GCE A LEVEL EXAMINERS' REPORTS

GEOGRAPHY
A LEVEL

SUMMER 2019

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C1: CHANGING LANDSCAPES AND CHANGING PLACES

General Comments

- Analysis of graphical material was encouraging. Candidates were able to identify trends, support their comments with data from the resources and, in the main, address the command words.
- Analysis of photographs was less secure with some unfocussed descriptions and answers straying into explanation.
- The use of case studies in the essays was generally sound but candidates should also try to integrate them into the 6 and 8 tariff questions.
- The use of diagrams in the glaciated and coastal landscapes essays was effective.
- Candidates should identify their selected questions on the front sheet of the answer booklet.
- Some examiners reported that the quality of handwriting made answers difficult to interpret in a number of cases.

Comments on individual questions/sections

Section A: Changing Landscapes

Coastal landscapes was the most popular with 76% of the candidates choosing this option. Mean marks for the glaciated landscapes option were generally higher than those for the coastal landscapes option.

Q.1 (a) (i) The majority of candidates were able to access the information in the resource and many were able to use the photographs to describe the characteristics of the coastal landscapes. The better answers covered the whole of the landscape features to include cliffs, wave cut platforms and beaches. Opening up the content to be covered gave candidates the opportunity to cover a number of potential comparisons. Some answers focused solely on the cliffs and therefore comparisons were more limited, although a number did give a thorough review of the differences seen. A number of answers failed to address the command word of compare and so credit was limited in these circumstances. Some candidates could resist the temptation to describe the processes that have contributed to the characteristics of the landscapes shown which would have been more appropriate in the next question.

(ii) This was a challenging question and the quality of the response depended upon the candidate's understanding of the term lithology. Unfortunately, many were not aware of its meaning and responded using geology in general. There were a few who addressed mineral composition, hardness and solubility and related these elements to the processes of marine erosion, mass movement and weathering that resulted in the cliffs illustrated. Many however drifted into structural geology soon after briefly examining lithological factors.

These answers concentrated on the role played by bedding planes in the different shape of the cliffs. There were some good responses that picked up on the clay content cliffs in Figure 1b and applied this to their knowledge of cliff development in examples they had studied as part of their course.

(b) Many candidates found this difficult as they were unsure of what constitutes a geo. There were however a number who were able to clearly identify two features. Some of these went on to outline the development of geos which was interesting but gained no credit.

Q.2 **(a)** **(i)** Answers here were generally higher scoring than the previous resource based question. Most students could access the graph and were able to establish how wave height changed with distance inland. Candidates seemed well prepared for this type of resource and their analysis of wave change height was usually effective. Most candidates answers were based on a forest by forest analysis with an analysis of changing rates of wave height decline and a comparison of one forest with the others. There was a good use of data from the graph to back up analytical points.

(ii) This was only worth 2 marks and some candidates' answers were over analysed. A simple observation that decreasing wave height leads to decreasing energy and therefore decreasing erosion would have scored well. However many drifted into explanation which was not required. A significant number focused on the absolute percentages and related this to an increase in wave erosion, which was incorrect.

(b) Most candidates chose to explain the formation of corals rather than mangroves. In the case of corals centres had clearly prepared their candidates effectively for the topic and many answers scored well. Responses were good in the description of the conditions needed for coral growth and the better answers linked these conditions to the development of corals with reference to reef structure and type of reefs. The Great Barrier Reef was used most frequently to illustrate the answers but there some who used Caribbean reefs and the reefs of the Red Sea as examples. Some answers focused solely on the conditions for reef development without linking these to development and so only partially addressed the question. Mangrove coastlines were less well done and often consisted of only basic reference to the characteristics of a low energy coastal environment without comment on location or their intertidal nature.

Q.3 This was the most favoured of the coastal landscape essays with over 90% of the candidates choosing this question. In general candidates had been well prepared with responses showing good knowledge and understanding of the topic. The process of longshore drift was well understood and many answers gave a very competent description of its operation. The majority of answers were able to link the process to the formation of coastal landforms of deposition, usually spits. Knowledge of case study material was generally good with frequent reference to Spurn Head, Hurst Spit, Mudeford Spit and Blakeney Point, often with clear annotated diagrams to enhance their interpretation.

These case study based answers were often well placed to assess the importance of longshore drift as they viewed the landforms in a holistic manner. Frequently, reference was made to other transport processes, such as aeolian and estuarine, or to the landform as part of the coastal system with comment made on erosional and depositional processes. Some answers also viewed the development of named landforms over time noting how the importance of different processes change over time. This approach was fruitful in the awarding of credit for AO2. Where spits formed the basis of the answer, there was also frequent reference to the influence of human intervention on longshore drift – often linked to change over time. Less confident attempts tended to produce a narrative 'textbook explanation' of the formation of depositional landforms. In addition, where candidates attempted to address too many landforms, the opportunity to address the AO2 aspects of the question became limited or repetitious.

Q.4 This was the less popular choice of the coastal landscapes essays with approximately 10% choosing this option but the facility factors were comparable (52% for Q3 and 50% for Q4) . Those that did attempt the question seemed to have a confident, well-informed approach with some high-level responses with good exemplification. Good answers were often structured around different time scales rather than the influence of different time scales on one landform. There were a number of excellent responses that gave a comparison of long-, medium- and short-timescale process and their resultant landforms. These typically referred to diurnal, seasonal, annual and geological timescales and examined changes due to weathering, wave energy and sea level change. Candidates selected from their knowledge base to give case study material to support their ideas citing the impact of freeze-thaw weathering on clay cliffs, the impact of storms on beaches and the role of sea level change on the production of fjords and raised shore platforms.

Q.5 **(a)** **(i)** Most candidates were able to access the information in the photographs and recognised a landscape of erosion and a landscape of deposition. The majority identified the main characteristics of erosion in 3a with many citing the U-shaped valley, corrie and misfit stream. There was less uniformity in the identification of the features in 3b but most could point out kames and kettle holes. Some candidates were less accurate and referred to landforms they expected to be in these situations rather than what was actually seen. A significant number of the answers managed to respond to the command word and used comparative phrases to distinguish between the two landscapes. However, some merely listed what was to be seen in both photos which limited the credit given. The better candidates went beyond a list of landforms and examined general differences such as a comparison of slope angles or shapes of landforms.

(ii) The majority of candidates focused on how the landscapes could influence tourism with most concentrating on 3a. The use of the upland glaciation landscape for outdoor leisure activities was generally well developed and supported with reference to the characteristics in the photograph. Most answers were less secure in the identification of the second way with few making reference to the potential for reservoirs and mineral extraction which is part of the specification.

Some did review how the landscapes could have a negative influence on human activity commenting on transport and agriculture, but these aspects were not as confidently developed and were more speculative. Some were sidelined by the snow on the upper slopes of 3a and made climatic comparisons of the photographs, ignoring the possible difference in the seasons between the photographs.

(b) The majority of candidates clearly described two features of a cold based glacier and had been well prepared for this question.

Q.6 **(a)** **(i)** Most candidates scored well in this question and were prepared well for the analysis of line graphs. They were confident in their use of data and had a good understanding of the base line.

