CHAPTER SIX

CONCLUSIONS, RECOMMENDATIONS, AND SUGGESTIONS
FOR FURTHER RESEARCH

In the previous chapter the data collected were analysed according to Strauss and Corbin's (1990) coding procedures. The four research questions were answered: 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?

This chapter will draw the conclusions of the study. It will also make recommendations for further development of the Portfolio Assessment Package. The findings of the study provided information which will be used to make decisions about the package, that is, which of the Assessment Tasks or procedures should be retained, which should be modified and which should be recycled. Recommendations will be made to improve the package for use in schools. In addition to that it will also present some recommendations for consideration by the Schools Division and the Teacher Education Division of the Ministry of Education. Finally, this chapter offers suggestions for further research in related areas of portfolio assessment.

6.1 Conclusions

This study is a development and evaluation study. A Portfolio Assessment Package was developed to assess students in Local Studies in Year Five. The students
who made up the sample for this study were thirty-six, eleven year old students who were academically average in their studies. The package consisted of Assessment Tasks, assessment criteria for assessing the tasks, a guide to using the Portfolio Assessment Package, and assessment forms for self-assessment, peer-assessment, and teacher assessment. The Portfolio Assessment Package was developed to provide an alternative assessment for Local Studies, which focused on the development of the students rather than sentencing the students. The Assessment Tasks in the package were designed to encourage students to perform higher-order thinking. Self-assessment, peer-assessment, and teacher assessment were incorporated into the package to make assessment informative and developmental. Students received feedback about their work from multiple sources, that is, themselves, their peers, and from the teacher. The information they received about their work was from multiple perspectives but based on the same criteria. Sadler pointed out that according to research, students enjoyed the experience of doing assessment with their teacher. He also said that the experience of assessing work together with the teacher influenced their learning and their attitude towards learning in a positive way (in Barr, Craig, Fisette and Syverson, 1999). The assessment was developmental because assessment was no longer something that only others did to students but was now also done by the students themselves. Students were aware of the assessment criteria, which they used to take charge of their learning. Assessment using the Portfolio Assessment Package was also developmental because the teacher's assessment of students' work was not a final stamp on their work. Teacher assessment provided students with feedback about their work and findings showed that students took steps to revise their work based on the feedback they received. Klenowski (2002) said
that when portfolios were designed for developmental purpose, the teacher’s role was not
confined to grading the portfolio. On the contrary, what was fundamental was providing
feedback to the students so that they know what actions to take to improve their work and
how to steer further learning.

The three vital components of Portfolio Assessment Package are: Assessment
Tasks that promote higher order thinking; self-assessment together with peer-assessment
practices that account for student assessment; and teacher assessment and feedback.
These three components of the Portfolio Assessment Package made it an integrated
learning and assessment tool.

The package was evaluated to gauge its merit and its worth. It was deemed
necessary to evaluate the package on a continuous basis as well as to evaluate the
package as a whole based on its use in the classroom. To fulfill this need, Shufflemam’s
process and product evaluation was used to evaluate the package. Process evaluation was
done so that information could be fed into the formative development of the package. The
objectives of process evaluation were to determine if there was evidence of higher order
thinking in students’ responses to the Portfolio Assessment Tasks, what evidence of self-
assessment did students exhibit when performing portfolio assessment, and what were the
characteristics of teacher feedback available to students during portfolio assessment. In
the first phase, process evaluation started with the pilot study, which provided
information on the Assessment Tasks as well as the other aspects of the Portfolio
Assessment Package. Changes were made based on the feedback received from the pilot
study.
In the second phase, process evaluation started with the introduction of the Portfolio Assessment Package in the classroom. Again information was drawn from students’ and the teacher’s practices using the Portfolio Assessment Package. The changes included further training for the teacher on how to assess students’ work and provide students with feedback. The teacher was also given a guide to show her how to relate the feedback comments based on the assessment criteria to students’ work that she was assessing. Process evaluation also provided information that students were facing problems with self-assessment and peer-assessment. This was based on feedback from the students. As a result of that, the students were also provided with additional guidance as they did self- and peer-assessment. This included ‘A guide to doing self- and peer-assessment’ that was prepared for the students to help them understand the self- and peer-assessment questions that appeared in the self- and peer-assessment forms.

The third phase of process evaluation was based on the analysis of students’ work, their self-assessment and peer-assessment statements, the teacher’s feedback to students, interviews with students and the teacher, the journals that the students and the teacher kept, and the researchers’ field notes. The findings from these analyses provided information for further development of the package.

The objective of product evaluation on the other hand was to determine students’ perception of the Portfolio Assessment Package. The students who were the main users of the Portfolio Assessment Package put forth their opinion about the Package. Feedback from students showed that they felt positively about the Portfolio Assessment Package. The implications of this feedback were that the Portfolio Assessment Package should retain its present structure, comprising the Assessment Tasks, self- and peer-assessment,
and teacher's assessment that provides feedback to students. The process and product evaluation provided information to gauge the merit and worth of the Portfolio Assessment Package as a learning and assessment tool that can engage students in higher order thinking, self- and peer-assessment, and utilisation of teacher feedback.

Several conclusions were drawn based on information gathered from process and product evaluation of the package. The conclusions of the study were:

Students were capable of practicing higher order thinking when the Assessment Tasks required them to do so. Students perform higher order thinking according to the various categories at which the Assessment Tasks were set, that is, interpreting and applying, organizing and creating, and making judgments.

However, six factors influenced students' higher order thinking when using the Portfolio Assessment Tasks. The first factor was students' ability to select relevant material to suit the topic in the task. Evidence from students' work showed that when the teacher provided students the necessary material for task completion, more students performed higher order thinking than when they had to source for their own material. These findings showed that students' were still dependent on their teacher for resources and hence needed to be trained to source their own material so that they would be more self-regulated and independent. The higher order thinking tasks of the Portfolio Assessment Package provided good training grounds for this purpose.

The second factor that influenced students higher order thinking was sourcing for sufficient material to answer the task effectively. This means that the amount of relevant information or contents of the topic that students include in their responses have an effect on their responses to the higher order thinking tasks. This finding indicates that students'
higher order thinking was affected by their information processing skills, that is, their ability to look for information from various sources and then to select relevant material that is sufficient to answer a task effectively. In order to do that, students also needed to have present and prior knowledge of the topic so that they would recognize the relevancy of the materials gathered on the topic.

Students' higher order thinking were also influenced by the clarity of the question itself. This was the third factor to influence students' higher order thinking. It was found that certain terminologies confused the students and this had an effect on their performance in the higher order tasks. Unfamiliar terms or vague terms used in the Assessment Tasks created confusion, which affected students' performances on the higher order thinking tasks.

