

International Advanced Level

Subject: Geography

The need for Transferable Skills

Sources: Cognitive/Intrapersonal and Interpersonal skills adapted and taken from the NRC framework

In recent years, higher education institutions and employers have consistently highlighted the need for students to develop a range of transferable skills to enable them to respond with confidence to the demands of undergraduate study and the world of work. The Organisation for Economic Co-operation and Development (OECD) defines skills, or competencies, as 'the bundle of knowledge, attributes and capacities that can be learned and that enable individuals to successfully and consistently perform an activity or task and can be built upon and extended through learning'.

To support the design of our qualifications, the Pearson Research Team selected and evaluated seven global 21st-century skills frameworks. Following on from this process, the team identified the National Research Council's (NRC) framework as the most evidence-based and robust skills framework, and have used this as a basis for our adapted skills framework.

The framework includes cognitive, intrapersonal skills and interpersonal skills. These skills have been interpreted to ensure they are appropriate for this subject. All of the skills listed are evident or accessible in the teaching, learning and/or assessment of the qualification.

Identifying and highlighting these skills in International Advanced Level qualifications ensures that it is not only the academic and cognitive skills that are developed, but those broader elements that universities highlight as being essential for success. Skills such as self-directed study, independent research, self-awareness of own strengths and weaknesses and time-management are skills that students cannot learn from a textbook but have to be developed through the teaching and learning experience that can be provided through an international curriculum.

In the tables below, we have taken the NRC framework skills and provided definitions of how each skill can be interpreted for this subject. This will enable teachers and learners to understand examples of how they can develop each skill through an International Advanced Level qualification.

NRC framework skill	Skill interpretation in this subject	Where the skill is covered in content	Where the skill is explicitly assessed in examination	Opportunity for the skill to be developed through teaching and learning approach
Cognitive skills				
Cognitive Processes and Strategies				
Critical thinking	Using various geographical concepts (including information collected from geographical enquiry) and synthesising this information to make judgements.	<p>This skill is covered in the detailed content wherever there is scope for students to make a judgement by weighing up the importance of competing factors, measure the value or success of something or exploring the strengths/weaknesses of different sides of an issue.</p> <p>This will usually occur in questions with the command word 'assess', 'discuss', 'evaluate' or 'to what extent'.</p> <p>e.g. 1.3.4 – Climate Change: Students to assess the reliability of past climate data and future predictions.</p> <p>e.g. 1.3.6 Managing global risk: Students to evaluate the success of Global Actions in terms of reaching agreements and actual emission reductions.</p>	<p>SAM Paper 1 – Section A 2(c)</p> <p>SAM Paper 1 – Section B 5(b)</p> <p>SAM Paper 1 – Section B 6(b)</p> <p>SAM Paper 2 – Section A 1(b)</p> <p>SAM Paper 2 – Section B 3(c)</p> <p>SAM Paper 3 – Section A 1(a)</p> <p>SAM Paper 3 – Section A 1(b)</p> <p>SAM Paper 3 – Section A 3</p> <p>SAM Paper 3 – Section B 4/5(b)</p> <p>SAM Paper 3 – Section C 6/7</p> <p>SAM Paper 4 – 1/2/3/4</p>	<p>Provide unfamiliar data/stimulus material and discuss how it relates to geographical concepts.</p> <p>Looking at geographical concepts and testing students understanding of how different components relate to each other.</p>