Most structured their answers around an analysis of the changes shown by each glacier referring to rates of decline, fluctuations and anomalies to the main pattern. A number did enhance their answers by giving comparisons of the changing mass balances as they described the dynamics of each glacier.

(ii) Responses to this question were generally good. The overall decline of the Gulkana glacier was usually linked to climatic change with further development related to the elements of the mass balance.

(b) There were some excellent answers that focused on eskers which displayed a clear grasp of their formation. Explanation was detailed in its consideration of process, sediment and characteristics and the linkages between them. Not all answers made reference to examples such as Blakeney, Pentir and the Esker Riada in Ireland but they did enhance the answers where present. Many answers made good use of diagrams to illustrate and explain the formation and characteristics of eskers. Where other fluvioglacial landforms were addressed the quality of the answers was more variable but there were good responses that examined sandur and varves. Some candidates did not understand what fluvioglacial meant and selected landforms that were inappropriate such as moraines or periglacial landforms.

Q.7 This was the most popular of the glacial landscape essays with 89% favouring this question. Most answers chose to examine cirques and there were some very good descriptions of the character of the landforms and the processes that led to its formation. The best answers were those that were based on an example with the popular case study being of Cwm Idwal. These answers were able to give detail of the processes of glacial erosion that had formed the cirque (plucking, abrasion and sub glacial fluvial erosion) and link these to its characteristics. The use of one example also allowed the candidate to examine the role of other processes as the cirque contained other features such as frost shattered slopes, scree slopes and features of the lip of the cirque. By doing this AO2 credit was easily gained. There were also some good answers that were more theoretical and explained the development of a cirque over time. The relative importance of different processes at each stage allowed access to AO2 credit. Where other landforms of glacial erosion were chosen they were most successful when examined in a suite or series of landforms, for example glacial troughs and truncated spurs. This approach was successful in displaying knowledge and understanding but gained less credit when assessing the relative importance of erosional processes.

Q.8 Candidates found this question challenging and it was attempted by only 11% of candidates. The facility factors differed with 56% for Q7 and only 43% for Q4. The best answers focused their attention of the formation of nivation hollows, blockfields and solifluction terraces. These answers contained description of the identified processes and how these linked to the characteristics of landforms. However, there was little in the way of assessment of the importance of frost weathering and mass movement, either as a contrast with each other or as a comparison with other processes. A number of candidates chose inappropriate landforms such as pingos and patterned ground that had their origin in ground ice.

Section B: Changing Places

Q.9 **(a)** **(i)** The stimulus material was accessible to most candidates and the majority recognised that the two resources offered conflicting viewpoints, one positive and informal and the other negative and based on statistics. There were some very good answers that took aspects represented in the resources, such as employment, and contrasted the presentation of the information. Answers that only focussing on one of the resources did not easily gain credit as there was little contrast.

(ii) The best answers recognised that the question was looking for information that addressed two elements – the regeneration of deindustrialised places and the role of external agencies. These agencies are identified in the specification as government, corporate bodies and community groups. Most good answers were able to identify one or more external agency and relate how it had enabled the regeneration of an area by investing in infrastructure, housing, jobs, education and training, environmental improvement and recycling buildings. There was a wide range of examples used such as London Docklands, Cardiff Bay, central Birmingham and Manchester as well as a series of case studies based on local studies relevant to each school/college. Smaller scale examples, perhaps based on fieldwork for the NEA, were also deployed. Many discussed the impact of the 'multiplier' on the changing character of places that had undergone regeneration. Those that based their answers on the resource were less successful. Some candidates failed to identify the external agencies, choosing to adopt a more theoretical approach and these responses provided only partial answers.

Q.10 **(a)** **(i)** Calculations were mostly correct

(ii) Candidates found difficulty in phrasing the answers to this and many only recognised the significance at 99% and made no mention of the rejection at 99.9%. This was frequently left blank.

(b) The best answers recognised that there were a variety of rural communities and as their characteristics varied so did the demand for fast internet. Clearly there has been some sound work in centres over digital exclusion and the 'two-speed' world. Many responses were structured around specific types of rural community such as commuter settlements, retirement villages, rural settlements where the economy is based on tourism, farming settlements and rural craft hubs. Candidates were able to examine the demographic, social and economic characteristics of these different places and comment upon the need for fast internet connection.

Good answers were based on examples and referred to real places with many using settlements in Cornwall, Derbyshire, Northumberland and the Welsh Marches. Those answers that scored well gave some focus to the variation in demand and not just a description of different rural settlements and their needs for fast internet. A number of answers were dominated by stereotypes such as old people not using the internet and farmers not having any need at all. Cornwall was slightly over used as an example, with the Eden Project being the sole demander of fast internet speeds in the County.

Q.11 This was by far the most popular choice of essay for the Changing Places unit of the specification with 76% opting for this question. The facility factors for the two essays was the same at 52%. Many answers were able to identify and discuss the threats to retailing in central urban places with the majority examining the growth of out-of-town and internet shopping. There were other threats used by answers that took a broader approach which included the growth of malls in separate parts of the CBD, increased rents in central urban areas, traffic congestion and decreasing attractiveness of urban areas with a large percentage of empty shops. Some even related the increased domination of the high street by chain stores as a reason for decline. There were many responses that scored well on AO1 as they gave clear detail of how the identified threats worked to cause decline in central urban retailing. Good examples were integrated into the answers usually related to local settlements associated with the school/college. Where many answers failed to reach their potential was in addressing the requirement to assess the severity of the threat. Some did say the threats could be negated and so gave some assessment by referring to click and collect, reimaging the CBD and environmental improvement. Few assessed the threats spatially or temporally.

Q.12 This was not as popular (only 24% chose this essay) and answers were polarised in their quality but there were some good answers that focused on money flows in a variety of formats related to the specification. Some examined global flows and related change to globalisation, Clark Fisher and the de-industrialisation of places. Others referred to the inward flows of government money and how this had been used to regenerate urban places. Some answers related flows of money to the changing demographic of an area and gentrification. Fewer answers addressed the investment in the knowledge economy and quaternary clusters. Answers that fully addressed the AO1 element of the question discussed the flow of money using a located case study and outlined how changes had shaped the social, economic, demographic and environmental character of place. The role of changing flows was not often discussed in a directed manner. Some answers took a historical perspective which was interesting but did not fulfil the spirit of the specification.

Summary of key points

- Candidates may benefit from a more analytical study of the key geographical features displayed in images.
- Time taken in the analysis of questions will provide more focussed answers.
- The significance of statistical calculations is an important element of quantitative skills in examinations as well as the NEA.

- The assessment element of the essay questions could be improved by an examination of temporal and spatial characteristics as well as processes.

- Where handwriting is clear it is easy to follow the arguments made in an answer.

GEOGRAPHY

GCE A LEVEL

Summer 2019

COMPONENT 2: GLOBAL SYSTEMS AND GLOBAL GOVERNANCE

General Comments

As in last year's C2 examination, stronger candidates were able to demonstrate they could analyse and explain data, evaluate geographic ideas/issues and come to clear conclusions using supporting evidence and case studies. An ability to organise thoughts and plan effective essays in a short time-frame was demonstrated by stronger candidates. When required to, for example in Q9, the majority could argue for both sides of the case in discursive questions. Most students employed their knowledge, understanding and skills to good effect, generally staying on, or close to, the question topic.

