VICTORIAN CURRICULUM AND ASSESSMENT AUTHORITY

2004 Geography GA 3: Written examination

GENERAL COMMENTS

There continues to be encouraging signs of improved student outcomes. There seems to be a greater frequency and effectiveness of geographic terminology used. At the lower end of the scale, there are more students attempting almost every question, including the difficult ones. At the opposite end of the scale, the quality of work is often revealed in succinct, carefully thought out answers that quantify accurately, use terminology comfortably and effectively apply the student's own studies to the question.

The most successful students appeared to have read and thought about the data very carefully, and were able to effectively incorporate the main thrust from the data into their answers. It was rewarding to see students handle more sophisticated concepts better than had been done in the past.

The paper appeared to spread the students, providing the opportunity for more able students to show their ability.

Areas of Strength and Weakness

Strengths

- In general, students seemed to have no trouble completing the examination; however, there were some students who did not complete all questions.
- The structure of the paper gave students ample opportunity to demonstrate skill development from their class work during the year.
- Directions were generally better followed compared to previous years. Students need to be reminded to use the map data when the question states, 'Use Figure 2 on page 4 and Figure 3b on page 5 of the data book when responding to Question 3'.
- Key Geographic Ideas, for example Spatial Interaction, were generally better used and clearly understood. There has been a marked improvement in the use of KGIs over the last three to four years, and students are showing greater confidence in using them independently. Many students included frequent reference to KGIs throughout the examination, and often these were handled correctly; however, some students inserted KGIs which were inappropriate or incorrect in the context. Students must understand that over-use is as bad as under-use.
- Data Representation Skills were generally sound, such as in Question 2, the map of spatial changes in the Merimbula region. Some students used shades of the same colour to show their distributions and this made them difficult to distinguish. Students should use different colours and check the information provided in their key.
- Instructional terminology was understood better this year; however, many students still did not understand basic instructional terms such as explain, describe, evaluate and discuss. Use of these terms in their school-based assessment tasks could assist students to better understand the terms on the end of year examination paper. This is an area of weakness that needs attention.
- Students tended to choose more appropriate case study material than in previous years, for example, irrigation water diversion from the Aral Sea, PNG gold mining, Southbank development and Snowy River management, although there was a significant proportion of students using generic material such as fish or water.
- The students often applied geographic techniques such as quantifying and elaborating on examples without a great deal of prompting.

Weaknesses

- Not reading the question properly.
- Some students spent too much time on some questions and ran out of time towards the end of the paper. Students need to balance their time according to the time recommendation and the number of marks allocated to the question.
- Inappropriate use of the data; some students did not refer to the data and wrote in general terms. Some students are still having difficulty with the significance and relevance of the data provided. Students still need to make more direct use of the data (for example relative proportions and amounts), and read the questions, as well as the data, carefully.
- The map outlines, such as provided for Questions 2 and 7, were a great help to students, and reduced the time taken to complete answers. Although the map outlines assisted students in depicting the mapped information, the end products were not as accurate and data was not as effectively mapped as in past years. Students must ensure that the data presented is correct and that there is appropriate use of titles and legend. Students are

advised not to use the colour yellow for shading as it is hard to see against the white paper – contrasting and bold colours are much better.