Problem solving	<p>Application of knowledge and understanding of geographical concepts to different contexts.</p> <p>Use of enquiry and geographical skills, including quantitative skills, to solve problems related to geography.</p>	<p>This skill is covered in the detailed content wherever there is scope for candidates to have to apply their knowledge and understanding (including geographical skills) to offer explanations, make interpretations, or draw conclusions from stimulus material.</p> <p>This will usually occur in questions with the command word 'explain', 'analyse', 'assess', 'examine' or 'suggest'.</p> <p>e.g. 1.4.3: Students can use environmental impact data and graphical resources (including graphs, infographics and G.I.S.) to review the impact of globalisation on pollution levels both globally and locally.</p>	<p>SAM Paper 1 – Section A 1(c)</p> <p>SAM Paper 1 – Section A 2(a)(iii)</p> <p>SAM Paper 1 – Section B 5(a)</p> <p>SAM Paper 2 – Section A 1(a)(ii)</p> <p>SAM Paper 2 – Section A 2(a)(ii)</p> <p>SAM Paper 2 – Section B 3(b)</p> <p>SAM Paper 3 – Section A 2</p> <p>SAM Paper 3 – Section C 6/7</p>	<p>Provide practice calculations using data and then look at aspects they can improve upon.</p> <p>Practice looking at real data and relating them to different areas of the detailed content, offering feedback on their ideas.</p>
Analysis	<p>Being able to break a geographical issue down into individual components and making logical, evidence-based connections about the causes and effects of interrelationships between components.</p>	<p>This skill is covered in the detailed content wherever there is scope for candidates to link different ideas together into cohesive chains of argument.</p> <p>This will usually occur in questions with the command word 'explain', 'suggest' or 'analyse'.</p> <p>e.g. 2.3.4: Students to investigate how coastlines can be managed in a sustainable way through local place contexts in one or more stretches of coastline.</p>	<p>SAM Paper 1 – Section A 1(c)</p> <p>SAM Paper 1 – Section A 3(c)</p> <p>SAM Paper 1 – Section B 6(a)</p> <p>SAM Paper 2 – Section A 2(b)</p> <p>SAM Paper 3 – Section A 1(a)</p> <p>SAM Paper 3 – Section A 2</p> <p>SAM Paper 4 – 1/2/3/4</p>	<p>Look at reasons or factors and develop responses. Look at ways students can further develop responses.</p> <p>Review primary or secondary data to identify evidence-based connections.</p>
Reasoning/ argumentation	<p>Give reasons and arguments on both sides related to a geographical issue.</p>	<p>This skill is covered in the detailed content wherever there is a requirement to provide a reasoned explanation of how or why something occurs.</p> <p>This will usually occur in questions with the command word 'explain', 'suggest', or 'summarise'.</p> <p>e.g. 1.3.1: Students are required to understand the causes of geophysical and hydro-meteorological hazards.</p> <p>e.g. 3.4.2: Students to know how biodiversity is being threatened at both a Global and Local scale.</p>	<p>SAM Paper 1 – Section A 1(b)</p> <p>SAM Paper 1 – Section A 2(b)</p> <p>SAM Paper 1 – Section A 3(b)</p> <p>SAM Paper 1 – Section A 4(a)(iii)</p> <p>SAM Paper 2 – Section A 2(a)(ii)</p> <p>SAM Paper 2 – Section B 3(c)</p>	<p>Look at geographical questions and issues; develop arguments for processes and interactions. Where appropriate, cover both advantages and disadvantages.</p> <p>Provide feedback to ensure explanations are developed and include supporting description/exemplification where appropriate.</p>
Interpretation	<p>Interpreting geographical information and understanding the meaning of that information.</p>	<p>This skill is covered in the detailed content wherever there is scope for candidates to apply their understanding to provide a reasoned explanation of how or why something may occur.</p> <p>This will usually occur in questions with the command word 'explain', 'suggest' or 'compare'.</p> <p>e.g. 3.4: Students need to interpret satellite imagery, GIS maps and Gersmehl diagrams in order to understand the nature and value of ecosystems and why biodiversity is under threat.</p>	<p>SAM Paper 1 – Section A 1(a)(iii)</p> <p>SAM Paper 1 – Section A 3(a)(iv)</p> <p>SAM Paper 1 – Section B 6(a)</p> <p>SAM Paper 2 – Section A 1(a)(ii)</p> <p>SAM Paper 2 – Section C 4/5(a)(ii)</p> <p>SAM Paper 3 – Section A 1(a)</p> <p>SAM Paper 3 – Section B 4/5(a)</p>	<p>Interpret diagrams/ graphs and manipulate data to identify both trends and outliers.</p> <p>Practice interpreting unfamiliar information sources (e.g. gapminder illustrations). Encourage students to extract key themes and to apply their knowledge / understanding to explain patterns, trends and outliers.</p>