In general, students and their teachers appear well-versed in this paper's AO requirements. In particular, the idea of drawing on the component's topics as a whole to answer the essay questions is clearly well-understood by the majority of schools. The final section of the C2 report provides guidance on a few ways in which future performance could be improved in line with the AOs.

Relatively few candidates appeared to experience any serious time issues.

Particular strengths in student performance included:

- Peat formation and management (questions 1 and 3): this has quickly shown itself to be a student-friendly area of the specification that is taught well and which most students can write about in a well-evidenced way. Many candidates were able to write in an accurate and informed way about physical processes operating over different timescales.
- Ocean governance (questions 6b and 7): some exceptionally good answers were seen whose content was entirely up-to-date (for example, some wrote confidently and accurately about recent developments in the South China Sea). This is a case-study-driven part of the specification that Eduqas geography students have engaged with very well.

Comments on individual questions/sections

Section A: Global Systems

Q.1 (a) This question was well-answered by the majority of candidates who seized the opportunity to synthesise the elements of Figure 1a and provide an overview of *which factors mattered most and which did not*. Use of the word 'analyse' as opposed to 'describe' at A-level reflects the increased stretch and challenge compared with GCSE when it comes to data-handling skills. Like other 5-mark AO3-targeted questions on this paper, the task was designed to provide candidates with an opportunity to demonstrate a 'data storytelling' ability.

Accordingly, the best answers usually provided a clear *overview* at either the start or end of the response.

They were also often concise (no more than 10 lines or so); these candidates clearly grasped the key causal links with slope angle and soil moisture and explicitly ruled-out altitude and temperature as being of equal importance. Arguments were evidence based and made good selective use of the data provided.

In contrast, weaker performance for a minority of candidates involved:

- *listing the conditions found at different sites* - but failing to use the evidence in a way which highlighted causality (simple 'copying out' of the data while failing to analyse the links between conditions and the presence or absence of peat typically resulted in only one or two marks being awarded).
- *explaining how peat is formed* - some answers contained copious amounts of information relating to soil-forming processes and anaerobic conditions. Candidates need clear guidance on how to approach part (a) questions on this paper. 'Analyse' is always used as an AO3 command term
- *writing an excessively long response of around 30 lines* - while such answers sometimes scored full marks, they should nonetheless be viewed as flawed performance in the context of the paper as a whole because marks were often lost elsewhere due to a lack of time.

(b) The vast majority of candidates interpreted the question correctly and made wide use of the resource as a 'springboard' for applied knowledge and understanding. At the upper end, candidates not only identified individual impacts but additionally synthesised the information and created linkages, for example by noting that the forest might affect transmission of water downslope thereby impacting on peat carbon storage on the valley floor. This was an excellent point to make under exam conditions, as some candidates did.

The majority of answers applied accurate knowledge and understanding of carbon storage processes to the context shown, often using subject-specific terminology such as anaerobic conditions, carbon fixation etc.

At the lower end, performance was hampered by insecure knowledge or lack of focus on the question, for example, some candidates:

- wrote about the impact of deforestation on the atmospheric store (but the question asked about local carbon storage)
- knew very little about peat formation processes and suggested, rather naively, that the drainage ditches would wash the peat away.

Q.2 (a) Figure 2 provided another opportunity for 'data storytelling', courtesy of the AO3 'analyse' command word. The best answers began with a clear overview (or 'headline news') which highlighted the *extremely severe situation* shown to be afflicting *the entirety of England and Wales*. Most candidates were able to provide a clear place-based analysis which highlighted the relatively less severe deficit in parts of the east of England.

Figure 2 also provided opportunities for *data manipulation*: good answers attempted to quantify the deficit, for example by telling us that 'around two-thirds of England and Wales received less than 20% of usual summer rainfall' or 'only a very small area of less than 200 km diameter received 80% of usual summer rainfall.'

A small minority of candidates were unable to interpret the map correctly. They paid insufficient attention to the wording of the key and wrongly inferred that a high number represented a 'bigger problem'; as a result, such answers told us that the worst conditions were to be found in the east of England. Candidates who made this category error were nonetheless able to gain some marks by virtue of describing the geographical pattern shown (i.e. correctly identifying named regions with their corresponding percentages). However, their interpretation of what was shown (i.e. telling us what the higher and lower numbers actually represented. In terms of deficit severity) was inaccurate. Typically, this resulted in a mark of 2/5.

(b) Relatively few candidates scored full marks here, although many achieved 3 or 4. This was an AO1-targeted question requiring isolated knowledge and understanding only. The difficulty for many candidates stemmed from the question's focus on *condensation as opposed to rainfall*. Large numbers of candidates devoted part of their answer to providing an explanation of the way a rain shadow can be created on the lee side of a mountain range – a point which is entirely tangential to the question asked. The evidence suggested many candidates engaged with this task on 'autopilot' and delivered an 'all-I-know-about-rainfall' answer.

Common reasons for underperformance were as follows:

- Some candidates were able to explain the basics of orographic and frontal uplift but entirely neglected to explain the key process of condensation which the question asked about. They briefly asserted that 'as the air rises it calls and condenses causing rain', for example. It was telling that so few answers began with the statement: 'Condensation occurs when...' Instead, most answers began with a statement such as: 'Orographic rainfall happens when...' In contrast, the very best answers provided some explanation of the condensation process (for example, by making reference to pressure changes, lapse rates, condensation nuclei, etc.).
- Significant numbers of candidates could only provide a partial explanation of key processes. Most commonly, they asserted that warm air rises above colder air along a weather front but neglected to develop this point (for example by explaining the differences in density of the air masses).

Q.3 Candidates working in the medium and upper levels of attainment make effective use of a variety of knowledge and understanding drawn from across the specification's carbon and water content. In some cases, answers drew on recalled case studies of environmental management and restoration, including: moorland management; human impacts on the tropical rainforest and temperate grasslands; and attempted aquifer restoration. The question was sufficiently open-ended to allow candidates to apply even more wide-ranging knowledge of different carbon and water stores including rivers, lakes, soils and geological deposits. Some effective answers discussed changes in the atmospheric carbon store as an example of 'collective mismanagement' of a global commons at a planetary scale. This was a legitimate approach to take which sometimes yielded excellent answers.

The AO2 component of this question, for which 10 marks was available, required candidates to evaluate the extent to which the 'natural state' of their selected stores could ever be restored.

- At the lower end, this resulted in superficial simple judgements such as: 'All in all, peat moorland restoration has been very successful.'
- In the middle of the mark range, answers took a slightly more nuanced approach, for example by noting that: 'Peat has taken many thousands of years to form, so full restoration is difficult to achieve in the short term, given the long-term natural processes that are at work.
- At the very upper end of the mark distribution, candidates actively 'questioned the question' - critical thought was given to what constitutes the 'natural' state of any system, given that fluctuations in storage size are, of course, always occurring both on longer geological time scales and sometimes on shorter, cyclical scales.

The best answers also unpacked possible meanings of 'mismanagement'. This allowed them to contrast very specific local instances of mismanagement, such as unsustainable forest removal in a located area, with more conceptual approaches (such as the global commons idea mentioned above).