- Many students were unable to accurately locate places on maps; this was noticeable in Question 7. Teachers must ensure that their students understand where places are located when discussing a global phenomenon.
- Teachers also need to ensure that students understand the terms 'sustainable', 'resource', 'factors including physical', 'environmental', 'economic and political', 'region', 'policy' and 'strategies'. Many students also appeared not to fully understand the term 'evaluate'.
- Poor use of student case studies meant that many students still gained low marks for the question that enabled them to use their own class research. Students appeared to learn material but not to apply it correctly. Students must read and think about the questions. When answering Question 5, many students referred to a policy in general terms. The best answers were those where the student referred to resources studied for their class SACs, as they were then able to refer to specific resources and policies.
- Some students are still confusing a 'resource' and a 'global phenomenon' as well as a 'process' and a 'resource', for example, 'fish' and 'fishing'. Deforestation is not a resource.
- Students are still not good at summarising information from world maps. All students should know the names and locations of the continents and significant regions such as the Middle East and Central America. They need to practise summarising mapped information using regional categories, rather than naming all the countries.
- There was some lack of understanding of basic map techniques.
- There was some poor geographic expression or knowledge, for example: 'above' or 'below' the equator; Eastern Europe – France, Germany and UK; Alaska missed from the US map; Amazon in Africa, Mt Pinataubo in Pakistan and Gippsland in Western Victoria.
- There is still a large number of students who spend time writing out the question in their answer. This wastes time. With the limited space available to write answers, it also means there is less depth to the answer. Students should **not** include a regurgitation of the question in their answer.
- Some students have difficulty with the concept of scale and referred to local impacts as being regional and vice versa.
- There was some use of top, bottom, right and left, instead of N, S, E and W and this still needs to be corrected by teachers as well as students.
- There were many cases where handwriting and spelling were both of very poor quality. While marks are not deducted for spelling errors, assessors commented on the difficulty in reading some of the papers. There were still too many students writing in fine pencil which proved extremely hard to read.

SPECIFIC INFORMATION

Note: Student responses reproduced herein have not been corrected for grammar, spelling or factual information.

Question 1

a. Students had to indicate one communication resource.

Marks	0	1	Average
%	16	84	**0.9**

b. Students had to indicate one recreation resource.

Marks	0	1	Average
%	20	80	**0.8**

c. Students had to name resource C and justify their decision why it is a communication resource.

Marks	0	1	Average
%	7	93	**1.0**

d. Students had to name resource R and justify their decision why it is a recreation resource.

Marks	0	1	Average
%	10	90	**0.9**

Most students attempted these questions. The recreational resource was less problematic than the communication one. Students generally chose the airport or the bridge for their communication resource. Although the sports complex or the beaches, for example Middle Beach, were the most popular recreational resources, a few chose the creek. A number of students decided that the power transmission line was a communication resource; this proved to be an effective distracter.

Better answers said, for example: *Merimbula Airport is a communication resource because it is utilised and maintained by people for movement and communication by air*.

Less successful students provided a definition instead of naming the resource. Some misunderstood the question and classified their answer using a classification taught in class. Some appeared to misunderstand the term 'communication', believing that it had to refer to mail or electronic types of communication rather than the wider geographical meaning.

Some students also confused re-creation with recreation and wrote about a resource that could be rejuvenated/replenished, rather than a resource used for recreation. For example, *the beach is re-created each day by the tides.*

e. Students had to explain why the resource at Place X on the outline map on page 3 is a 'sustainable resource'.

Marks	0	1	Average
%	44	56	**0.6**

Although there was a marked improvement in the understanding of the term 'sustainability' compared with a similar question on the 2003 examination paper, there was still some confusion over the understanding of this term. Some students only defined what a 'sustainable resource' was, rather than explaining that the forest can be sustained through appropriate management or controls. Many students did not appear to fully understand the 'future' component of the definition and could not apply the scale of the map to understand the size of this parcel of land.

Better answers gave a response similar to the following: *The resource at point X is closed forest with 80-100% crown cover. This resource is sustainable as there appears to be effective management which will protect the area and enable moderate use which will continue its sustainability as a resource*.

Less successful students omitted any reference to management or control of the forest when discussing sustainability; these students appeared to understand the definition of a 'sustainable resource' but could not apply this understanding to the example of the forest. Less successful students also interpreted 'closed forest 80-100%' to mean that the forest was closed to human interference, rather than that the density of the canopy of the forest was 80-100%. Other less successful students were of the opinion that the percentage of cover gave some protection as to sustainability and the forest, being so thick, could easily renew itself.

A few students became confused between the concepts of renewable and sustainable.

Some students believed that the 'X' was the survey landmark and students must understand that they must locate accurately, not generally.

f. Students had to place the letters SI in one of the circles on the outline map on page 3 to indicate where spatial interaction could occur, and describe the spatial interaction that could occur at this location.

Marks	0	1	2	Average
%	14	22	64	**1.5**

This question was answered well. Although most students understood the concept of 'spatial interaction', some failed to state the two things that the spatial interaction was between or they just named the two features and failed to describe the spatial interaction.