In addition, it was also ascertained from the findings that the difficulty level of the tasks affected students' higher order thinking performance. This was the fourth factor to influence students' higher order thinking. It was found that when tasks were too simple and the necessary contents to answer the question were available directly in the textbook, the tasks posed little challenge to the students and they responded by copying the contents verbatim from the textbook. However, when the responses to the Assessment Tasks were not directly or at all available in the textbook, students were forced to utilize other sources of information and this encouraged them to paraphrase, interpret, draw inferences, and even make their own judgments according to the needs of the Assessment Tasks.

Besides the difficulty level of the tasks, the fifth factor that influenced students' higher order thinking was the nature of the tasks. Although in general the nature of the
through relevant scaffolding from the tutor/teacher and peers, it enhanced development of their capabilities.

Based on the findings it can be concluded that students were able to perform self-assessment by identifying their strengths, their weaknesses, and by making recommendations to overcome the weaknesses identified. This indicated that when using the Portfolio Assessment Package learning was not confined to learning of facts about specific topics but that students were able to perform metacognition, if they were given the opportunity and support to do so. However, it was found that practice alone was insufficient to improve students' ability to self-assess. By improvement it is taken to mean writing more specific statements relating to the tasks being assessed as opposed to general statements, which were not related to the task being assessed. The implication of this finding was that besides more practice, students needed training and support to improve their self-assessment skills.

Students' self-assessment skills were also influenced by certain factors. It was found that students' self-assessment statements of strengths and weaknesses, varied in terms of its density or the amount of elaboration they provided. This was attributed to several factors namely language deficiency, self-assessment being a new experience, insufficient time to conduct self-assessment, and students being given menial tasks to do during group work.

The study found that some students encountered problems with self-assessment because of several reasons: they did not refer to the task and their responses when doing self-assessment; they looked for 'acceptable' statements to write, that is, they recycled the same self-assessment statements from their previous tasks; they found it a tedious
activity and so devised short cuts, for instance by stating that they had no weaknesses although their responses were far from satisfactory. In this way they felt that they did not have to write about their weaknesses and make suggestions to overcome them.

The suggestions given by students during self-assessment to improve the weaknesses that they had identified emphasized one solution, that is, ‘putting in more effort’ as the answer to overcome their weaknesses. Contrastingly during peer-assessment, the suggestions they gave their peers to improve their weaknesses were more varied. They included doing corrections, improving neatness and handwriting, and doing references. In addition the suggestions for improvement also included specific suggestions that were related to particular tasks, and the suggestion that there was no need to improve the work further. The implications of this finding is that students’ ability to make suggestions to overcome weaknesses was limited and this could be attributed to lack of training in doing self-assessment, as well as their present and prior knowledge of the topic that they were assessing.

Students made both positive and negative statements about their work when doing self-assessment but when doing peer-assessment they made more negative statements about their peers’ work than positive statements. This means that students were critical of their friends’ work. However, it did not show that they were less critical about their own work because their self-assessment statements comprised both positive and negative comments about their own work.

Students were able to reflect on their work and make selections based on their own criteria to determine what they considered their best work, most unsatisfactory work, and work that contributed to the most learning. Students’ self-reflection statements
indicated that they were aware of their abilities and inabilities as learners, they were aware of the task requirements, and they were aware of their learning. However, more students showed an understanding of the task (task knowledge), and an awareness of what they had learnt from the task (knowledge of contents) than an understanding of their own abilities or inabilities (self knowledge). Paris and Winograd (1990) referred to this as cognitive self-appraisal, which they said includes reflections about one's abilities and knowledge situation. They mentioned that studies have shown that children have difficulty performing cognitive self-appraisal and that it is possibly an age related activity. This probably accounts for the reason why fewer students (11 year olds) showed an understanding of self-knowledge compared to task knowledge and knowledge of contents. Incidentally, Shuell (1986) also includes knowledge about the tasks, the tasks completion process and strategies as part of cognitive self-appraisal.

Another conclusion that was drawn from the findings was that students could understand the teacher's feedback statements, which comprised statements of praise, criticism, and advice, and they were able to utilize the teacher's assessment feedback to revise their work. This constituted learning, as students used the feedback they received to correct or improve their work. In other words it can be said that students learned while being assessed which goes to show that when using the Portfolio Assessment Package, assessment and learning can be integrated.

Several patterns emerged concerning the utilization of teacher feedback. First, it was found that the time taken by the teacher to assess students' work and offer them feedback did not influence students' utilization of feedback. This means that whether the teacher took a short or long time to assess students' work and offer them feedback, did
not show significance on students’ utilizing the feedback received, by revising their work. Second, it was found that the type of feedback students received had an influence on students’ utilisation of teacher feedback. For example students who did not receive advice feedback from their teacher, in written form, generally did not revise their work. Third, students’ responses to teacher’s feedback showed that more students responded to the first four tasks of the Portfolio Assessment Package, by revising the work according to the feedback received, compared to the latter three tasks. In other words, the timing of the tasks had an influence on students’ utilisation of feedback received from the teacher. The fourth pattern that emerged was related to the nature of the task. It was found that group tasks recorded a lower rate of students’ utilization of teacher feedback compared to individual tasks. In addition, group tasks in which students did their revision individually and not as a group saw a better response to teacher feedback. Besides group tasks, it was found that students seldom revised activity based tasks compared to paper and pencil tasks.

The implications of these patterns were that teachers needed training, support and experience before they could administer effective feedback to students in the form of descriptive written feedback. It was also found that when the teacher supervised students with their revision, this influenced utilization of teacher feedback. More students did their revision when the teacher reminded students to read their feedback and do their revision. However, when students were left to do their revision on their own, they responded poorly to teacher feedback. This indicated that students too needed training on how to utilize teacher feedback. Sadler (1998) emphasized this when he said that students needed training to be able to interpret feedback, and to relate it to their work and future
learning. He insisted that it should not be assumed that student would automatically know what to do with the feedback the moment they received it.

Based on the finding of the product evaluation, it can be concluded that students' perception of assessment was that it was a low anxiety activity, which not only involved the teacher but also themselves and their peers. The function of assessment was to provide them with information about their work, which they could then utilize to improve the quality of their work.

Students generally had a positive perception towards the assessment tasks, self-assessment, peer-assessment, the teacher's feedback, and the Portfolio Assessment Package as a whole. Students found that their lack of knowledge in a topic affected their ability to self- and peer-assess effectively. Students voiced their preference for advice feedback and this preference for feedback that provided advice and suggestions had an effect on their utilization of feedback to revise their work.