Q.4 This question was slightly less popular than question 3. Generally, most candidates who attempted it showed secure knowledge and understanding of a range of specific water and carbon system processes, such as evaporation, overland flow, carbonation etc. While many scored well according to criterion AO1, the AO2 marks often proved harder to gain.

Typically, AO2 under-achievement reflected:

- an inability of many candidates to focus on the key phrase 'faster flows'. Instead, there was frequent drift into the impact of warmer temperatures on the *size* of particular stores such as glaciers. No explicit argument was advanced about the rate of operation for particular flows such as meltwater runoff or evaporation. Instead, any flow rate changes were only implied as party of a generic account of ice mass wasting.
- over-simplistic reasoning and a lack of attention to specific located geographical contexts. At the lower end, answers typically asserted that the world in general would experience higher evaporation and therefore precipitation.

Again, the best answers 'questioned the question' and reflected critically on the *scale* of any temperature changes and the *possibility* of particular thresholds being crossed. In some local contexts, it was argued, high temperature rises might encourage the growth of vegetation but *only up to a certain point* and with the additional proviso that *precipitation levels also remain adequate*. Similarly, higher temperatures may increase the rate at which glaciers melt thereby accelerating water cycle flows such as runoff and evaporation. But beyond a particular threshold, glaciers may disappear entirely at which point rates of runoff in previously glaciated regions will of course be reduced (this is a particular future concern for some densely populated regions of Asia).

Section B: Global Governance

Q.5 (a) (i) Around two-thirds of candidates scored full marks by correctly completing the compound interest calculation.

There were two main reason why most of the remainder of the cohort gained only 1 mark:

- In some cases, a simple interest calculation was performed (giving an answer of 192).
- In some cases, the correct answer was provided but no working with shown even though it is explicitly requested.

(ii) Very few candidates scored full marks. This AO3-targeted question required geography candidates to briefly describe employment inequalities in Bangladesh. Inequality is, of course, one of the course's specialised concepts; and one of the most important geographical understandings about inequality is that it can be found both *between and within* places. Figure 3 shows exactly this: very significant employment inequalities are shown both *within* the urban factory and also *between* the urban and rural areas. It was disappointing that so many candidates wrote at great length about the differences between urban and rural data but failed to even acknowledge that a large part to Figure 3 also shows large differences in pay *within* the urban workforce.

(b) This question was poorly answered by the majority of candidates due to their failure to apply any of their own knowledge and understanding to the question. The specimen papers and 2018 C2 examination provided clear guidance on the way AO2-targeted questions like this should be answered. Part (b) questions which make use of the phrase '...such as those shown in the figure' are sending a clear signal that the resource should be used as a *springboard* for the candidate to apply their own knowledge and understanding. In this case, candidates were free to apply their own knowledge of export processing zones, supply chains and MNCs, perhaps using parallel examples (i.e. whichever global migration or container shipping hubs they had previously studied).
The best answers provided well-evidenced suggestions and applied a range of subject-specific terminology relating to economic labour flows within global systems.

Under-performance in this question typically stemmed from one of the following reasons:

- Unselective 'copying-out' of information from figure 3 with no additional applied knowledge and understanding.
- A lack of focus on the question set (many candidates wrote at length about rural push factors; however, the question asked for suggestions of how urban employment opportunities might affect migration i.e. the required focus was *urban pull factors*).

Q.6 (a) Again, performance was generally very good for this AO3-targeted question, with very few candidates scoring fewer than 3 marks. Most identified the general relationship and highlighted the high scores of the Scandinavian countries and variations amongst the African countries (the majority of candidates made reference to 'two anomalies' in their answers).

What additionally helped determine whether a response was worthy of full marks? Typically, the following points helped convince examiners they were viewing a 'well developed analysis of the relationship':

- Some candidates began their answer by clearly stating they could see evidence for a 'weak positive correlation'. In other words, they identified the *strength and direction* of the relationship. This is good practice which uses appropriate terminology. Only a minority of candidates did so instinctively, however.
- Some candidates offered the overview that even the most developed countries did not score very highly on the commitment scale (some answers referred to the 'low gradient of the line').
- Some candidates noted that the relationship was clearer (more significant) at the upper end of each scale, with a looser fit (and more anomalies) for lower values.
- Each of the developed ideas above represents a high-quality analysis of the relationship.

(b) The majority of candidates provided a satisfactory or good answer to this question. Responses were typically well-focused on reasons and argued the case that restrictions were necessary for sustainable management, to protect species and food webs and to maintain living standards for fishing communities. Most candidates applied appropriate subject-specific terminology. In some cases, they employed a bio-geographical vocabulary (food web, food chain, fish stock etc.).

Other answers took a more conceptual approach by referencing the global commons and/or sustainability. Some candidates were unable to access mark band 3 because they provided *only one* well-developed reason (for example, a long account of the global commons concept). This was a pity because the question clearly asked for the outlining of 'reasons'.

Q.7 Many candidates are clearly well-versed in the study of hard and soft power. They produced informative and well-evidenced essays dealing with such popular topics as: Chinese naval operations in the South China Sea; the past clout of the British Empire as a maritime force to be reckoned with; and the various migration policies and rules used by dominant economic powers such as G7 countries.

- Mid-level answers tended to over-play descriptive case study details at the expense of evaluation (it was common for such candidates to end abruptly with an assertion such as: ‘So in conclusion, all forms of power are useful’.
- Upper-level answers were more likely to provide a more developed evaluation, for example by making the case that: ‘The relative importance of hard and soft power has changed over time with the rise of the Internet’. Alternatively, some candidates argued that: ‘The 21st century will most likely bring resource shortages which may mean it becomes more important than ever to maintain a strong naval presence to protect imports.’

Many candidates struggled to link their knowledge and understanding of migration policies with this question’s power focus in a truly effective way. It was common for a case to be argued that it is important for rich countries to control the flow of immigration, the reason being that: ‘Too many low skilled migrants might harm the economy and therefore the global advantage of a country’. Bland statements such as this left the most important questions unanswered.

How, exactly, is a country's global advantage measured, and why does the presence of low-skilled migrants necessarily prejudice that country's ability to project power and influence globally in ways which are self-advantaging? A surprisingly large number of candidates made little or no attempt to establish at the start of their essays what is actually meant by the phrase 'maintain their global advantage'. As a result, they struggled to make a meaningful PEEL-type link at the end of each content paragraph dealing with migration.

Q.8 Candidates answering this question sometimes scored more highly according to the AO2 criterion than for the AO1 criterion. The reason for this was that they sometimes lacked much in the way of concrete evidence for the economic costs of (i) emigration or (ii) being landlocked. However, they were still able to develop quite nuanced evaluative arguments, albeit ones based around generalisations.

Popular AO2 themes included:

- the argument that *migration is part of a bigger system of flows* which include remittances; emigration may therefore have net benefits overall. In contrast, being landlocked is a physical condition which provides many challenges but few reciprocal opportunities. This line of argument often allowed for a sustained and nuanced conclusion to be arrived at, with a clear and substantiated final judgement that landlocked status presents the greatest challenge.
- the argument that emigration is *often only a short-term process* that may only operate for a period of years or decades in a country's economic history. In contrast, being landlocked is a permanent state of affairs, provided political boundaries remain fixed. As such, it may be reasonable to conclude that being landlocked represents the greater challenge.