Most students chose the airport or the bridge/ramp for the location of the spatial interaction, while other students referred to *the spatial interaction between the oysters in the oyster beds and the currents moving microscopic particles through the water*, which was another possible example. The understanding of this concept was vastly improved on that of previous years.

Better students stated, for example: *Spatial interaction could occur between Merimbula Airport and people using Arthur Kane Drive. Many people would come and go from the airport at all times of day, using the road to get to Merimbula or to access the airport.*

Other successful responses included: *Spatial interaction occurs at Merimbula Creek between the creek water and the people using it,* and *Spatial interaction occurs at Merimbula Airport between the people arriving and departing and the planes and the airport buildings.*

A few students outlined the spatial interaction occurring between two separate locations, for example the airport and the beach, and these were less successful. Some students chose locations other than those indicated on the map and misinterpreted the symbols listed in the key.

Question 2
a. On the outline map provided, students had to mark in and shade
i. The built-up areas as shown on the 1966 map, Figure 1(c)

Marks	0	1	2	Average
%	7	16	77	**1.7**

ii. The built-up areas that have been developed since 1966 and are shown on the 2000 map, Figure 1(a).

Marks	0	1	2	Average
%	4	25	71	**1.7**

b. Students had to complete the outline map with an appropriate title and key.

Marks	0	1	Average
%	42	58	**0.6**

This question provided many students with an easy, but not often a full, set of marks. Although the quality of mapping varied, most students were able to map the change in the built-up areas of Merimbula. There was a handful of students who successfully overlaid colour or symbols to represent the distribution of urban areas over two time periods. At the other extreme, there were students who simply scribbled a pattern without noting the original data. The main failure of students was not so much the lack of accuracy in representing the built-up areas, but a failure to represent the shaded areas correctly in the key. These less successful students showed two built-up areas that were apparently independent of each other, implying that the whole urban area had shifted during the two time periods.

Better answers identified the two time periods. They shaded the 1966 distribution and there was an appropriate item in the legend, naming the colour as the 'distribution of the built-up areas as shown on the 1966 map'. They then shaded the additional built-up areas that had developed since 1966 shown on the 2000 map, and the legend would have an item such as 'additional built-up areas since 1966'.

Less successful students experienced difficulty transposing the data from the 1966 map to the outline map as the region had to be transposed from a map of a different scale.

Question 3
a. Students had to explain how one physical or one environmental factor could have affected the development of the resource in Figure 2.

Marks	0	1	2	Average
%	26	23	51	**1.3**

Most students handled this question well and wrote answers that depicted a sound understanding and application of geography. These students clearly stated the factor, described it and explained how it affected the development and use of cut flowers.

Better answers understood the meaning of a physical factor or an environmental factor and were able to apply these factors correctly to the new situation provided on the examination paper using valid reasoning. Although the best answers were those that were based on the background data in the data book, students who simply paraphrased this background data without applying their knowledge did not answer the question as required. The best answers were those written by students who referred to the possibility of drought *because this environmental factor could have affected the development of the resource, dams and climate-controlled glass houses were required.*

Other good responses included: *The Melbourne climate may have affected the development of the resource as it is difficult to predict and impossible to control. It causes the use of glasshouses which may be costly and more time consuming to operate, thereby limiting production*; *the climate in Melbourne could have had a great effect on the development of the flower resource. This is because the climate is a temperate one and certain flowers may not be able to survive and grow to their full potential in weather like that. It is clear that this factor was overcome when the flowers were grown in glasshouses, which are climate controlled*; and *the physical factor of climate necessitating the construction of an artificial environment (glasshouses) to control light, temperature and humidity thus making production sustainable*.

Other successful answers made reference to the availability of flat land, the opportunity of the large areas of land for future development, the quality of the soil and the barrier to the expansion of the Dandenong-Hastings Road.

Less successful answers did not distinguish between a physical and an environmental factor and had difficulty interpreting the question correctly. For example, they may have stated that soil and rainfall could have influenced development, but failed to show how this could have occurred.