Finally, it can be concluded that the Portfolio Assessment Package provided students with a comprehensive assessment of their work because students' work were assessed by multiple assessors, namely the students themselves, their friends, and the teacher who provided students with feedback about their work. It can be described as an integrated learning and assessment tool for Local Studies, which can be used to develop students' ability to perform higher order thinking, perform metacognition and become self-regulated learners. Students developed their higher order thinking skills by using the Assessment Tasks of the Portfolio Assessment Package. Students' metacognition on the other hand was developed through students' practice with self-assessment, peer-assessment and reflections. The self-regulated learner was developed through the
utilisation of teacher feedback especially, teacher’s advice feedback, guidance, role modelling and scaffolding. Finally, the findings showed that even eleven year old students, who were only average students academically, could use the Portfolio Assessment Package to perform higher order thinking, self- and peer-assess their own work and those of their peers, and utilise the teacher’s feedback to improve their work.

6.2 Recommendations for Further Development of the Portfolio Assessment Package

The recommendations for further development of the Portfolio Assessment Package will be discussed from five different perspectives namely, the Assessment Tasks, teacher task management, assessment practices, curriculum and training program, and students’ perceptions of the Portfolio Assessment Package. The decision to modify the Assessment Tasks were based on students’ performance on the tasks as well as information about its weaknesses gathered from interviews with students and the teacher, and their journals. Those tasks in which only 50% of the students or less could perform higher order thinking were reviewed and if found necessary, were modified. Table 6.1 shows the Assessment Tasks that needed to be modified.

6.2.1 Assessment Tasks

From the perspective of Assessment Tasks, it was found that certain Assessment Tasks needed to be amended for various reasons. For example, Assessment Task 1.1.1a/1.1.2a, Question 1C (Location of Malaysia in relation to Southeast Asia and the World), showed less higher order thinking responses from students. The question stated:
## Table 6.1

**Assessment Tasks That Needed to be Modified**

<table>
<thead>
<tr>
<th>Assessment Task (AT)</th>
<th>Evidence of Higher Order Thinking</th>
<th>Tasks that need Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT1.1.1/1.1.2a (Location of Malaysia in southeast Asia, and in the world) Question 1A(iv)</td>
<td>86.1% of the students are able to state the location of countries in southeast Asia in relation to Peninsula Malaysia.</td>
<td>X</td>
</tr>
<tr>
<td>Question 1B(iv)</td>
<td>83.3% of the students are able to state the location of continents in the world in relation to Peninsula Malaysia.</td>
<td>X</td>
</tr>
<tr>
<td>Question 1C</td>
<td>25% of the students able to make three inferences. (61.8% of the students were able to make at least one inference on the location of Malaysia based on observation.)</td>
<td>/</td>
</tr>
</tbody>
</table>
| AT1.1.1/1.1.2b (cycling expedition)                                                | 86.1% able to paraphrase information from map 2 to Table 1.1.1b with at least 50%.
                                                | 86.1% able to prepare a report. (50% of students prepared error free reports). | /                           |
| AT1.2.1a (States of Malaysia – Jigsaw Game)                                        | 58.3% of the students are able to make logical comparisons between the sizes of the states and federal territories of Malaysia. | /                           |
| AT 1.2.1b (States of Malaysia – Making a Map of Malaysia)                          | 1 out of 9 grps able to integrate and organise information from the textbook & atlas to construct a map.
                                                | 8 of 9 grps had between 1 – 8 errors on their maps. | /                           |
| AT1.2.1c (States of Malaysia – Poster Competition)                                  | - 7 of 9 grps were able to paraphrase information from different sources
                                                | - 8 of 9 grps able to cite examples
                                                | - 6 of 9 grps able to organise relevant and sufficient information & pictures to create a poster. | X                           |
| AT1.2.2a (States of)                                                               | 100% of students were able to paraphrase | /                           |

...Table continues
<table>
<thead>
<tr>
<th>Assessment Task (AT)</th>
<th>Evidence of Higher Order Thinking</th>
<th>Tasks that need Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malaysia – Flags and other Symbols</td>
<td>information on the state flags. None of the grps were able to name the other symbols that represent the states and give reasons why these symbols were chosen by the respective states.</td>
<td>/</td>
</tr>
<tr>
<td>AT1.2.2b (States of Malaysia – State Emblems)</td>
<td>1 of 3 grps were able to prepare list of common features found in the state emblems with no error. 1 of 3 grps was able to give reasons to justify their selection of unique emblems.</td>
<td>/</td>
</tr>
<tr>
<td>AT1.2.2d (States of Malaysia – Designing a flag and emblem)</td>
<td>2 of 3 grps were able to design a flag and emblem for Putrajaya. 1 of 4 grps was able to explain design &amp; colours of flag &amp; emblem for Putrajaya.</td>
<td>/</td>
</tr>
<tr>
<td>AT1.3.1a (Identity of the Country – Preparation for School Assembly)</td>
<td>9 of 12 students were able to paraphrase the meaning of the National Anthem. 3 of 12 students were able to paraphrase the meaning of the National Flag. 6 of 12 students were able to draw National Flag accurately</td>
<td>X</td>
</tr>
<tr>
<td>AT1.3.1b (Identity of the Country – The Malaysian Flag)</td>
<td>9 of 12 students were able to create an original, creative, purposeful souvenir carrying the features of the Malaysian Flag. 5 of 12 students drew the Malaysian Flag accurately on the souvenir. 7 of 12 students were able to give reasons why countries have National Flags.</td>
<td>X</td>
</tr>
<tr>
<td>AT1.3.1c (Identity of the country – Mural)</td>
<td>6 of 12 students were able to select 5 symbols of Malaysia accurately but 4 students presented it creatively. None of the students were able to paraphrase information on the national emblem.</td>
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</table>

