed, and categorised using Strauss and Corbin’s (1990) coding procedures. The findings of the analysis were then discussed.

In the next chapter conclusions will be drawn based on the findings of the analysis. Based on these conclusions, recommendations will be made for further improvement of the Portfolio Assessment Package so that it will be suitable for use in schools. In addition, recommendations will also be made for consideration by the Ministry of Education, and for further research to be done.