Other weak responses did not make the link between the factor and how it has affected the development of the resource; there was a distinct lack of specific data and these students tended to rely on their own knowledge or make unrealistic assumptions. Students must refer to the data provided. It was of concern that many weaker students did not read the question carefully and continued to write about Merimbula instead of 'cut flower production'.

Some students interpreted the 'could have affected' in terms of 'what if' scenarios, identifying drought, floods and accessibility to grazing land as limiting factors for future/past expansions.

Students must be directed to read the questions carefully.

b. Students had to explain how one economic factor could have affected the development of the resource in Figure 2.

Marks	0	1	2	Average
%	21	24	55	**1.4**

This question was answered more successfully than 3a. Better responses referred to the demand for flowers and access to the market as economic factors that could have affected the development of the resource. For example, the *increase in the demand for flowers leading to a subsequent increase in the development of the resource and the economic factor of the cost of importing technology from The Netherlands thus reducing the possibility of increasing the scale of production in the future*. Other successful responses included the reduction in transport costs due to the location of the facility.

Less successful answers did not provide an adequate explanation, for example: *An economic factor that could have affected this resource may have been a growth in demand from foreign and local places*. Clearly this student needed to follow through with their initial statement. Other examples of weaker answers occurred where The Netherlands was mentioned without explanation, or where data was misclassified; for example, classifying the cost of importing technology as a physical/environmental factor.

As in 7a above, some students interpreted the 'could have affected' in terms of 'what if' scenarios, identifying a slump or increase in demand for flowers on domestic or international scales, the establishment of new trade agreements for the exportation of cut flowers from Australia and increases in the cost of land as limiting factors.

Again, students must be directed to read the questions carefully.

Question 4

a. Students had to list the countries to which Australia exports fresh cut flowers.

Marks	0	1	Average
%	8	92	**0.9**

This question required a straight–forward analysis of the map and a simple recording of the countries to which Australia sends fresh cut flowers (New Zealand, Singapore and Japan). Hong Kong was also accepted because of its trade with Singapore. Some students added a comment about the relative importance of these countries, which was not required. Those students who suggested that Australia sends flowers to Malaysia had confused the arrow direction.

b. Students had to describe the movement of fresh cut flowers into Japan.

Marks	0	1	2	3	4	Average
%	5	19	30	29	17	**2.4**

Descriptions were generally well handled, and many students backed up descriptions with quantification of values of trade. Better answers gave a statement showing the overall pattern of movement, for example, *Japan imports fresh cut flowers from many countries in the Asian region*. These students then specified which countries exported to Japan (major and minor suppliers) and then continued to discuss the value of the trade to Japan.

Although the question asked students to describe the movement into Japan, a considerable number of students commented that Japan didn't export flowers and listed the countries that didn't export to Japan – a waste of time and space. Some students referred to China, Korea, Europe, the USA and Africa.

Less successful students referred to a 'global trade' even though there was no information provided on this. They ignored the quantification, did not state the size of the trade and were unable to use the key on the diagram. They tended to explain the trading pattern instead of describing it, and even made comments about Japan's apparent lack of export trade in cut flowers.

Some students described the distribution rather than movement.

c. Students had to explain how one political factor could affect the pattern of trade in fresh cut flowers in the Asian region in the future.

Marks	0	1	2	Average
%	22	20	58	**1.4**

Many students either did not understand the notion of a political factor, or they didn't read the question properly.

Better answers used the example of conflict or war between nations; however, very few actually went on to explain how this would influence the trade patterns. Often the answers were non-specific about how conflict could alter trade. Very few students made any mention of trade agreements, taxes, subsidies or quarantine arrangements. Again, those who did refer to tariffs and trade agreements failed to relate that these could be considered as political because they are based on government decisions and policies.

Question 5

a. Students had to name a resource they had studied during the year. They had to describe a policy that was designed to manage the effects of the development and use of this resource. They were not to include the data of Figures 1, 2, 3 or 4 in the data book in their answer.

Marks	0	1	Average
%	21	79	**0.8**

There were some excellent responses that clearly named the resource and succinctly described the policy. Although many better answers referred to the fieldwork undertaken during Unit 3, there were some excellent answers referring to case studies from class work.

