Geography

2012 Chief Assessor's Report





GEOGRAPHY

2012 CHIEF ASSESSOR'S REPORT

OVERVIEW

Chief Assessors' reports give an overview of how students performed in their school and external assessments in relation to the learning requirements, assessment design criteria, and performance standards set out in the relevant subject outline. They provide information and advice regarding the assessment types, the application of the performance standards in school and external assessments, the quality of student performance, and any relevant statistical information.

The number of students choosing to study Geography at Stage 2 increased by more than 30% in 2012. Students generally performed soundly within the range of assessment types. Teachers and schools have become more familiar with the changes to the assessment model and the administration of the subject, and the design of assessment tasks was done more effectively. Many students were able to show good achievement against the performance standards and demonstrated a sophisticated understanding of the key concepts and ideas. An interesting range of folio tasks was presented, and teachers and schools are developing some innovative and challenging methods of assessing student learning against the assessment design criteria and the performance standards.

SCHOOL ASSESSMENT

Assessment Type 1: Fieldwork

A number of students produced outstanding work this year, which met the performance standards at the highest level. A wide range of relevant fieldwork techniques was evident at moderation and this was especially true of the more successful students. Teachers are encouraged to carefully guide student selection of topics and fieldwork so that their choices are relevant to the topic. The best fieldwork reports were those where the topic was obvious throughout. Surveys require careful planning and the sample population should also be relevant to the topic chosen.

Very few students considered the limitations of their fieldwork techniques. The relevance of some survey questions to the fieldwork was questionable. The details of how fieldwork was undertaken were often limited. The best reports demonstrated sophisticated evaluation of the fieldwork. Teachers are encouraged to emphasise the importance of evaluation of fieldwork within the text or in a table, in particular evaluating the strengths and limitations of the field techniques used.

The best reports integrated comprehensive geographical knowledge and understanding with their fieldwork. Teachers are further encouraged to emphasise the importance of illustrating the spatial nature of their topic through a range of carefully chosen maps. A range of highly effective mapping techniques were evident including the use of overlays. Hand-drawn and GIS-generated maps, as well as aerial photographs, were modified to suit the purpose and were well integrated in a number of fieldwork reports. Many students are highly skilled at using a range of information and communication technologies (ICT). A number of students

demonstrated a high degree of skill in utilising a range of techniques to manipulate, integrate, and present information gathered (including titles, annotations, sourcing the data, and by referring to the information in the text) and received credit for this. The best responses perceptively analysed both the spatial patterns and processes involved in the chosen topics. The responses of these students went beyond description of the results and considered why the results had been obtained. Less drafting was evident in student work which clearly limited the success of some students.

The wording of the guiding question or hypothesis can significantly influence the ability of students to successfully address the performance standards. Almost all student responses were in report form. The best field reports often emphasised the spatial and temporal nature of fieldwork. Small, local-scale topics tended to be completed successfully.

A wide range of option topics were chosen that represented the best possible opportunities for developing, selecting, and applying a range of geographical and fieldwork skills. Some outstanding fieldwork was completed when the students considered both the temporal and spatial nature of the topic. The inventiveness of students in developing their own fieldwork techniques to match the particular needs of their topic is to be commended.

Very few students exceeded the word-count. Students successfully used a range of strategies to stay within the word-count.

The moderation panel identified some areas that enable teachers to assist their students to perform at all levels of the performance standards, including the highest level:

- Fieldwork data (primary data) must be the central focus of the topic secondary data should not be focus of the fieldwork.
- Fieldwork should have an appropriate geographical and spatial context.
- A range of fieldwork types should be integrated to answer each aspect or question being considered.
- The inclusion of raw data: data should be modified or adapted to suit the purpose of the report.
- Data should not simply be described but carefully analysed.
- A number of students used colour-coded annotations to complete various aspects of the performance standards.
- The best fieldwork reports were well structured using the performance standards to guide their construction.
- Statistically significant sample sizes were often present in the fieldwork of students who achieved at the highest level.
- Drawing conclusions not supported by the results obtained should be avoided.
- The best reports effectively used a range of relevant geographical terminology.
- Teachers should identify the option topic, which is relevant to the fieldwork topic or question.
- Fieldwork should be completed on the option topic not the core topic.

