

Examiners' Report Principal Examiner's Feedback

Summer 2022

Pearson Edexcel AS Level In Geography (8GE0)

Paper 01: Dynamic Landscapes

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Introduction

This is the fifth year of examinations for 8GE01. The paper saw the continued assessment of physical geography ideas, testing knowledge of tectonics, with a choice between glaciation and coastal landscapes. Candidates were asked to look at the synoptic links between physical geography processes in Antarctica (Glaciation) and Iceland (Coastal landscapes) and to evaluate the significance of the threat posed by human activity, particularly given the changes that are already being caused by natural processes.

In a year where students continued to be affected by the impacts of the Coronavirus Pandemic, this paper is unusual in two ways:

- The fieldwork scenarios have been moved to 8GE02, with a narrowed requirement for centres to prepare candidates for just one human, OR physical scenario
- Advance information was made available to candidates, allowing them to narrow their revision to the most relevant parts of the specification.

It is worth noting that almost all students in this cohort will not have sat GCSE exams in June 2021. Despite the requirements for CAGs (2020) and backup CAGs (2021), this exam paper is likely their first experience of a live paper, particularly given how early AS Geography was in the examinations calendar. The quality of knowledge and understanding shown is impressive, particularly for glaciation; candidates seemed prepared for answering the longer 12- and 16-mark assess questions. They had knowledge about the located examples required for the different 6-mark questions. However, candidates still struggled to organise their ideas in the most effective way – looking to write clear evaluative paragraphs would help many responses score one level higher.

1a	This question caused no problems for the vast majority of candidates. The answers offered were almost always physical characteristics from the standard hazard profile model. Allowance was made for a few responses that reflected the human characteristics that are sometimes features in alternative versions of the model.
1b	The method required to calculate an area was, unsurprisingly, not a problem for candidates. The difficulties came through inaccurate measurement of Box A (the rubric for the exam paper has always required candidates to bring a ruler), or the correct conversion using the scale bar. The mark scheme did allow for errors to be carried forward and recognised that 3 steps were required for this 2-mark question. As a result, candidates who had included their working out were rarely penalised enough to prevent them securing full marks.
1c	Candidates made good use of the resource to identify a range of factors that could have increased hazard risk. Most were then able to extend these ideas enough to achieve a second mark. As with previous exam series, candidates need to extend their explanations with one further idea in order to fully explain why this might increase hazard risk.
1d	This question was answered well by many candidates, with secure knowledge displayed about tectonic processes at convergent boundaries. A lot of candidates confined their responses to explanations of why earthquakes and volcanoes occur; a number also referred to slab-pull and subduction. A few candidates also offered ideas about the formation of fold mountains. Only a handful of

	candidates also wrote about processes that could only be found at divergent boundaries.
1e	Descriptions of the impact of the earthquake in Haiti dominated responses to this question. There are conflicting definitions of 'mega- disaster; the 'detailed content' in the specification expects centres to teach a 'located example' with a global impact or significance.
	It was difficult for candidates to use the Haiti earthquake to demonstrate global significance. However it was possible to demonstrate why the number of deaths made this event (in 2010) globally noteworthy. As a result, the mark scheme steered examiners towards awarding good explanations of human vulnerability (level 2), whilst expecting more explicit explanations related to global interconnections for higher marks (level 3). It was easier to achieve this with some located examples (e.g. Eyjafjallajokull) than others (Japan) because the consequences on other countries were more clearly described and exemplified. It was very difficult for candidates to succeed on any of these criteria by using located examples such as Christchurch.
	Finally, a few candidates lost the focus on social and economic impacts. Although it was possible to explain why physical geography created a large areal extent, a few candidates lost the necessary focus on social and economic impacts.
1e	Candidates responded to this question well. There was good focus on the resource booklet with very clear explanation of the different ways in which wealth affected the impact of the earthquakes. A good number also explained why other factors mattered too (e.g. magnitude). Once the response had a clear judgement it was likely to score higher within level 2, and those also with a clear reason why wealth did (or didn't matter) tended to score within level 3. Better responses structured their response around 3-4 paragraphs that looked at different pairs of earthquakes and offered explanations of the extent to which wealth (vs other factors) shaped their different impact.
2a	This question was answered well by the vast majority of candidates, however a significant number responded with the words for erosion processes, e.g. abrasion.
2bi	Successful completion of this question required both the correct use of the compass rose and an understanding of how (tributary) glaciers flow downstream. Many candidates made two separate descriptive points. A good number offered explanations instead. A few ignored the compass rose and constricted their explanations to 'downhill', which was not creditable.
2bii	There were many clear explanations of how the lateral moraines on tributary glaciers joined together to create a series of medial moraine. Some candidates extended their explanations to explain the erosion (and depositional) processes responsible for lateral moraines.
2c	Many candidates answered this question well – there were many clear explanations of different periglacial landforms. Pingoes, patterned ground and solifluction lobes were the most popular. There were a