Too many students did not refer to data from case studies learnt in class. Less successful responses wrote about resources in general and, as a result, could not describe a relevant policy, or they named an activity and not a resource. Some students are still confusing a 'resource' and a 'process'.

Teachers should be aware that resources such as 'fish' are too broad an example. Many students did not name a policy, but only listed a number of strategies (for example, putting up fences or making a path). It is vital that students understand the term 'policy'; this did not appear to be the case with the majority of students, many of whom became confused with the 'strategies' that are put in place to implement a policy. Teachers should ensure that students can distinguish between these two terms.

Less successful students referred to a 'global phenomenon' instead of a 'resource'.

b. Students had to explain two reasons for the development of this policy.

Marks	0	1	2	3	4	Average
%	6	4	21	14	56	**3.1**

This question was generally well answered if the resource in 5a was appropriate and the student referred to an appropriate policy. Better answers used subheadings in their explanation; for example, Reason 1, Reason 2.

Weaker responses described the policy in 5a in more detail and even tried to evaluate it, instead of saying why the policy had needed to be put in place. In some cases, only one reason was given because it was repeated in slightly different terms as a second reason. Some students had no idea why the policy was put in place.

The greatest weakness here was that students explained the effects of the resource use rather than reasons for the policy. While the effects are important, students often neglected to make the link between the effects and the policy.

c. Students had to evaluate the success of this policy in dealing with the effects of the development and use of their selected resources.

Marks	0	1	2	Average
%	10	20	69	**1.6**

Although there seemed to be a better understanding of 'evaluate' than in the past, this question appeared to challenge many students, and teachers must ensure that students are familiar with this term. Some students made an evaluative statement but did not elaborate; others explained how successful it had been without stating the evaluation clearly.

Better answers stated whether the policy was successful and discussed why it was successful. Better answers were complex, and some students referred to tables when dealing with the success of the policy; however, teachers should be mindful of prepared answers which do not enable the students to answer the question set. Some students presented a matrix to evaluate their policy according to different criteria, for example sustainability, cost, long/short term, but then did not refer to the various indicators of success and so the value of the table was lost.

Less successful answers also referred to future effects but didn't answer the question. This was particularly the case where students were writing about a possible future policy they had created.

Question 6

a. Students had to describe the distribution of feature film production in 2000.

Marks	0	1	2	3	4	Average
%	4	11	25	34	26	**2.7**

Although most students described the distribution pattern adequately, some students confused the term 'distribution' with the 'distributing' of feature films. Some less successful students could not read the map correctly and assumed the location of the circle was the absolute location of feature film production rather than for the whole country.

There were also too many students who simply listed countries producing feature films, or who ignored the main producer, India. In fact, there were many students who failed to identify India and the USA as the major producers. Some students tried to explain the distribution rather than describe it.

Many students quantified their data.

The best answers mentioned an overall statement as to the uneven nature of the distribution pattern, then referred to the three levels of distribution (major, medium and minor producers).

An example of a better answer: *The two major film producers were India, with 764 films per annum, and USA with 628 films over the year. European nations especially France (181), UK (92) and Spain (97) produced most films in their region. Fewer films were produced in Africa and Russia where film production is sparingly distributed.*

Less successful answers used terms such as *on the edge of the continent*, *under the equator*, *the lower part of Africa* and *in the north east of the world*.

b. Students had to discuss the statement, 'The population of a country is a better indicator of the distribution of feature film production than Gross Domestic Product per capita', using specific examples from the data provided.

Marks	0	1	2	3	4	5	6	7	8	Average
%	5	4	3	4	7	13	18	19	28	**5.8**

There were some excellent answers as students manipulated, analysed and interpreted three sets of data together. Better answers used a table to compare film production, population and GDP for the major countries in each category, and then quantified the data in their discussion. This approach enabled students to logically present their findings. Better students understood this question to be one involving the concept of 'spatial association' and their answers interpreted and synthesised a range of data.

Less successful answers dealt with only two of the three variables, ignored the major producers and/or were selective of data to support their contention. This question required a balanced development that reflected the fact that the statement was true in some instances but not in others.

c. Students had to outline a policy that an African government could implement to promote feature film production in their country.