Assessment Type 2: Inquiry

Students were able to select, apply, and evaluate a variety of geographical skills and technologies in their inquiry. Many of the best inquiries were effectively structured by using the suggested structure in the subject outline and performance standards.

Students should be commended for the highly integrated nature of their inquiries using a range of technologies and forms, such as tables, pictures, mind maps, 3-circle diagrams, and flow charts. The more successful students used a range of methods of communication to present their information, enabling them to illustrate the interdependent nature of the issue. Less successful students collected and presented data with little or no thought to its organisation or structure.

Analysis of spatial patterns and processes related to geographical issues was evident in most students' work. The more successful students considered the complexity of the issue in a local, national, and global context. Most students effectively evaluated the environmental, social, political, and/or economic implications of responses to geographical issues using a variety of methods, including text, tables, flow charts and mind maps.

Many students demonstrated strong research skills and a high degree of referencing. The more successful students perceptively analysed and evaluated the conflicting demands and diverse values, views, and perceptions related to their chosen geographical issue. A number of students skilfully evaluated the relevance, bias, accuracy, and usefulness of various sources. Teachers are encouraged to ensure that students address contrasting viewpoints because it was noticeable that a number of less capable students ignored this aspect. The more successful students often sought conflicting opinions to contrast the viewpoints of experts. Few students provided in-depth reflection on sustainability when examining geographical issues.

The best inquiries tended to be framed around a question that had a spatial aspect. Issues structured around an appropriate question enabled students to achieve at the highest level against the performance standards.

A number of formats were available for the presentation of this assessment type, but the most commonly used is the report. There were fewer broadsheets and these were variable in standard. There were very few digital slide presentations.

The students are to be commended for selecting a wide range of controversial geographical issues including piracy, nuclear energy, ecotourism, and the impact of climate change on malaria.

Almost all students met the required word-count as presented in the subject outline. Students successfully used a range of strategies to limit their use of words, including flow charts, pictures, graphs, and mind maps.

The moderation panel identified some areas that enable teachers to assist their students to perform at all levels of the performance standards including the highest level:

- The topic chosen must have a geographical focus.
- An inquiry topic must be from the option topics, not the core topic.
- Negotiated topics should be approved by the SACE Board.
- Individual maps should be developed and adapted to the intended purpose. Maps that are cluttered or are unclear should be avoided.
- Succinct analysis is better than description.
- A range of forms of communication other than text should be used.
- Topics that appear too general should be avoided.
- The most successful reports are those that follow a particular structure, usually related to the performance standards.

- It should be possible for the impact of the issue to be considered at varying scales (local, national, and global).
- Recent and highly relevant sources provide students with greater opportunity to achieve at the highest level.
- Students that utilised the structure for the inquiry presented in the subject outline appeared to have a much greater chance of performing at the highest level.
- The best inquiries were rich in geographical terminology.
- Bibliographies should be detailed.
- A lack of drafting was evident and this appeared to limit the success of many students.

Assessment Type 3: Folio

Students produced outstanding work this year and met the performance standards at the highest level. The more successful students demonstrated comprehensive geographical knowledge and understanding across the tasks in the folio. Strong understanding of the key geographical concepts for each task was evident in outstanding work. Assessment tasks rich in relevant geographical terminology led to better results. A number of responses were well integrated and used a range of technologies and forms (tables, pictures, mind maps, 3-circle diagrams, and flow charts). Tasks that were structured based on using the performance standards led to higher performances.