Lower- and middle-band answers sometimes lacked a clear focus on the question. Social and cultural challenges were described, even though the question was more narrowly interested in economic challenges alone. There was often confusion about the difference between immigration and emigration, with many candidates devoting much of their answer to the challenges the UK faces from hosting a large Polish population. Benefit of the doubt was given here, but answers which wrote at great length about the impact of emigration for both the source and destination country tended to be self-penalising because candidates ran out of time and were unable to evaluate the challenges faced by landlocked countries in much depth or detail.

Section C: 21st Century Chanllenges

Q.9 This was by far the more popular of the two synoptic questions. There was evidence of very good candidate preparation by the majority of centres. Most answers quite correctly offered a blended answer which incorporated sustained reference to the source material (AO3) along with supporting ideas drawing on candidates' own knowledge (AO1). Moreover, both AO1 and AO3 evidence was used to by candidates to make a case and arrive at a substantiated judgement. Many strong answers scoring more than 20 marks were seen.

Upper-band answers usually made use of nuanced arguments (as opposed to merely concluding that 'both physical and non-physical causes are equally important', which tended to characterise middle-band answers). The best responses sometimes concluded that physical factors might lead to internal displacement because citizens are still counting on their own government to rehouse and look after them.

In contrast, human causes such as ethnic persecution and conflict may be more likely to generate international refugee flows because the citizens of a certain state no longer believe there is any safe haven for them there under the current political regime.

Only a small minority of candidates appear to be unprepared for this particular task. Typically, they neglected the source material and wrote an answer based entirely on prior case study knowledge. This meant that at least 10 marks became unattainable.

Q.10 Fewer than one-in-five candidates attempted this question. Many of those who did answer made good use of knowledge gained from both the Changing Places topic of C1 and Global Governance from C2.

Very few candidates, however, engaged fully with the word 'interrelationships'. This was surprising given that it is an important geographical idea which even features in some GCSE courses (where the interrelationships between soil and vegetation are explicitly addressed, the key idea being that the soil affects the vegetation and vice versa). It was expected that candidates might discuss ways in which place identity can operate as a push factor for forced migration, and, in turn, the consequences of the arrival of refugees or IDPs for particular places. In other words, the essay might ideally explore (i) push factors for migration prior to (ii) writing about the consequences of migration.

In the event, however, candidates overwhelmingly produced a cause-and-effect essay which only considered the varied ways in which forced migrants impact on the characteristics of the places they move to. Provided thorough use was made of the source material and a thoughtful evaluation was included, full marks could be obtained, despite this 'one sided' approach. However, it was a pity that so few candidates took the opportunity to provide an account which fully grasped what is meant by an *interrelationship*.

Summary of key points

Moving forwards, the following points may be helpful for students.

- *Answers to 3- and 5-mark questions should not be too long.* In questions 1 and 2, at the start of the exam, there is a notable tendency among candidates to write excessively long answers, sometimes at the expense of performance in questions 7-10. For all 5-mark questions, 10-15 lines of writing ought to be sufficient for people with average sized hand writing. In this year's paper, candidates often wrote excessively-long answers to questions 1a and 1b.

- *'Analyse' is **always** used as an AO3 data-skills command term.* Explanatory information (a candidate's own recalled knowledge of places, processes, etc.) should **not** be included as part of the response.

- *It is helpful to highlight and underline key words in short-answer questions.* This may help exam candidates to stay focused (in this year's paper, candidates often failed to focus on condensation in 2b).

- *Always apply your own knowledge to 5-mark part (b) questions which include a phrase like '...such as those shown in the figure.'* It is essential that future cohorts realise these will **always** have been designed as 'springboard' questions for the application of their own knowledge, for example of processes or 'parallel' case studies. In this year's paper, candidates often failed to apply their own knowledge when answering question 5b.

- *Remember that more is expected than at GCSE-level when analysing relationships.* At A-level standard, a scattergraph analysis may require candidates to do more than simply write that: 'As X values increase so do Y values although there are some anomalies'. Candidates should additionally be commenting explicitly on the strength, direction and (non)linearity of any relationships. In this year's paper, candidates often failed to focus on provide a sufficiently detailed analysis of the data as asked for by question 6a.

- *Write about two or more different things when answering questions which include words in a plural form, such as reasons, factors or processes.* These questions will typically require at least two distinct and developed ideas to be included as part of an answer in order to access the top mark band. In this year's paper, candidates often failed to provide two reasons when answering 6b.

- *Always provide working if it has been asked for as part of a calculation.* In this year's paper, candidates sometimes failed to provide working in 5ai.

GEOGRAPHY

GCE A LEVEL

Summer 2019

COMPONENT 3: CONTEMPORARY THEMES IN GEOGRAPHY

General Comments

The demands of this paper are quite considerable both in terms of the breadth of subject content and the challenging nature of the questions posed. However, it proved to be accessible to most candidates and enabled clear differentiation to be made. Most candidates were able to answer all three questions comfortably in the time allocated, with most rubric errors confined to questions 6 and 8 where candidates overlooked the term 'or' and provided coverage of all three resources. Some exemplary responses were seen, with candidates displaying both an impressive knowledge base coupled with sophisticated skills of analysis and synthesis. Weaker candidates found some questions challenging and experienced problems with structuring their responses and applying their knowledge to the specific question posed. Although definitions may be contested, candidates would be well advised to state what they understand by key terms used in the question at the outset as this practice is more likely to both keep candidates 'on task' and create a clear framework for their responses.

Although there were a few outstanding students whose impressive knowledge and understanding was matched by their linguistic fluency, overall the level of English is disappointing. The most concerning trend is the increasing number of scripts displaying appalling legibility. These often take examiners an inordinate and disproportionate amount of time to assess. As the deciphering of illegible words is painstaking it often affects the flow and meaning of responses, resulting in an element of 'guesswork' on the part of examiners, possibly compromising the mark awarded. A weaker command of English may also account for misunderstanding of questions: a common feature of both questions 4 and 12. The longer questions which contained more than two key words or concepts often presented more challenges. However, it needs to be pointed out that the wording of each question is firmly rooted in the focus boxes of the specification, therefore greater familiarity with the specification wording should place candidates in a stronger position to understand the demands of all the questions posed.

There is increasing evidence that candidates were aware of the specialised concepts and made good use of them. Causality, feedback, interdependence, mitigation, place, risk, resilience, sustainability, thresholds and vulnerability were the most frequently used and credit was awarded where these concepts were either implied or made explicit in responses. Exemplification was variable, in the best instances topical, detailed and wide ranging. Limited use was made of sketch maps and diagrams, apart from in question 13, where a variety of diagrams were well-integrated into answers, thereby enhancing them.

Comments on individual questions/sections

Theme 1: Tectonic Hazards

Q.1 This question was attempted by 69.9% of candidates and was therefore significantly more popular than the alternative compulsory question in Section A. Many candidates produced competent responses (the facility factor for this question was the highest of the paper at 62.4) and ones that elicited a satisfactory amount of relevant information.