Marks	0	1	2	Average
%	23	24	53	**1.3**

Few students answered this question well. There were some answers that were well thought through, for example, *make contact with Indian film producers for co-production*. Other good answers referred to tax incentives and training. Most students understood the idea of incentives but were unable to clarify what these should be and how they would help promote the film industry.

Too often students resorted to patronising comments, for example *teach them how to use a camera*; *show them what feature films are like*; and *swap food for producing feature films*.

Some less successful answers linked population and GDP, usually erroneously, by stating that the Africans needed to increase their birth rate to get more people into cinemas or become wealthier so they could afford to go to cinemas. Less successful answers also confused Africa with an African country, and referred to the African government instead of an African government.

Question 7

a. Students had to map the distribution of a global phenomenon they had studied.

Marks	0	1	2	3	Average
%	13	13	28	46	**2.1**

The quality of maps was poorer than in previous years. There were some very poor responses to this question; some students couldn't map a global phenomenon at all and also some could not map one correctly. It is a technique of representing data in a succinct and visual form – a spatial skill that should be acquired by all students at this level. There should not be inaccuracies.

Better answers accurately mapped a global phenomenon and made effective use of colour, annotations and shading. These students also provided map elements such as a title that clearly told what was contained on the map and a key that unlocked the data contained on the map.

Less successful students confused resources with phenomena, chose a regional rather than a global phenomenon and presented inaccurate, poorly represented map-work.

b. On the map, students had to name one location relevant to their phenomenon at a local scale and name one location at a regional or national scale.

Marks	0	1	2	Average
%	35	28	36	**1.0**

Teachers should note the problems most students experienced with this question. Few students could correctly map a local, a regional and a national scale on the map.

The majority of students had little idea how to correctly classify their location. For example, Gujarat was named as a local scale, a town, a region and even a country depending on the student. New Zealand was local but Kobe was national. There was some confusion over the concept of scale, with many students not distinguishing between local and regional scales; for example, students referred to local scale as being a suburb of a city, a city the size of Tokyo and even a country such as Japan. Students must be taught about scale, and especially local scale.

Many students could also not place the locations correctly. For example, Cambodia was placed near Madagascar by some students. The inability to accurately locate a place being discussed is of extreme concern.

Too many students implied scale by simply writing out or labelling any two places.

c. With reference to the named and mapped locations at different scales, students had to discuss the impact of their global phenomenon on either people or places.

i.

Marks	0	1	2	3	Average
%	14	21	31	34	**1.9**

ii.

Marks	0	1	2	3	Average
%	18	22	30	30	**1.8**

Students frequently discussed causes of the phenomenon rather than the impact. Very often the discussion was so general that it could have fitted any location and at any scale. Many students discussed how people responded to the phenomenon, particularly when they discussed earthquakes and volcanoes. Few wrote specific dates of events associated with the phenomenon such as an earthquake in Kobe or Bam or even the commonly quoted Gujarat. There were some worrying misconceptions, for example that the water shortage in Victoria is due to global warming.

Too often students wrote general impacts, for example, death, destruction, litter, unemployment or loss of housing with little elaboration or even data that related to material studied in class. Less successful answers showed no delineation in impacts at the different scales, for example, the impact of 'death' without elaboration of the scale (amount) of death.

Less successful students discussed the impact on people **and** places. Students must read the question.

Better students, who understood the notion of 'scale', were generally able to discuss the impact to a high standard. They nominated the impact on people or places and discussed the type of impact (negative, positive). These answers then provided detail about where this had occurred, referring to their case study material fully.

d. Students had to evaluate the policies designed to manage the impact of their global phenomenon at one of the locations mentioned above.

Marks	0	1	2	3	4	5	Average
%	16	11	22	30	9	13	**2.5**

There were too many misreadings of this question. Many students dealt with one policy, rather than several policies; however, this one policy was often discussed in considerable detail. In some cases they dealt with one or two policies at several scales and they did not always relate it to the locations in 7c. Very few students evaluated more than one policy.

Some students suggested what should be done about a situation rather than answer the question. Despite the above concerns, there seemed to be a better understanding of 'evaluation' than in the past; rather than just saying whether a policy was good or effective, students are starting to say why this would be so.