Analysis of spatial patterns and processes related to geographical issues was evident in student work using a range of unique maps, tables, annotations, and charts. The best responses demonstrated that students found an outstanding range of relevant information in various forms to complete their assessment tasks. The more capable students effectively used a variety of methods, including text, flow charts and mind maps, to present their information. Fewer students provided in-depth reflection on sustainability when examining geographical issues.

There was a broad range of tasks chosen and the general level of achievement was good. PowerPoint presentations, broadsheets, essays, and so on were presented as part of the folio. When tasks were designed specifically to meet the performance standards, student success was more likely. Some teachers limited the number of specific features assessed in designing each assessment task to enable all students to achieve at the highest level. Assessments in the folio should relate directly to the core topic. Some of the assessments presented in the folio were very straightforward and hence did not provide all students with the opportunity to achieve at the highest level.

There was a significant range of tasks presented. Mapping tests were commonly used and often enabled the teacher to limit the word-count. The ecological footprints assessment was commonly used by teachers. Migration, population pyramids, and population sustainability were common topics covered. A range of water topics were presented. A GPS (global positioning system) task was also used this year.

Teachers are encouraged to limit the number of tasks presented to enable students to stay within the word-count. Teachers are encouraged to consider carefully the type of tasks presented for the folio. The nature of the task was significant in enabling most students to meet the prescribed word-count. Examinations or tests with a number of extended responses made it difficult for the students to stay within the prescribed word-count.

The moderation panel identified some areas that enable teachers to assist their students to perform at all levels of the performance standards including the highest level:

- Where assessment tasks required students to be assessed against many specific features using the performance standards, it was more difficult for students to succeed at the highest level.
- Submitting large and complex tests with a number of large extended responses can make it more difficult to remain within the word-count and should be avoided.
- Including scripts for PowerPoint presentations assists the moderators to understand the assessment decisions.
- It is difficult for students to achieve at the highest level in folio tasks which lack a geographical focus.
- Examination or test-style assessments appeared to significantly disadvantage less able students.

EXTERNAL ASSESSMENT

Assessment Type 4: Examination

The examination consisted of a range of short-answer and extended-answer questions, supported by one page of additional material comprising two maps of the same area at different scales. Students need explicit instruction in the importance of reading all the instructions on the paper to ensure that they are considering the correct data or answering the correct question. Students must examine the number of marks available for each question and then consider the detail or structure of their answer in order to have the best possible chance of gaining the maximum marks available.

It is important for teachers to explicitly teach about examination strategy and careful reading of the questions to enable their students to develop effective examination technique. A range of opportunities to practice past examination questions and to analyse responses should be offered to students. Emphasis should be placed on connecting the question to the marks available and helping students to understand how they should structure their answer for maximum success. Students should be given the opportunity to consolidate their understanding of how to express themselves clearly and how to structure their answers to meet the requirements of the questions.

Extensive practice in the interpretation of data presented in different ways should be offered to students. Use of different graphs, being able to interpret a satellite image or aerial photo, and identifying trends and ideas from data tables will assist students to tackle data-interpretation questions with confidence. Careful attention should be paid to the wording of questions so that the student clearly understands exactly what is being asked, and then can accurately interpret any data appropriately.

The most successful students achieving at the highest level used correct geographical terminology and concepts to a high level. Extended answers were well constructed and organised, and demonstrated an excellent ability to connect knowledge and understanding appropriately to address the clearly articulated requirements of the questions. Students are advised to read questions carefully and use them to structure their answer. Many students identified the command terms in

the question by the use of a highlighter or by underlining, and this assisted them in focusing their answer more clearly. In addition, they took time to carefully examine any additional or stimulus material provided and used it to great effect in their answers. Where a question clearly asks for supporting evidence from the resources provided, students are advised to use them as fully as possible.