The quality of response was a function of the amount of case study material provided together with the breadth of factors other than quality of governance that were considered. More perceptive candidates recognised the interdependence between quality of governance and other factors such as levels of development, technology and education. Some excellent scripts were seen that successfully applied detailed case study knowledge and conceptual understanding to the question posed. Exemplification was often detailed and analytical and could either be drawn from earthquake hazards or volcanic hazards or both. Candidates mostly used earthquake hazards associated with Haiti [2010], Christchurch [2011], Loma Prieta [1989], Sichuan [2008], Nepal (Gorkha) [2015] and Tohoku (2011) and volcanic hazards associated with Eyjafjallajökull [2010] and Montserrat [1995, 1997]. Better responses to this question were anchored by a conceptual framework, such as Park's disaster-response curve model or the Hazard Management cycle, which provided the scaffolding for distinguishing between 'good' and 'bad' governance. Improvements could be made by candidates focusing more on key terms such as 'vulnerability', as often detailed knowledge of quality of governance was not effectively linked to its impact on a location's vulnerability.

Q.2 This less popular question, attempted by under a third of candidates (30.1 %), proved to be more challenging as indicated by a lower facility factor of 55.0 and a lower mean mark of 20.9. There was often a considerable amount of knowledge and understanding of vulcanology provided by candidates but many lost their way when dealing with the other elements of the question. Associated descriptions of 'losses' and analyses and evaluation of the relative impact of mismanagement were often weakly developed. Better candidates recognised that losses were not necessarily a function of poor management and correctly attributed these to the nature and physical profile of the volcanic hazard under review and other factors such as population density and geographical location. The most frequently cited volcanic hazards were Eyjafjallajökull [2010] and Montserrat [1995, 1997].

Theme 2: Ecosystems

Q.3 More popular than Q4, this question produced some good responses as demonstrated by a mean mark of 26.2. It had the lowest standard deviation figure of all the optional questions (8.3), indicating that even weaker candidates were able to make a reasonable attempt at applying their knowledge to this question. The question was often answered with a range of examples from different environments and scales, including tundra, tropical rainforest, coral reefs and wetlands. Most were able to differentiate clearly between direct and indirect actions, with more able candidates able to discuss the linkages between the two. The specialised concept of thresholds or tipping points was often effectively applied. A major weakness in many candidates' responses was a failure to identify the resulting impacts on biodiversity indicating that many did not understand the term 'biodiversity' in practice, although definitions of the term in introductory paragraphs were often sound. Candidates were differentiated on the amount of detail they provided of resulting impacts on biodiversity including losses/ changes to biodiversity as a result of habitat loss, damage to food chains/webs and disruption to nutrient cycling. Whilst coverage of coral reefs provided a rewarding study for some, coverage of the tundra as exemplar was often superficial and frequently confused with polar ice caps. A narrow focus on the plight of polar bears was a common feature of weaker candidates' scripts.

Q.4 Of the limited number who attempted this question, the low mean of 19.6, lowest facility factor of the paper (43.5) and high standard deviation of 11.1 are indicative of the fact that many misinterpreted it.

Many candidates focused on damage to biomes in general, thereby revealing little exemplar knowledge and no understanding of the concept of succession. Although clearly bulleted in focus box 3.2.5, only the stronger candidates had an explicit grasp of the term succession. High quality responses were seen from candidates who had a firm conceptual grasp of the topic, perhaps through their NEA. Stronger responses exhibited a very good command of key terms including sere, subclimax, secondary succession and plagioclimax and recognised the increasing influence of anthropogenic forces whilst acknowledging that the initial physical conditions were fundamental in determining the specific nature of the succession in question.

Theme 3: Economic Growth and Challenge

The Indian questions were less popular (answered by only 8.3 % of candidates) than the China ones and answered less confidently.

India

Q.5 This question was more popular than question 6 and achieved a higher mean mark of 23.6. Coverage of India's economic global importance was often more extensive, with the result that many responses lacked balance. Balanced coverage is important for achieving good AO2 credit as any assessment of economic compared to political importance requires sufficient and balanced appropriate evidence in support of arguments. Stronger responses provided specific knowledge of India's growing economic global importance following the economic reforms of 1991, although it was often argued that these economic and political variables are interlinked and that over time India may assume greater political importance. Some candidates were well-informed about topical events such as India's recent national election, but arguments often needed more explicit linkage to India's global importance to earn significant credit, and this was often not the case.

Q.6 Too often this question suffered from rubric infringement with many candidates providing coverage of water, energy and food resources rather than focusing on one resource selected from a choice of 3 in the question. In such cases coverage was evidently diluted and could only achieve a mark in band 2 or lower band 3 at very best. The mean mark suffered as a result (21.2). Those candidates who did focus on one resource were able to provide some detail of specific strategies ranging from small-scale, bottom up measures such as rainwater harvesting and energy micro-generation to large-scale strategies such as the Green and Gene revolutions and Narmada dam, together with a sound grasp of their associated levels of sustainability. With Question 6, as with Question 8, greater place- specific referencing would have been beneficial.

China

Q.7 This was more popular than the corresponding Indian question and answered better with a mean mark of 26.5 and a high facility factor of 58.9. Most candidates understood the question and their application of knowledge was sound with some up to date knowledge and understanding of recent economic and political developments associated with China's growing global importance. There were a range of documented changes, such as the Open Door Policy, China's Belt and Road Initiative, the 'Made in China 2025' strategic plan and contested territorial expansion in the South China Sea (where synoptic links were made with Global Governance). The interdependence of political and economic global importance was acknowledged, and it was generally accepted that politics is at the heart of everything in China. Better responses provided considerable detail and analysis within their responses.

Q.8 This was less popular than question 7 with only 6.3 % of candidates attempting it. It did suffer from some of the problems of the Indian question in that candidates did not confine their responses to one resource, therefore coverage of all three was at best partial, but often inadequate. The failings were less pronounced in the China answers as indicated by a higher mean mark (22.2) and facility factor (49.4) than for question 6. Where details were provided of strategies such as the Three Gorges dam and the South-North Water Transfer and adequate linkage made to sustainability, candidates were able to earn good credit.

Africa

Q.9 This was much less popular than question 10 with only 3.1 % of candidates attempting it. The term 'measures', although clearly derived from focus box 3.3.8, was often confused with 'strategies' so responses were either off task or partial with inadequate coverage of specific measures as indicated by the second lowest facility factor of 46.5. Weak responses contained vague reference to GDP or HDI, not necessarily applied to specific countries. However, the high standard deviation of 10.7 indicated that those who did understand the requirements of the question tackled it competently, although often without the breadth of valid exemplification associated with question 10.

Q.10 This was a popular question and answered well, as reflected by the highest mean mark of all the optional questions of 27.3. Most used rewarding case studies, usually Nigeria, Ghana, Kenya, DRC and Botswana and dealt with two or more countries. Weaker candidates were often confused about the countries they selected to write about, conflating DRC with Ethiopia for example. Better candidates displayed sound knowledge and understanding of political and other factors with good locational exemplification and sustained evaluation. With Nigeria, DRC and Botswana, the arguments focused on political control of earth resources. A Botswana government that favoured the development of the people was contrasted with corrupt governance in Nigeria and the DRC in the trap of the resource curse. Some excellent responses were seen with several candidates attaining strong marks on this question with some impressive detail used to support analysis and arguments.

Theme 4: Energy

This theme is the most popular optional theme.