Note. X means task does not need modification; / means task needs modification.
"Based on the two maps above [map 1a, and map 1b], make at least three observations on the location of Malaysia. Use a graphic organiser to present your answer". It was found that only nine of the thirty-four students who did this task were able to make three observations by referring to map 1a and map 1b. Another twelve students were able to make at least one observation by referring to map 1a and map 1b. This question was a test of students’ higher order thinking abilities because the answer to this question was not available in the textbook or reference books. Students needed to make their own observations and draw inferences from it. Students may have found it difficult to refer to the map 1a and map 1b because they were small which made it difficult for students who were not familiar with the countries in Southeast Asia and the world to observe and draw inferences from the map. One suggestion to encourage students to perform higher order thinking on this task is to modify the question. The modified question should be more specific so that students can confine their answers to specific parameters defined by the question. Assessment Task 1.1.1a/1.1.2a Question 1C should read: “Make three inferences on how Malaysia's location has contributed to the present development of the country, in terms of trade and tourism. Give examples to support your inferences". To answer this task, students can make connections between Malaysia's location in the centre of Southeast Asia and between the continents of Europe and Asia and relate this to the development of its ports like the Penang Port, Port Klang, Johor Port, Kuantan Port, and the Terengganu Port. The development of ports has contributed to more trade between Malaysia and other countries in Europe, America, and Asia. Besides that students can relate the development of Malaysia’s plantation sector and industrial sector to the influx of foreign labour from neighbouring countries like Indonesia, Bangladesh,
Vietnam, and Thailand. Students can point out that the nearness of these countries to Malaysia encourages its people to come and work in Malaysia. This has contributed to increase in trade because foreign workers have increased the production of raw materials to be traded with other countries. Students can also refer to the maps to show how the location of Malaysia in Southeast Asia and the world can make it a tourist hub. People from neighbouring countries can easily travel by road from Singapore, Thailand and other Southeast Asian countries, or travel by sea, or air to come to Malaysia. Similarly tourists from European, and other Asian destinations can fly to Malaysia and from there travel by air or road to neighbouring countries like Singapore, Thailand, Brunei, and Indonesia. These are among some of the issues that students can discuss about the location of Malaysia based on map 1a (map of Southeast Asia) and map 1b (map of the world).

Another Assessment Task that did not encourage students to perform higher order thinking was Assessment Task 1.2.1a (States of Malaysia – Jigsaw Game). Although 58.3% of the students were able to complete Table 1.2.1 with at least 50% accuracy, nonetheless students complained that it was confusing and the teacher also complained that it was cumbersome to mark. This task consisted of Table 1.2.1, which students had to complete. This table required students to, “Compare the sizes of the states in the vertical column with those in the horizontal column.... Use the following symbols: > larger than; < smaller than; and = the same as”. The table was confusing for the students because they were not familiar with the symbols. The symbols could easily be reversed mistakenly and this would produce results that were incorrect. If students wrote the words ‘larger than’, ‘smaller than’, and ‘the same as’, they would be able to comprehend the statements better.
and would be less likely to make errors. Therefore it is suggested that Assessment Task 1.2.1a Question 5, be modified so that the words 'larger than, 'smaller than', and 'the same as' be written on Table 1.2.1, instead of the symbols presently used.

For Assessment Task 1.2.1b (States of Malaysia – Making a map), students made a map of Peninsula Malaysia from dough and on it marked the names of states, capitals of the states, and one town in each state. The map was approximately, 420 cm by 300 cm. For its size it was found to contain too many details. The map appeared crowded and students tended to miss out information. It was found that the map needed to be either bigger or the number of details on the map should be reduced, for example students need only to name the states, mark and then name the capitals of the states. The location of towns can be done as a separate task on a separate map. Therefore for this task, it is recommended that Question iv, which states, “stick a small circle to show the location of at least one town in each state and name it/them” be removed. In place of this question the following question will be added: “On a sheet of paper, draw a map of Peninsula Malaysia. On it mark and name the states of Peninsula Malaysia and at least one town (other than its capital) for each of the states”. This task will encourage students to perform higher order thinking at the ‘interpreting and applying’ category because they will need to translate information from other sources, namely the atlas, and transfer them to their maps accurately.

Another task that posed a problem for students was Assessment Task 1.3.1c (Identity of the country – Mural). This task required students to:

1. Design a mural for a wall in your school. The mural should carry the National emblem and other symbols that represent Malaysia.
2. The mural should state the meaning of the features on the national emblem.
Present your answer on a paper the size of a mahjong paper.

Students were able to do Question 1 of this task, which requested them to design a mural based on the national emblem and the other symbols that represent Malaysia. However, students’ responses revealed that none of them were able to perform higher order thinking for Question 2 of this task, that is, students did not paraphrase the meaning of the features on the national emblem. They copied verbatim from the textbook. This was because the information about the national emblem was easily available in the textbook. Students therefore did not see the point in paraphrasing the simple information. This task needs to be modified so that students can perform higher-order thinking to complete it. It is suggested that Question 2 of this task should be:

a. Explain the meanings of all the features on the national emblem.

This would encourage students to perform higher order thinking at the ‘interpreting and applying’ category, as they will have to paraphrase information about the features on the emblem from other sources besides the textbook as the textbook only contains information about some features of the emblem and not all the features. Besides that, to make this task more challenging, another question will be added, that is:

Question 3. The national emblem was designed in the 1950s. Since then Malaysian has undergone many changes, including the addition of several federal territories within the Malaysian boundaries.

a. Design a new emblem that will show these changes.

b. Explain the design of your new national emblem, that is, the colours and the features that you have used.

This task will encourage students to perform higher order thinking at the ‘organising and creating’ category because students need to create an emblem and explain their creation.
6.2.2 Teacher's Task Management Strategies

The implementation of the Portfolio Assessment Package in the classroom also found that teacher's task management strategies needed to be changed to encourage students to perform higher order thinking. Several Assessment Tasks highlighted this need. Changes from the perspective of teacher's task management were necessary for Assessment Task 1.2.2a (States of Malaysia – Flags and other symbols). All the students who did this task were unable to answer Question 2 of the task, which states:

What other symbols represent these states? Explain why these other symbols have been chosen to represent the state?

This task was categorised at the 'making judgments' category because students were required to identify and give reasons as to why particular symbols were chosen to represent the state. Students' responses to the Assessment Tasks, as well as their journal entries, revealed that they did not understand the question, particularly the term 'other symbols that represent that state'. They took it to mean 'emblems'. As a result of that all the students drew the respective state emblems and explained the meaning of the emblems. The term 'other symbols that represent the state' is an acceptable term as it is found in the Local Studies syllabus, as well as in the Local Studies textbook. This shows that students did not have the language of discourse. They had apparently not read their textbook or any reference books. If the teacher's task management strategy on this task included a discussion on the 'other symbols that represent the states', this could encourage students to perform higher order thinking. Students can then select other symbols, which they feel represent the different states and explain why these symbols represent the respective states (giving reasons for selection). Therefore the teacher's task
management strategy could have encouraged students to perform higher order thinking at the 'making judgments' category.

As for Assessment Task 1.2.2b (States of Malaysia – State emblem), it required students to,

1. Compare the various state emblems. List some of the common features found on the state emblems.
2. Which state, in your opinion, has the most unique emblem? Why?

Students’ responses revealed that only one of the three groups who did this task was able to answer the question according to the task requirement. Two other groups produced answers that did not comply with the task requirements, that is, for question 1 of this task, the two groups produced a mixed list of features found on the state emblems. This means their list comprised features that were commonly found on state emblems, as well as features that were unique to particular state emblems. Besides that, the same two groups were also unable to say why they chose a particular state emblem as unique. Instead they described the emblems.