Decision making	Evaluate geographical issues, questions and information to form conclusions which draw on evidence such as strengths, weaknesses, alternatives and relevant data.	<p>This skill is covered in the detailed content wherever there is scope for candidates to evaluate different pieces of information (for example, different ways of responding to coastal flooding or rapid urbanisation) and then bringing it together to form a conclusion (for example, why response 'A' is most effective).</p> <p>This will usually occur in questions with the command word 'assess', 'discuss', 'evaluate' or 'to what extent'.</p> <p>e.g. 3.3.3: Students are to understand and evaluate the role of forecasting, prediction and mitigation in response to weather hazards in contrasting countries.</p>	<p>SAM Paper 1 – Section A 4(c)</p> <p>SAM Paper 1 – Section B 5(b)</p> <p>SAM Paper 1 – Section B 6(b)</p> <p>SAM Paper 2 – Section A 1(b)</p> <p>SAM Paper 3 – Section A 1(b)</p> <p>SAM Paper 3 – Section A 3</p> <p>SAM Paper 3 – Section B 4/5(b)</p> <p>SAM Paper 3 – Section C 6/7</p> <p>SAM Paper 4 – 1/2/3/4</p>	Attempt evaluate/discuss/assess questions and encourage students to offer two viewpoints and to make decisions and conclusions for example as to whether advantages or disadvantages are more significant.
Adaptive learning	Apply understanding of geographical issues in familiar situations and adapt these to use them in new and unfamiliar situations.	<p>This skill can be applied to most areas of the specification as all topics have the scope to provide information that is unfamiliar to encourage application of knowledge and understanding.</p> <p>e.g. 3.5.1: the use of unfamiliar newspaper articles on energy sources and security.</p>	<p>SAM Paper 1 – Section B 6(a)</p> <p>SAM Paper 2 – Section A 1(a)(ii)</p> <p>SAM Paper 2 – Section C 4/5(a)(i)</p>	Use a range of data, graphs, diagram, and visual sources to encourage learners to test their understanding against a range of unfamiliar contexts.
Executive function	Planning how to apply practical geographical / enquiry skills to investigate a geographical issue(s). Consideration of the planning process and the importance of reviewing outcomes.	<p>This skill can be applied to any part of the content; in particular, the fieldwork requirement in unit 2 offers clear opportunities for the coverage of this skill.</p>	<p>SAM Paper 2 – Section B 3(a)</p> <p>SAM Paper 2 – Section B 3(b)</p> <p>SAM Paper 2 – Section B 3(d)</p> <p>SAM Paper 2 – Section C 4/5(a)(i)</p> <p>SAM Paper 2 – Section C 4/5(b)(ii)</p>	Plan, carry out and evaluate a fieldwork to investigate a geographical issue.

Creativity				
Creativity	Application of existing geographical knowledge and understanding to unfamiliar situations and/or use geographical concepts to explain an unusual geographical scenario.	Applies to any part of the detailed content where an unfamiliar context is used to encourage a creative response. This will usually occur in questions with the command word 'suggest'. e.g. 3.8.1: the use of unfamiliar socio-economic data to assess global variations in levels of development, including information about countries that might not fit an expected trend.	SAM Paper 1 – Section B 5(b) SAM Paper 1 – Section B 6(a) SAM Paper 2 – Section B 3(b) SAM Paper 3 – Section C 6/7	Give students geographical information/data and allow them to be creative in suggesting possible reasons for and responses to the scenario.
Innovation	Use a different or unexpected way to answer a geographical question, for example those using data/statistics which require the application of geographical skills.	This skill can be covered in any part of the specification.	SAM Paper 2 – Section B 3(b) SAM Paper 2 – Section B 3(d) SAM Paper 3 – Section A 3	Explore different ways to solve calculation questions.

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Intrapersonal skills				
Intellectual openness				
Adaptability	Ability to select and apply geographical skills across different topics ('transferable skills') to support knowledge and understanding / learning process.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Adaptability is assessed across all four papers. Students are required to apply their geographical skills to interpret a range of unfamiliar resources.	Throughout the course, flag up common geographical skills / recap prior learning before applying them to a different topic.
Personal and social responsibility	Awareness of contrasting social, economic, political and environmental perspectives for different geographical issues.	This skill can be applied to several areas of the content. It is dependent on how the content is taught. e.g. 1.3.6: Students are required to explore how attitudes to global warming vary, both internationally and within countries. e.g. 1.4.5: Students are required to study the differing attitudes towards migration.	Not assessed in a specific question. It is assessed as part of the learning process.	Get students to look at issues related to topics with ethical considerations. Feedback focusing on how ethical issues can offer a viewpoint to achieve a higher score.
Continuous learning	Planning and reflecting on own-learning goals and meeting them regularly.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Students identify areas where they need extra help or practice. Re-teach topics where mastery has not yet been achieved.

Intellectual interest and curiosity	Identifying their own geographical questions under their own initiative, and exploring the causes, consequences and possible solutions.	This skill can be applied to all areas of the content. It is dependent on how the content is taught. The fieldwork component of the course (Unit 2) offers students the opportunity to work independently and creatively.	Intellectual interest and curiosity is directly assessed in Paper 2 Section B. This compulsory question requires students to write about their own field investigation – outlining its purpose and findings.	Students explore an area of interest and present findings and discuss with peers.
Work ethic/conscientiousness				
Initiative	Using geographical knowledge, independently (without guided learning), to further own understanding. Using different forms of media to investigate real world stories.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Looking at real world stories in newspapers, T.V. news and online. Facilitating feedback from students and discussing what they have find out.
Self-direction	Planning, developing and applying their learning of the real world through fieldwork.	This skill can be applied to all areas of the content. It is dependent on how the content is taught. The fieldwork component of the course (Unit 2) offers students the opportunity to work independently and creatively.	Not assessed in a specific question. It is assessed as part of the learning process.	Give research tasks to assess their ability to self-direct but also to ensure they can interpret data and show what it means.
Responsibility	Taking responsibility for any errors or omissions in own work and creating a plan to improve.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Feedback on any errors and omissions given students the chance to correct mistakes.
Perseverance	Actively seeking new ways to continue learning or solve a problem despite setbacks that appear insurmountable at the time.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Give feedback in work that is constructive advising on ways to improve performance.
Productivity	Be able to spot opportunities to apply knowledge to questions allowing complex arguments to be articulated in coherent, logical chains of reasoning.	This skill can be applied to all areas of the content – particularly in Sections B and C of Unit 3 (Contested Planet) and Unit 4 (Researching Geography). It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Test understanding of key terminology. Put terms on the board and get them to define or give definitions and get them to identify the key term. Could be adapted to play as a bingo style game. Get students to construct diagrams and get others to critique for accuracy on the sequences of physical processes that lead to different landforms.