Q.11 The management of oil and gas resources was generally well understood and answered in a straightforward way. Although coverage of oil and gas was often uneven, there was no requirement for balanced treatment of the two. Better candidates demonstrated sound geopolitical knowledge and understanding of the challenges and key players associated with the management of oil and gas. Most candidates referred to the role of OPEC, although there was some vagueness about its composition, powers and aims, but fewer discussed GECF. There was a broad appreciation of the political instability in areas where oil and gas resources are concentrated. Much was made of the use of Russia's oil and gas power against Ukraine and, by extension, the larger European market. Oil spills and other environmental damage, including the Athabasca Tar Sands, were often cited as evidence of poor management, with weaker candidates focusing on generalisations rather than specific details. Indeed, it was the lack of accurate, specific and up to date knowledge that contributed to a 'flat' mean mark of 22.9 for this question.

Q.12 This was the second most popular optional question, with 31.4% of candidates attempting it. Whilst some good answers to question12 were seen, several candidates misread the question substituting 'clean technologies' for 'clean technologies for fossil fuels'. These candidates therefore wrote about renewable energy alone, which had some validity but was self-limiting. Better candidates wrote commendable responses with good technical knowledge and understanding of clean technologies for fossil fuels, adopting a balanced approach to some of the sustainability problems with these and with renewables. The phrase in the question 'only way' presupposes that other ways will be examined and the candidates who focused closely on this wording in their analysis were rewarded. Citing the finite nature of fossil fuels, many argued that clean technologies implemented to reduce the problems associated with fossil fuels were simply an unproven short-term fix that could not be seen as sustainable.

Theme 5: Weather and Climate

Q.13 This question was not quite as popular as question 14, but those who attempted it usually answered it in some detail and it proved highly rewarding for those who had the knowledge to hand (mean mark 26.1). The question posed few issues of understanding with the quality of response reflecting in the main the amount of detail provided. Air masses and their general characteristics were identified, but subsequent knowledge and understanding of their interaction and operation via factors like the position of the Jet Stream, convection cells and coverage of other ameliorating factors including the Gulf Stream, altitude, latitude and urban heat island varied. Greater breadth of coverage was often associated with a more informed discussion and higher marks. This question was one of the few where diagrams were used to good effect and these were often integrated well with some sound annotation.

Q.14 This question was marginally more popular than question 13, but candidate performance was weaker (mean mark 22.1). Unfortunately, many candidates spent too much time explaining the damaging effects of human activity on urban climates rather than examining responses to these which was the central requirement of the question. Another issue was a focus on strategies to reduce pollution without linking these effectively to the influence pollution has on climatic variables such as fog, smog and sunshine. As a result, solutions were often insufficiently focused on actual climatic issues, at least in the explicit sense. The command 'to what extent' was frequently overlooked as most assessment of strategies neglected to address 'the extent to which' the damaging effects of human activity had been reduced. More detailed exemplification of specific city/cities may have provided the basis for such assessment, but this was often lacking.

Summary of key points

- Candidates should be encouraged to be as familiar with the specification as possible as the wording of questions will always be grounded firmly in it.
- Candidates should be encouraged to read questions extremely carefully to avoid rubric infringement or misinterpretation of questions.
- Providing definitions in their introductions is one way of keeping candidates 'on task'.
- Structuring of answers is important to develop coherent responses and brief planning at the outset is recommended.
- Legibility of responses is important.

GEOGRAPHY

GCE A LEVEL

Summer 2019

COMPONENT 4: INDEPENDENT INVESTIGATION

General Comments

It was very pleasing to see a wide variety of interesting and appropriate investigations being undertaken by candidates, the majority of which were a clearly linked to the specification. Most centres coped well with the administration and work arrived on time.

The continued success of the NEA depends very much on careful planning and preparation before candidates finalise titles and embark on data collection. This was not always evident, with some centres still prescribing a narrow range of titles. This tends to limit student engagement with the topic and goes very much against the ethos of this task. Additionally, a significant number of candidates continue to attempt tasks that are unmanageable and, at times, unachievable.

Candidates should structure their investigations carefully, with appropriate sub-questions/aims that are related to the investigation and clearly linked to the specification. Identifying relevant bullet points within the specification could help candidates plan appropriate questions, which then become the driving force behind the data collection and allow relevant conclusions to be reached. It is recommended that candidates have three or four sub-questions. In some instances this year, candidates had as many as eight, which lead to a lack of focus and conciseness.

Centre declaration forms were completed in all but a minority of cases, however, candidate proposal forms still appear to be an issue and it was worrying to note that many were still poorly completed with some carrying a title and teacher signature only. It is vital that due time is spent working through this form with candidates. Each centre has a responsibility to ensure that candidates embark on a piece of work that is appropriate and manageable. Centres are reminded that Eduqas offer an advisory service for teachers to submit proposals to check their appropriateness. If use is made of this advisory service centres must attach the principal moderator's comments to the completed work. Centres are also reminded that they must use the most up to date forms for this purpose, which are available on the web site. Please do not photocopy forms from the specification.

Some candidates continue to have titles that are too long and not linked to a specific location, such as "*Does the type of woodland (such as semi natural ancient woodlands) effect the rate at which carbon is removed from the atmosphere and stored and will this amount stored help contribute to the reduction of GCC on a local scale*". Others seen were very brief but broad in nature, "*An investigation of coral reefs*" or "*How management effects biodiversity*". Although fewer investigations related to the Bradshaw model were seen this year, there continue to be issues with studies rooted in this part of the specification. "How does river discharge change along the course of the River …?" is an example that is not applicable to the specification as river discharge must be investigated in relation to change over time, rather than change over place. With this in mind candidates need to plan how they will collect the relevant data to meet the temporal element of their investigation.
Similarly words such as; assess, change, impact, success, sustainable and effective often appear in the titles of candidates' work, but often candidates do not collect data that will allow them to reach conclusions relating to this aspect of their question. Clear indicators to measure success or sustainability must be identified at the outset.

Although the situation has improved considerably, it was noted that many investigations were still significantly longer than the recommended word guidance. Centres are reminded that the recommended word count of 3–4000 words is sufficient for study at A level. Word counts significantly in excess of this become self-penalising, as they can lack focus and coherence. The experience over the past two years has shown that a tightly structured report of 3-4000 words, clearly focused on the investigation in hand, allows candidates to explain and evaluate succinctly. As noted earlier in this report, securing manageable and focussed investigation titles for each candidate, through detailed discussion at the outset, could greatly assist this process.

While annotation of the work sometimes did not match what was seen and was often patchy in nature, it was pleasing to note that in the majority of cases it was helpful and objective with strengths and weaknesses being clearly and concisely identified. It would, however, greatly aid the moderation process if the mark sheets were annotated or highlighted to identify the assessment criteria being rewarded. A number of centres made errors in addition and transference of marks onto IAMIS, care needs to be taken in this respect.

It was pleasing to note that most candidates followed the prescribed structure, with clear sections, as outlined in the specification. Many pieces of work came in plastic wallets and were loose leaf. This can easily become muddled and disordered. It would be preferable for work to be fixed in the top left hand corner with a treasury tag, or similar.