Since at least one of the three groups was able to answer this question, it indicates that the question was within the level of understanding of the students. However, from the responses of the two groups who had responded erroneously, it was found that their weakness laid with the categorisation of the features. That is to say, the categories chosen were not generic. Some features were left to stand individually implying that they were unique and did not belong to any of the categories formed when in fact they could easily be absorbed into categories already formed. One example was the mouse deer, which was listed on its own when it could actually be categorised as an animal. It can be said that the two groups that made the errors, were not sensitive to the question. Instead of preparing a
list of common features found on the emblems, the students instead prepared a list of all the features found on the emblems.

Again in the second question of this task, the same two groups of students erred. Instead of giving reasons why they selected an emblem as unique, they went on to explain the features in the emblem. Students were again not sensitive to the question. They found it easier to explain the features found on the emblem, as this information was readily available in books. They did not scrutinise the question to understand its requirements. As a result of that, their comprehension of the task was weak and their responses deviated from the task requirements.

To overcome this problem, the teacher's task management strategy could include a discussion on how to choose categories that encompass features found in the various state emblems. This would enhance students' categorisation skills. Besides that, students with the help of the teacher should also be taught to acquire and understand the language of discourse. The teacher should teach students to break down the question into smaller parts and to check their responses after completing each part, to ensure that all parts of the question have been answered. This was one of the suggestions given by Costa (1984) on how students can be taught to practise metacognition. By breaking down the question and encouraging students to ask themselves questions about the task requirements like 'why do I think this emblem is unique?' will reduce the incidence of students assuming the meaning of a question based on their familiarity with particular information.

Another Assessment Task to which students were insensitive was Assessment Task 1.2.2d (States of Malaysia - Designing a flag and emblem). Question 1 of the task states “Design a flag and an emblem for Putrajaya”. Of the three groups who did this
task, two groups were able to follow the instructions. One group only designed a flag. A member of this group wrote in her journal that the group had misinterpreted the question. Since two groups of students were able to do this task according to the task requirements, it shows that the task was within the level of understanding of the students. Thus, group 8's misinterpretation can only be attributed to their insensitivity to the task, which arose because they did not read the question carefully. This is another task that indicates that if the teacher's task management strategy includes teaching students to understand the task by asking them to breakdown the task into smaller parts and asking themselves questions about the task requirements (Costa, 1984), students would be able to perform higher order thinking.

The three tasks: Assessment Task 1.2.2a (Flags and other symbols), 1.2.2b (State emblems), and 1.2.2d (Designing a flag and emblem) created some confusion among the students and caused them to misinterpret the question. One factor that caused this confusion was probably due to the fact that the three tasks were distributed simultaneously to the different groups of students. Instructions were given out task by task to the whole class. As the teacher gave instructions for each task, she called the attention of those groups doing the particular task. However, as all the students ended up listening to all the three sets of instructions, this must have confused some students, especially those who did not read their Assessment Tasks further in order to plan their work. This is also related to the teacher's task management strategy, which the teacher needs to address.

Students’ insensitivity to the Assessment Tasks was most noticeable when the situation preceding the question was lengthy or when the Assessment Task had more than
one part to it. When this happened, students usually performed better in the first part of the question than for the other parts of the question. This was found to be true of Assessment Task 1.2.2a (Flags and other symbols) where students did not answer question 2 of this task (What other symbols represent these states? Explain why these other symbols have been chosen to represent the state.) Similarly students did not answer Question 2 of Assessment Task 1.2.2b (State emblems), which stated: "Which state, in your opinion, has the most unique emblem? Why?" This pattern was again repeated for Assessment Task 1.2.2d (Designing a flag and emblem). Some students only answered the first part on designing a flag for Putrajaya. This problem can be overcome through more efficient teacher’s task management strategies. Again the teacher can overcome this problem by teaching students to plan their responses. Teachers can help students by pointing out the strategies, steps, rules and directions needed to answer the Assessment Task. Teachers can also draw out parameters for students to work within so that they will answer the question within the task requirements. These task management procedures were recommended by Costa (1984) for teachers to help students develop metacognitive skills.

6.2.3 Teacher’s Assessment

From the perspective of teacher’s assessment, the teacher had recommended that the assessment criteria for assessing the Assessment Tasks be made simpler so that students could relate to them. She also suggested that the teacher should provide more written feedback on students’ work itself, that is, at the end of the response rather than on a separate assessment form. As Ms. Jamilah commented:
I suggest that the comments be written on the assignment itself, that is, at the end of the assignment. Let us say we are going to assess student’s understanding on the topic, then we write the comments at the end of the student’s assignment, specifically at the point we want to comment on.

She explained that in this way students could see the context in which a certain comment was made and it would reduce the necessity for the teacher to reproduce in writing on the assessment form, the context in which the students made the error, that is, by citing examples of students work where the error occurred. At present the teacher’s written feedback appeared on the teacher assessment forms, which were placed at the end of the students’ task. Writing the feedback on the assignment itself, could reduce the incidence of students not reading the teacher’s feedback, or not understanding what they read because they do not see the context in which the comments were made, or do not know what to do with the comments they have received. The teacher also recommended that to ensure students read the teacher’s feedback, students should be made to respond to the feedback. Ms Jamilah suggested, “We can ask the students to respond to the comments, for example by saying ‘I have completed my work that was incomplete’ or ‘I do not understand the comments’”. Students can alternatively sign against the advice or suggestions given by the teacher after they have done their revision as acknowledgement that they have read the feedback, understood it and taken action to rectify it.

6.2.4 Curriculum and Training

From the perspective of the curriculum and training program, the Local Studies curriculum was found to contain too many topics. This was also the opinion of the Local Studies teacher, who commented, “There is not enough time to complete all the
Assessment Tasks. The syllabus is too wide". In order to overcome the problem of too many topics, the teacher could select topics to be assessed through portfolio assessment. This suggestion would be especially suitable if two types of assessment were implemented to assess Local Studies. Assessment by course work using the Portfolio Assessment Package, and assessment by standardised testing as summative assessment. The fewer topics to be covered under course work could provide for built-in time for students to do self-assessment, peer-assessment and to utilise feedback from self-assessment, peer-assessment, and teacher assessment. This will contribute to enhancing students' learning as students will have the time to internalise and appreciate the topics that they have learnt.