Self-regulation (metacognition, forethought, reflection)	Using opportunities to reflect on own learning to support the recognition that similar geographical processes and concepts can be applied in contrasting scenarios.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Look at different types of questions and what success looks like.
Ethics	Appreciate ethical issues relating to geographical issues.	This skill can be applied to several areas of the content. It is dependent on how the content is taught. e.g. 1.4.2 Students are required to study the positive and negative impacts of TNC outsourcing to emerging and developing countries. e.g. 2.4.1 Students are required to explore the stark social and economic inequalities which often occur in developing cities.	Not assessed in a specific question. It is assessed as part of the learning process.	Get students to look at issues related to topics with ethical considerations. Feedback on how offering different viewpoints can achieve a higher score.
Integrity	Taking ownership for your own work and willingly respond to questions and challenges.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Offer questions and challenges in feedback.
Positive Core Self Evaluation				
Self-monitoring/self-evaluation/self-reinforcement	Planning and reviewing your own work as a matter of habit.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Give learners the opportunity to monitor their understanding of topics. Get them to evaluate the strengths and weaknesses in practice tests.

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Interpersonal skills				
Teamwork and collaboration				
Communication	Able to communicate the geographical concepts behind a given scenario to peers and teachers and be able to answer questions verbally or in written forms using appropriate geographical terminology.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Quality of written communication is assessed on Paper 4 (5 marks). All levelled items reward students who can clearly formulate and structure ideas.	In group discussion, team activities and presentations.

Collaboration	Peer review the work of others within a group to offer supportive feedback on strengths and weaknesses of the work.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Working within teams on research projects and in delivering presentations.
Teamwork	Working with others in exploring geographical issues.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Working within teams on research projects and in delivering presentations.
Co-operation	Sharing resources and sharing learning techniques with others. Working as part of a team in group based work.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Encouraging students to share ideas and work. Offer constructive feedback including identifying strengths and weaknesses.
Interpersonal skills	Using verbal and non-verbal communication skills in developing their awareness of geographical concepts and issues.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Give opportunities to plan responses to questions and for team work activities.
Empathy/perspective taking	Being able to appreciate that people have different views of, and attitudes to, the world, its environments and its issues.	This skill can be applied to several areas of the content. It is dependent on how the content is taught. e.g. 2.4.2: Students are required to consider differing views on major infrastructure projects designed to tackle urban transport problems. e.g. 3.4.2: Students should explore the different attitudes towards conservation and understand that different groups of people have different perceptions of value.	Not assessed in a specific question. It is assessed as part of the learning process.	Group work looking at geographical issues, getting them to debate issues from different perspectives.
Negotiation	Awareness of different viewpoints and ideas and that stakeholders should work together to propose a solution/strategy/plan.	This skill can be applied to several areas of the content. It is dependent on how the content is taught. e.g. 2.3.4: Conflicts between different users of the coast, with different views on coastal management.	Not assessed in a specific question. It is assessed as part of the learning process.	Class debates and discussions which cover a range of viewpoints. Student roles to be rotated mid-activity to ensure both sides are understood.
Leadership				
Leadership	Taking a lead role in piece of collaborative work, for example a research task or geographical enquiry.	This skill can be applied to several areas of the content – and the fieldwork enquiries. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Ensuring that groups are selected over time that allows all to take a lead role at one stage. Especially picking topics on strength when they take on their leadership roles.
Responsibility	Taking responsibility to ensure that in a group exercise, all students contribute and a final outcome is achieved.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	In team and group activities.

Assertive communication	Motivating a team through use of language to reach an appropriate outcome.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Opportunity for students to chair discussion in smaller group and some in whole class debates.
Self-presentation	Delivery/presentation of independent work or being part of a team presentation and being able to answer questions about the presentation.	This skill can be applied to all areas of the content. It is dependent on how the content is taught.	Not assessed in a specific question. It is assessed as part of the learning process.	Giving activities that ensure students can share and present their ideas and respond to questions.