Comments on individual questions/sections

Context

Most candidates clearly identified a title for their investigation and linked it to the specification, either in the text or on the proposal form. While sub-questions were usually on the proposal form, in some instances they did not relate well to the topic or appear to have any relationship to the data being collected.

Theory appears to be an aspect of Geography that many candidates do not engage with effectively. There are still a number of centres that are allowing candidates to pursue investigations based upon theory that is not in the specification, such as Bradshaw's Model, or theories such as Burgess' Concentric Zone Model that have limited relevance in the 21st century.

While some candidates made excellent use of relevant literary sources, clearly identified in the text using a recognised system such as Harvard, it is clear that many candidates did little if any background reading before embarking on their investigation and have a limited understanding of how to use literature sources.

Most candidates made some attempt to discuss risk although it was often generic with little reference to their actual situation. Understanding of ethical issues continues to be patchy, with it often being omitted completely, while risk assessment was often being seen as synonymous with ethical issues. Candidates need to be fully prepared for these elements at the planning stage of their investigation. It should be noted that Band 5 requires a 'confident and informed understanding of risk/ethical issues'.

Only a few candidates identified and displayed a clear and detailed study location. Maps in general were often very poorly presented. Many candidates simply copied Google/OS images and did not use or engage with the map in any way. In future years, it would be pleasing to see an improvement in the way candidates present and use maps in their investigations.

Methods of Field Investigation

Marking still tended to be on the generous side for this assessment criterion, with many centres awarding Band 5 marks for work that did not meet the assessment criteria at this high level. To reach Band 5, work must show strong evidence of wide ranging and good quality data collection relevant to the research question.

There were some interesting approaches to this section. Some approached this discussion one research sub-question at a time and identified the methods linked to each question. Alternatively, many candidates created a comprehensive table, which ensured all elements of the marking criteria were addressed.

Stronger investigations had a good range of varied methods that were clearly aimed at collecting data to allow them to answer their sub-questions. These methods were well described, replicable and clearly justified. Weaker investigations had a limited range, often only two, that did little to answer their questions and tended to reflect attempts by centres to shoehorn their standard fieldwork days into the NEA.

In describing methods such as questionnaires, bi-polar surveys or environmental quality surveys, many omitted to either include a blank copy in the appendix or identify the sort of questions being asked, or factors/indicators that were being investigated. Candidates need to be made aware of the significance of sample sizes when conducting questionnaires, five or ten responses is insufficient to give a true cross-section of the population under consideration. Candidates should also be encouraged to edit questionnaires carefully, asking only questions that are relevant to their aims. Questions about age, gender and residence are often left unused in the analysis.

Very few candidates mentioned photography as a means of collecting primary data, even though photographs were commonly used in their write-ups. In many instances there was an overreliance on secondary data and many candidates struggled to show awareness of the limitations of secondary data or the possible bias or reliability of sources.

The understanding of sampling processes and their role in collecting reliable data is an area where much improvement could be made. In most human geography investigations candidates used ‘random sampling’ for collecting all their data, particularly when carrying out questionnaires. To access Band 5 candidates are required to have a “sampling *strategy that is well designed, explained and justified. The strategy is wholly appropriate to the investigation*.”

For example, when completing pedestrian and traffic counts, many just counted pedestrians/vehicles passing one place at one time. There was no concept of direction of flow or the impact that time of day might have. Well-designed group activities here could be very useful and would allow opportunities for sophisticated data presentation.

Data Presentation and Findings

Some interesting and innovative approaches were seen once again this year with some candidates making excellent use of GIS to present data. The use of located symbols on maps was also encouraging to see. However, in general the quality of data presentation is rather disappointing with many candidates over reliant on poorly presented Excel generated maps and graphs, many of which added little meaning or value to the data collected. Graphs must have their axes clearly labelled and maps should have a scale, north point and where appropriate, a key.

Some candidates used inappropriate methods of data presentation, often using bar graphs to show changes over time rather than comparing sets of data between different groups. There was some use of scatter graphs, which is more sophisticated, however, these frequently lacked a line of best fit and were not always appropriate to the data under consideration. Centres should continue to embed discussion of maps, graphs and alternative data presentation techniques into lessons so that candidates become more familiar with different options available to them in order to present their data in the most appropriate and effective manner.

In many instances, centres over credited this section.

Analysis and Interpretation of Findings

To achieve marks in Band 5, candidates are required to give a sophisticated analysis and interpretation of findings, clearly showing why they were appropriate and relevant to the research question. Ideally they should show some individuality and/or links between the study and other aspects of Geography. The strongest investigations were also able to reflect on their theory, secondary data and literary review.

In general, little sophistication was seen in analysis with many candidates being unable to look beyond their own data to identify insights into other areas of Geography; furthermore, many were unable to suggest how their data might generate different results in different places. It appeared that too many candidates approached their investigations with pre-determined conclusions which they were committed to upholding – data notwithstanding.

The go to position was often to describe the findings; the even more basic position was to methodically describe each graph, with some placing the data presentation in the Appendix, where if not referred to it could not be credited. This in turn might impact upon marks awarded for structure. In these cases candidates were unable to develop analysis that supported their sub-questions and overall investigation. The strongest investigations were those where data presentation and analysis sections were integrated.

While the use of statistical techniques is not a requirement, it is to be applauded when attempted by candidates. However, the techniques used must be appropriate and include sufficient data sets to be acceptable. For example, when using Spearman's Rank Correlation Coefficient, candidates often had less than the minimum number of ten data sets, which made the test inappropriate. If using this technique, candidates should be prepared to use a hypotheses and null hypotheses, and the results of the test should be correctly concluded with the use of significance tables. This was often not the case and frequently there was no data or working shown. Many candidates also had difficulty relating the results of their analysis to their investigation.

Conclusions and Presentation requirements

Many candidates drew clear and detailed conclusions in an overall summary linked directly to the investigation, with the strongest investigations summarising the conclusions under each sub-question. Some were able to make meaningful and objective statements about what their data had shown. Candidates should beware the temptation to repeat their findings.

As noted earlier in this report, work rewarded in Bands 4 and 5 must be concise. Many candidates and centres that continue to present work way beyond the guided word limit fail to meet this requirement.

Further attention should be paid to the quality of spelling, punctuation and grammar, which in some cases – despite the work being word processed – was poor.

Evaluation

To achieve marks in Band 5, candidates must produce a perceptive evaluation of each stage of the fieldwork investigation, to include the ethical dimensions of the field research. A successful evaluation should also contain perceptive and well-considered reflections on further research and extension of their geographical understanding.

The strongest investigations made good use of the marking criteria in order to ensure that all elements of the investigation had been evaluated. Most candidates referred only to their methods and results (yet were often awarded marks in Band 5), and ommitted elements such as planning, literature, choice of study location and conclusions.

Similarly, ethical issues were largely ignored by all except the strongest candidates, and very few could make meaningful suggestions as to further study; where this was addressed it usually involved repeating the data collection, collecting more data or avoiding rainy days and 'if I had more time'. It would be hoped that candidates can be encouraged in future to acitvely engage with a meaningful evaluation of the successes and challenges of their investigation. Where candidates had truly engaged and been inspired by their choice of topic and field of research, the quality of evaluation was far stronger.

We would wish to take this opportunity to remind centres that the submission date for NEA samples in 2020 is **Friday, March 20th, 2020**.

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