On training, it was found that both teacher and students needed training for various aspects of the Portfolio Assessment Package. Students needed more training on how to self-assess, peer-assess, and on how to utilise feedback to revise their work. Teachers on the other hand needed training on how to assess the Assessment Tasks, keep records of students' development and how to use the information to understand students' progress. Besides that teachers also needed training on how to provide students with feedback that is useful to the students and on using teaching methods that will enhance the development of students' higher order thinking and metacognition. In short the teaching methods employed by the teacher should integrate teaching the students, with students' learning, and assessment of students' learning. According to Klenowski (1998), when portfolios are used for the purpose of assessment they have an impact on pedagogy and hence teachers need to adjust their teaching methods accordingly. Thus for the Portfolio Assessment Package to realise its full potential, both the teacher and students
need a continuous and hands-on training program designed to immerse them progressively into portfolio assessment. This is because portfolio assessment is a school culture and not merely assessment per se. Thus, the curriculum, the teacher, and the students have to make adjustments to accommodate this new school culture.

6.2.5 Students' Views

It was found that students generally had a positive perception towards the Portfolio Assessment Tasks. They liked the tasks, found them easy and interesting. Students said that they liked the tasks themselves as well as the methods used to complete the tasks, like being involved in group-work, working individually or working with the teacher. They especially liked Assessment Tasks 1.2.1b (States of Malaysia – Making a map) and there was no particular task that they disliked. This information from students should be fed back into the evaluation cycle. The implications of this feedback from the students were that the Assessment Tasks on the whole should be retained in its present format.

Majority of the students were positive about self-assessment and peer-assessment. They said that self-assessment was useful as it made them aware of their strengths and weaknesses. They liked peer-assessment because it acted as a window to view their friends’ work and to get ideas from it. Those who viewed self-assessment and peer-assessment negatively said that they were unsure of their answers and this affected their ability to self- and peer-assess. The implication of this feedback from students is that students appreciated self- and peer-assessment as beneficial activities and they should therefore be retained. However, the group of students whose lack of knowledge in the
every year and in addition to these school tests, students also have to sit for standardised examinations: at the end of their primary education (Primary School Evaluation Examination), lower secondary education (Lower Secondary Evaluation), upper secondary education (Malaysian Certificate of Education) and sixth form (Malaysian Higher School Certificate of Education). There have been several calls to reduce the emphasis on standardised examinations and the most recent call came from the Minister of Education himself. The Minister of Education, Tan Sri Musa Mohamad said: “We want to make the education system less examination oriented and are looking at increasing school-based assessment as it would be a better gauge of students’ abilities” (Gomez, 2003, May 7, p.3). In line with this call the Director General of Education reiterated that: “… students’ report cards will no longer register ‘good’, ‘average’, or ‘poor’ grades for oral ability but instead teachers will have to give more specific feedback regarding each student’s ability. This way the students will know how to improve” (Gomez, 2003, May 9, p.12). He said that by making the education system less examination oriented and by emphasising school-based assessment, teaching and learning would improve tremendously. This call for more emphasis on school-based assessment has been echoed throughout the world, in America (Stiggins, 2002), in the United Kingdom, and in Hong Kong (Klenowski, 2002). Assessment needs to suit the purpose it serves. When one type of assessment is used to serve all purposes, then a misfit occurs in the assessment system. It is suggested that the Ministry of Education introduce two types of assessment to serve the different educational needs. Stiggins (2002) emphasises that both the types of assessment are important: assessment of learning which takes the form of standardised testing provides information that is used to determine the status of
learning; and assessment for learning, which takes the form of school-based assessment, that is used to promote learning. Assessment of learning has been in practice in Malaysia for a long time. What needs to be introduced into the education system to balance the scales is assessment for learning. Assessment for learning can be introduced through school-based assessment. The Portfolio Assessment Package, which has been recommended as an alternative assessment for Local Studies can provide the answer to more school-based assessment. The Portfolio Assessment Package has in place all the essentials of school-based assessment. It returns assessment back to the teacher. The teachers are responsible for the daily, weekly, monthly, and yearly assessment of students. The teacher develops the Assessment Tasks, assesses students' work, analyses their performance, provides students with feedback, records students' development and achievement, and communicates this to students, parents, administrators and policy makers by providing descriptive feedback about students' learning. The Portfolio Assessment Package provides more than an assessment of students' cognitive and metacognitive development. It also encourages students' affective development through collaborative group work. Students' cognitive and metacognitive development are taken care of through the Assessment Tasks that encourage students to perform higher order thinking, as well as through self- and peer-assessment practices. Students' affective development is nurtured through collaborative group work. Students are encouraged to interact with the teacher and peers while doing the Assessment Tasks. They are also encouraged to be self-regulated learners by providing them feedback from the teacher, peers and self and allowing them to utilise these feedback to improve their work and to plan future work. Feedback to students is in the form of descriptive feedback, which
informs students about what they have achieved and what they need to give more attention to.

In order to introduce the Portfolio Assessment Package to schools namely, primary schools, certain other practices need to be put in place. One of these practices is training for teachers, and administrators to make them assessment literate (Stiggins, 2002). Teachers and administrators need to understand the purpose of having two types of assessment, that is, assessment of learning is for purposes of accreditation, and assessment for learning is to enhance learning. Hence if Portfolio Assessment is to be introduced as a means of school based assessment, then teachers need to know how to use the Portfolio Assessment Package to promote learning. The Portfolio Assessment Package comprises Assessment Tasks, assessment criteria for assessing the tasks, self- and peer-assessment forms, and teacher assessment forms. The Portfolio Assessment Package can act as a starter kit for teachers intending to use portfolio assessment in the classroom. Hence teachers need to be trained to produce these materials according to the level they are teaching, their students' needs and interests, and the facilities available in the school including the time available for students to do these Assessment Tasks. This is to ensure sustenance in the use of this new assessment method. Teachers will not use the excuse that there are no suitable Assessment Tasks to conduct Portfolio Assessment in the classroom. Teachers need to be literate assessment practitioners in order to make professional decisions about assessment so that portfolio assessment using the Portfolio Assessment Package can be used to promote learning. Hence, teachers need to be trained to produce Assessment Tasks that assess students' performances in multiple ways. In other words there must be variety in the Assessment Tasks so that students can show their
progress in various ways. The Assessment Tasks must also assess the different aspects of students’ development, that is, their cognitive and metacognitive development, the development of skills, and their affective development. Teachers should also be trained to develop assessment criteria that reflect the tasks as well as the purpose of the assessment. These need to be communicated clearly to both teachers and students so that they are aware of what the Assessment Tasks require of them. This will help teachers to guide students to achieve their learning targets as well as to guide themselves when assessing students’ responses. Students on the other hand will know what is required of them so that they can ensure that their responses are in accordance with the assessment criteria. Teachers need to be trained to teach students how to self- and peer-assess and how to give themselves and their peers informative and constructive feedback. The teacher also needs to be trained to provide students with informative and constructive feedback, which students can use to improve their work.