Teachers are advised to explicitly teach their students all the basic mapping skills and to ensure that students get sufficient practice in interpreting unfamiliar maps. Many students were able to show competency with the range of map-reading skills. However, there were some elements that need further attention. Students need to understand the need for accuracy, especially in measuring distance or reading information from graphs. Some students missed marks through not reading the question carefully; for example, for a 2-mark question asking to 'describe and explain', if the student carried out only one of these requirements, then 1 mark would not be allocated. Teachers are advised to ensure that students have been exposed to the full extent of mapping and spatial skills detailed in the subject outline as below:

Using and Interpreting Geographical Data and Information, Including Maps

Students should be able to:

- analyse, interpret, and use a range of maps; in particular they should be able to
 - locate and use map features (e.g. latitude, longitude, grid reference, legend or key, direction, and contours)
 - understand and use scale (e.g. enlargement, reduction, vertical exaggeration, area, and distance)
 - construct and interpret profiles, cross-sections, and transects
- analyse, manipulate, interpret, and synthesise geographical information
- interpret images, including aerial, oblique, and ground photographs, and satellite images
- interpret, manipulate, critically analyse, and evaluate data, including information in tables, graphs, diagrams, and population pyramids
- interpret and extrapolate from statistical information
- understand the use of GIS (geographical information system) techniques.

Some students were careless in their reading of data from graphs or maps, and lost marks due to their inaccuracies.

Students appeared to be very comfortable with the population element of the core topic and the questions related to population were answered soundly. Again, careful reading of the questions will provide the best opportunity for individual success. There was a sound grasp demonstrated of the analysis of population and population data. Question 13 was the most challenging, with most students achieving 1 mark but very few gaining 2 marks. Some students did not read the question carefully and either ticked three boxes or only one.

Students need to understand the elements necessary to build a GIS. There is still a lack of understanding of the term 'attribute data'.

In answering the extended-response question on the declining growth in world population (Question 17), some students did not read the question carefully and focused on declining birth rates or only focused on areas at one level of

development. This impacted on the marks they achieved for this question. Students are reminded that the marks for longer questions are not allocated on a 'per point made' basis, but are allocated holistically according to the extent and sophistication of the response.

The extended-response question on the issues facing ageing population (Question 18(c)) was generally well done and many students showed a sound grasp of the key issues and impacts. A range of examples were used to support their ideas. Students are reminded that if the instruction is a plural, they should attempt to include more than one example.

The extended-response question centring on the components of the ecological footprint (Question 19(d)) was the weakest for most students. There was a lack of accurate interpretation of the instructions in the question; many responses only discussed size or composition and not both. In addition, the question asked for two factors and many answers did not present these. Students are reminded to read the questions carefully, organise their responses, and include necessary supporting examples or evidence.

The final suite of questions focusing on water (Questions 20 to 23) was generally well done. Students are encouraged to be accurate when reading graphs and other data. There was a sound demonstration of the ability of student to connect the elements of the core topic and to draw justified conclusions.

Finally, teachers should encourage students to attempt all the questions and not to leave blank responses. They will not lose marks for an incorrect response and may in fact gain from their response, particularly on the extended answers. Students should have extensive practice in responding to the complete range of short-answer and extended-answer questions and gain experience in meeting the time requirements of the examination.

OPERATIONAL ADVICE

- It is easier for moderators to confirm a school's assessment decisions where associated marks schemes, rubrics, and/or specific features of the assessment design criteria are also included with task sheets for each assessment task.
- Teachers are reminded that the overall grade for an assessment type should match the selection of performance standards.
- Teachers are encouraged to self-moderate their marking with colleagues.
- Assessment cover sheets for the fieldwork and inquiry should include the option topic to assist with moderation.
- Ensuring student work is appropriately labelled and stapled assists moderation.
- Appendices containing completed surveys and similar material are not necessary.
- Teachers should ensure that the correct performance standards are addressed for each assessment type.
- Some folio assessments did not assess the same assessment design criteria as outlined in the learning and assessment plan. When teachers make adjustments to their approved learning and assessment plan, the adjustments should be recorded on the addendum and the addendum provided to the moderators.

Chief Assessor Geography