	number of responses that explained how nivation hollows are formed, but these are glacial, not periglacial landforms.
2d	Similar to 1d, this question was rooted in detailed content where a globe signifies the need for a located example to be taught to candidates. There were many interesting locations picked, ranging from Svalbard, Mount Everest or even Antarctica.
	To achieve level 2 the response needed to make a link between a specific approach and the resulting conflict. Many candidates could clearly identify at least one of the four types of management referenced in the specification. Addressing 'total exploitation' worked particularly well as a policy that created conflict. Better responses clearly identified specific players or applied the conflict recognisably in the context identified. The very best recognised a number of conflicts and had very clear location specific knowledge.
2e	This question was challenging to many candidates. However, the majority were able to explain how deposition processes led to particular landforms. This was enough to secure a level 2 mark. Better responses went on to also explain how erosion processes created different landforms – and this was a good way to address the 'assess' command word. However, in order to reach level 3 there needed to be a way to compare these different situations – and some candidates engaged with the 'distinctive landscapes' aspect of the question by showing that depositional processes created an assemblage of landforms that showed provenance / extent of glaciation in a way that erosional processes could not. Candidates that talked about named landscapes (instead of named landforms) invariably found this easier. The very best responses showed how particular landforms were the by-product of both erosion and deposition, e.g. an erratic.
3	Candidates made good use of the resources to explain the different ways that human activity was damaging Antarctica. This was enough for level 2, and without that explanation, some responses struggled to score higher than level 1. For level 3 there was a need for candidates to make an assessment about whether human activity was the only (or more important) cause of change, in contrast to the extensive tectonic and glacial processes operating in this landscape. Some candidates limited this discussion to simplistic comments about global warming melting the glaciers, perhaps not noting the synoptic links between volcanic activity and glacial melt. Better responses split their answer into sections about glacial and tectonic processes or went further to consider whether human activity was significant (or not), or indeed could reverse (or counteract) the physical processes.
4	Almost all responses identified the name of one part of the littoral zone model. Because the question focussed on this model, no marks were awarded for 'beach' or 'headland'.
4bi	Candidates found this question difficult, however mostly correctly identified that sediment movement was mainly 'up the beach'. A good number also showed how the groyne had 'stopped' sediment movement. Others referred to the correct direction of longshore drift. As with 2bi, a successful response required both the use of the compass rose and an understanding of longshore drift to correctly interpret the photo. Two descriptive points were required, and no

	marks were awarded to statements that explained, including just the term 'longshore drift'.
4bii	Perhaps because of the complex situation shown in the photograph, this question proved a good discriminator between candidates who simply recognised the role of longshore drift and those who could explain why the sediment material was higher in some locations than others. There were many possible explanations; many focussed on higher amounts of erosion caused by marine processes closer to the sea, or the importance of storm waves depositing larger material further up the beach. As with 2bii, marks were constrained by the candidate's ability to provide extended explanation.
4c	In comparison to 2c, responses to this question were relatively poorer – and seemed to depend on whether candidates had secure knowledge of ria/fjord formation. Better answers tended to focus on the tectonic processes operating on Dalmatian coasts, perhaps reflecting more secure knowledge of submergent coasts overall (and an easier set of processes to explain for 2+2 marks). It was pleasing to see some candidates use their understanding of marine transgression to explain shingle ridge formation, but this was certainly not a requirement to access full marks!
4d	Similar to 1d, this question was based on detailed content where a globe signifies the need for a located example to be taught to candidates. The vast majority of responses focussed on variations along the Holderness coast. However, there were also responses based on Walton on the Naze, Slapton Sands and interestingly the Thames Estuary (which worked particularly well for explaining the conflict between developers of the Thames Gateway and oyster catcher communities).
	To achieve level 2 the response needed to make a link between a specific approach and the resulting conflict. Many candidates could clearly identify at least one of the four types of management referenced in the specification. Better responses clearly identified specific players or applied the conflict recognisably in the context identified. The very best recognised a number of conflicts and had very clear location specific knowledge. Responses that were based on ICZM and sustainable management struggled to explain why conflicts remained between players.
4e	This question was challenging to many candidates. However, the majority were able to explain how transport and deposition processes led to particular landforms. This was enough to secure a level 2 mark. Better responses went on to also explain how erosion processes created different landforms – and this was a good way to address the 'assess' command word. In order to reach level 3 there needed to be a way to compare these different situations, and some candidates engaged with the 'distinctive landscapes' aspect of the question by showing that a unique combination of factors and processes created an assemblage of landforms e.g. cuspate forelands at Dungeness, or shingle ridges on the Jurassic Coast. A number of candidates also addressed the 'assess' command word by considering how depositional landforms were unlikely to exist without prior erosion, and not the other way around. Overall, candidates that talked about

	named landscapes (instead of named landforms) invariably found this easier with the Jurassic Coast being a notably successful example.
5	Candidates made good use of the resources to explain the different ways that human activity is damaging Iceland's landscape. This was enough for level 2 and, without that explanation, some responses struggled to score higher than level 1. For level 3 there was a need for candidates to make an assessment about whether human activity was the only (or more important) cause of change in contrast to the extensive tectonic and coastal processes operating in this landscape. Some candidates limited this discussion to simplistic comments about too many people coming to visit, or film in Iceland. However, others identified synoptic links between volcanic activity and coastal processes (perhaps in the way that basalt rock had created a landscape that is particularly vulnerable to erosion). Better responses split their answer into sections about coastal and tectonic processes or considered whether human activity was significant (or not), or indeed could reverse (or counteract) the physical processes. The very best managed to even make some synoptic links to human geography content, noting that the importance of the film industry (and other associated TNCs) was likely to have a greater influence on decision making than the Iceland government itself although this was not a requirement to achieve full marks!

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