The next thing that needs to be put in place is the time factor. The Portfolio Assessment Tasks are usually activity based tasks or paper and pencil performance tasks and hence requires a longer time for students to complete and for teachers to assess. Hence appropriate amount of time needs to be provided to students to complete the tasks effectively, and to do self- and peer-assessment. Students need time to reflect on their work, to internalise what they have learnt and then assess their work. If students are not given sufficient time to self-assess and to reflect, Klenowski (1998) says that students will merely write ‘superficial and unconnected reflected statements’. They need time to select relevant work as evidence to support the claims made. The Portfolio Assessment Tasks also usually require teachers to take time to assess the tasks. Teachers also need
time to write feedback statements detailing description about what each student had achieved in doing the task and what further action needs to be taken by the student.

In line with the need to provide time for portfolio assessment to be conducted effectively time needs to be created within the already crammed school day. It is recommended that the Local Studies syllabus be reduced of its contents so that the lesser contents can be explored in greater depths. This would give students and teachers time to appreciate and internalise what have been learnt. For example the Year Five Local Studies syllabus can be reduced to two themes, which can be introduced to students holistically rather than topic by topic. Table 6.2 condenses the present Year Five Local Studies syllabus comprising four themes and fifteen topics into two comprehensive themes with a total of eight topics. The two themes cover two main topics, that is, my state and my country.

The training of teachers and administrators and the introduction of the Portfolio Assessment Package into schools will require funding. This brings us to the next issue that needs to be put in place so that school-based assessment takes off on the right footing. There should be equal funding for both the types of assessment, that is, assessment of learning which takes the form of standardised testing, and assessment for learning, which takes the form of portfolio assessment. The portion of the funding meant for school-based assessment should be used for purposes that include: the training of experienced teachers, providing on-going support for all teachers by conducting workshops and seminars for teachers on portfolio assessment and school-based assessment, and for conducting moderating sessions when assessing the portfolios.
Table 6.2

*Themes to be Taught in Year Five Local Studies*

| Theme A  | 1. Location of Malaysia in relation to Southeast Asia and the world.  
| My State | 2. The states of Malaysia and their capitals.  
|          | Focus on one state, which should be the state where you reside.  
|          | The identity of my state: the state anthem, emblem, flag, state Government.  
|          | 3. The physical features of the state: highlands, plains, coastland, lakes, caves, rivers, and islands.  
|          | 4. Development in the state: its history, the present, and the future.  

| Theme B  | 1. The Identity of my country: National anthem, National emblem, and other symbols that represent the country.  
| My Country | 2. The administrative structure of the country.  
|           | 3. The Head of State and the Head of the Federal Government.  

It is also recommended that the Ministry of Education advise schools to hold portfolio evenings or weekends. The purpose of school-based assessment is to provide information, so teachers should use students’ portfolios to provide parents with evidence of the progress that their children have been making in school.

To help the Ministry Of Education implement portfolio assessment as a means of school-based assessment, a Model of Portfolio Assessment for Local Studies is proposed. This model is designed after the model recommended by Moya and O’Malley (1994) which was designed for the implementation of Portfolio Assessment for English as a Second Language (ESL). It has been adapted to suit Local Studies. Similarly the model proposed to the Ministry Of Education for Local Studies can be used to implement portfolio assessment for other subjects. The adapted model basically comprises five integrated steps: The first step is to identify the purpose of using portfolio assessment and
accordingly to determine the focus of the portfolio. The second step is to determine what goes into the portfolio. The third step is to determine the assessment criteria for the portfolio and the integration of all the different types of information gathered. The fourth step is to determine the type of feedback to provide students, teachers, and parents and the utilisation of the feedback by the respective parties. Finally the fifth step is to implement the model in the classroom (Table 6.3).

First of all to identify the purpose and the focus of the portfolio, the school needs to set up a portfolio committee. The role of the portfolio committee is to oversee the smooth introduction and implementation of portfolio assessment in the school and to coordinate all work concerning portfolio assessment. These include determining the purpose of the portfolio. In the case of the Local Studies portfolio the purpose is to promote students' learning. In order to do that, students need to be informed about their progress and the areas that need further attention. Next, the committee needs to determine the focus of the portfolio. This is done by identifying the goals of the portfolio. Goals as opposed to objectives provide a broader focus. It allows for the assessment of students' learning beyond merely observed behavioural changes. These goals will guide the contents of the portfolio, the Assessment Tasks, and the assessment criteria. The goals for portfolio assessment for Local Studies needs to be holistic in nature encompassing the development of students' knowledge of contents, thinking and organising skills, presentation skills, and collaboration.
### Table 6.3

**Portfolio Assessment Model for Local Studies**

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Identify purpose and focus of portfolio</th>
<th>Determine the purpose and focus of the portfolio.</th>
</tr>
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<tbody>
<tr>
<td>Step 2</td>
<td>Plan portfolio contents</td>
<td>Determine on the contents of the portfolio:</td>
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<tr>
<td></td>
<td></td>
<td>- ways to collect information</td>
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<tr>
<td></td>
<td></td>
<td>- assessment methods to be used;</td>
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<td></td>
<td></td>
<td>- Assessment Tasks;</td>
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<tr>
<td></td>
<td></td>
<td>- how to assess students’ learning process</td>
</tr>
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<td></td>
<td></td>
<td>and product.</td>
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<tr>
<td>Step 3</td>
<td>Design portfolio analysis</td>
<td>Determine the criteria for assessment.</td>
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<tr>
<td></td>
<td></td>
<td>Determine the procedure for integrating</td>
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<tr>
<td></td>
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<td>different information.</td>
</tr>
<tr>
<td>Step 4</td>
<td>Prepare for instruction</td>
<td>Determine the format for reporting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>feedback to students, teachers, and parents.</td>
</tr>
<tr>
<td>Step 5</td>
<td>Implement the model</td>
<td>All parties ready for the implementation.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Practice collaboration among students,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>teachers and parents.</td>
</tr>
</tbody>
</table>

In the next step, the committee decides on the contents of the portfolio. Here the committee decides on the ways information is to be collected in accordance with the goals of the portfolio. A variety of assessment methods should be used, including activity based tasks, and paper and pencil performance tasks. Besides assessing students performance on the tasks, the teacher can also use other methods to gauge students’ performance like observations, students’ self- and peer-assessments, students’ journals, and interviews. Once the decision has been made on the types of assessment to be used, the committee needs to ensure that the Assessment Tasks developed are in accordance with the goals of the portfolio assessment. A standard set of Assessment Tasks to be used by all the students will contribute to the reliability of portfolio assessment. The
Assessment Tasks developed should be fair to all students, that is, they should be gender, ethnic, and religion neutral. This is especially important because Local Studies is a subject that hopes to inculcate racial, cultural and religious understanding and tolerance in students. Furthermore in a multi ethnic country like Malaysia it is necessary to ensure that educational material uphold racial, cultural and religious sensitivity in order to avoid politicisation of the issue. Another factor that needs to be decided upon is how the process of students’ learning and the product of their learning will be assessed. The committee also needs to specify what goes into the portfolio. In other words the types of evidence that would show that students have attained the goals, need to be verified to ensure that the evidences selected are a valid assessment of students’ learning. These items of evidence need to be included in the portfolio to demonstrate achievement of the students’ learning goals/outcomes. In addition to these, it is important for the committee to fix the dates for progressive assessment of the portfolio in advance so that students and teachers are aware of deadlines.

In the third step, the committee needs to determine how the contents of the portfolio will be assessed. Thus, the assessment criteria has to be devised to define what constitutes a good, average, or poor portfolio. A clearly developed set of assessment criteria, which can be used by both students and teachers will increase the reliability of portfolio assessment. The assessment criteria, like the Assessment Tasks, should be gender, ethnic, and religion neutral so that no students will be discriminated against. Standards against which the students’ portfolio will be assessed like exemplars of good, average, and weak portfolio, need to be developed to act as a guide for students and teachers to refer to. Also how the various items of evidence collected in the portfolio will
be assessed and recorded, needs to be determined. The different types of information collected to describe students learning, for example, student’s work samples, presentations, observations, evidence of collaboration, interviews, student’s self- and peer-assessment need to be integrated and interpreted so that it provides a holistic assessment of the student’s progress in the subject. Besides that a method to ensure reliability of the assessment procedures need to be determined. This can be done through moderation exercises. In addition, the committee needs to put in place the assessment personnel who would be involved in assessing the assessment evidence. Dates for giving students feedback on their work also need to be fixed so that students will receive prompt feedback.

Step four involves the preparation for instructional use. A format for preparing feedback reports to parents, students, and teachers need to be determined. The reports should contain information that the stakeholders in education can easily understand and that can be utilised to promote effective learning in students. The committee should devise a method to encourage students and teachers to utilise the feedback information to revise their work, as well as to plan future work.

The last step is to implement the model. By the time the committee has taken the first four steps, the teachers and students in the school will be fully ready for portfolio assessment to be practised in the classroom. With the implementation of portfolio assessment in the classroom, the portfolio users should try to maintain the collaboration process between them, that is, the teachers, the students, and parents. This will determine the sustained use of portfolio assessment to continually enhance students’ learning.
This model of Portfolio Assessment for Local Studies can be adapted for other subjects as well. It can be implemented in both primary and at the secondary school level. The model provides a framework for implementing portfolio assessment and the Portfolio Assessment Package provides the material for this framework.

6.4 Recommendations to Teacher Education Division of the Ministry of Education

Why use portfolio assessment in teacher education? Portfolio assessment is in line with the current emphasis on meaningful learning and the need for learners to be active participants in the learning process (Klenowski, 1998). If school based assessment is introduced into schools then the teacher education curriculum should also correspondingly include the training of teachers to conduct this form of assessment. In fact it should be made compulsory that all teachers are assessment literate before they are awarded their teaching certificates. This is because the best way to understand and then implement a model of assessment that promotes learning is by first practicing it (Klenowski, 2000). Klenowski (2000, p.218) goes on to say that:

If preservice teachers are to learn how to use these methods with children, then they need to have some experience of them. Preservice teachers thus need to be participant observes of these new forms of assessment.

Portfolio assessment can be introduced to teacher trainees during their training programme by introducing assessment as a major component in the teacher education curriculum in line with philosophy, psychology, pedagogy, and subject knowledge. In fact the equivalent of one semester of contact hours for the subject Education Studies should be used for training students on assessment that includes both assessment of learning and assessment for learning.
In addition, the assessment of some of the trainee teachers’ learning should also be through portfolio assessment. In this way trainees will get hands-on experience in dealing with portfolio assessment and understand the technicalities involved when implementing portfolio assessment. As future teachers they will understand what portfolio assessment is from the students’ perspective. It will also prepare trainees well to nurture a portfolio culture in school where assessment is student oriented, focuses on improving students’ learning, and its purpose is to provide constructive information to all who are involved in the process, including students, parents, teachers themselves, and school, district and state education officers.

Besides using portfolio assessment to assess trainee teachers on their subject majors, portfolio assessment should also be included as part of their practicum. Practicum is when trainees will get a feel of what classrooms and students are really like. Trainee teachers’ practicum portfolio should include samples of Assessment Tasks that they developed for students, a rationale why these tasks were developed, and the development of assessment criteria. The portfolio should also contain evidence showing how the trainee teacher carried out the following: assessment of students’ written work, feedback to students, students’ utilisation of the feedback they received, trainee teacher’s utilisation of these feedback to plan future lessons, analysis of students’ progress, record of students’ progress, and the dissemination of information about students’ progress to students, parents, and school heads. The trainee’s practicum portfolio will reflect how the trainee translates understanding of portfolio assessment learned during the teacher training course, in practical terms by carrying it out in the classroom. This experience will prepare trainee teachers for the real world of teaching, learning and assessment. As a
guide to trainee teachers on how to get started with portfolio assessment in the classroom, the Portfolio Assessment Package for Local Studies can be used. For trainees whose subject major are other than Local Studies, they can study the structure and components of the Portfolio Assessment Package and emulate it.

6.5 Recommendations for Further Research in Portfolio Assessment

This study has potential for future research. Further research can be carried out on the Portfolio Assessment Package over a longer period of time probably one school year to ensure that the Assessment Tasks are tried in the classroom to determine its effectiveness in assessing students' knowledge, skills and abilities. In addition a more reliable display of students' practice with self- and peer-assessment can be gauged from a longer period of study. This is because with time and practice the use of self- and peer-assessment will be internalised and students will be able to conduct self- and peer-assessment the way they understand it to be and in a manner that they find meaningful and useful. Similarly other aspects of the Portfolio Assessment Package like utilisation of teacher feedback and reflection can also be examined more rigorously. The researcher can study students' self- and peer-assessment practices, as well as students' utilisation of feedback from self, peer and the teacher. The researcher can investigate to what extent these practices enhance students' learning and make them self-regulated learners.

The Portfolio Assessment Package can be converted into an Electronic Portfolio Assessment Package. Using programmes like 'HyperStudio' can help make portfolio assessment more creative, manageable, and expand students' learning sphere. The use of multimedia to create the portfolio makes it more creative. Students can include
The findings of such a study would inform teachers of students with special needs what aspects of the Portfolio Assessment Package need to be modified.

Hence, further research on portfolio assessment will provide more information about this relatively new form of assessment. This will allow practitioners to make informed judgements about portfolio assessment as an alternative form of school-based assessment to promote learning.