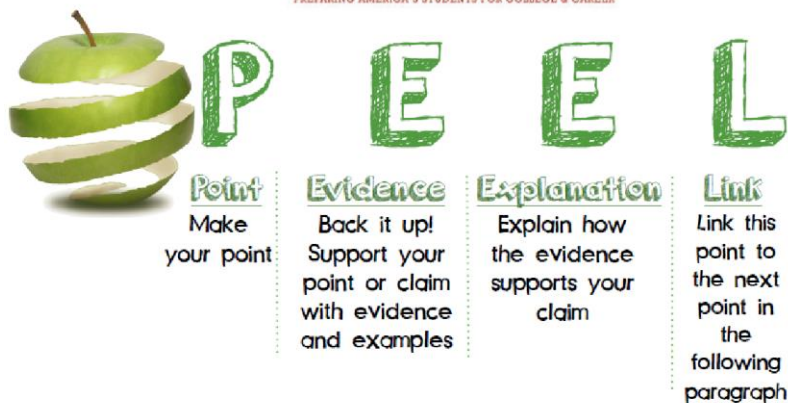


Literacy scaffolds



CCSS.ELA-Literacy.CCRA.W.1 Write arguments to support claims in an analysis of substantive topics or texts using valid reasoning and relevant and sufficient evidence.

<https://scpswritingresources.weebly.com/the-write-idea.html>



PEEL

Organize your thoughts before writing your paragraph(s) by using the **PEEL** method. (1) Think about the **POINT** of your paragraph, (2) what **EVIDENCE** you have, (3) an **EXPLANATION** of your evidence, and a (4) **LINK** or transition into your next paragraph.

Topic: _____

1 POINT: What is your main *point* of this paragraph?
What is the one thing you want the reader to know?

2 EXPLANATION: How will you *explain* your supporting evidence?
What do the facts mean? How do they support and make your point?

3 EVIDENCE: Find facts, testimonies, (quotes), statistics, and expert opinions to support your main point. Write at least three pieces of *evidence* below.

4 LINK: How does this point *link* to your next point?
What are some ways you can connect the two?

Hypothesis: Geography

By Keith Kelly <http://www.onestopenglish.com/clil/clil-teacher-magazine/your-clil/hypothesis/hypothesis-geography/551493.article>

Keith Kelly looks at examples of the language of hypothesis, prediction and conditions from the area of geography, covering common structures and lexical phrases.

Common structures

Predicting with a greater degree of certainty

If ... happens, ... will:

If the population continues to increase at this pace, it *will* double in less than 20 years.

As ... happens, (then) ... will/may happen:

As a country's economy develops, its population *will* grow very slowly at first, but will then grow rapidly later and *may* finally stop growing.

When ... happens, (then) ... will happen:

When the magma cools, it *will* form igneous rock within the crust.

Because ... happens, (then) ... will happen:

Because the resources are used at a faster rate than they are replaced, they *will* be run down to levels at which they become of little use to people.

Predicting with a lesser degree of certainty

If ... happens, ... may / might / can / could happen (possibility):

If a cave erodes all the way through a headland, an arch *may* form.

If many vehicles pass over the sand dunes throughout the year, this *can* greatly reduce vegetation cover.

If greenhouse gases continue to accumulate at their present rate, the earth's temperature *could* rise by around 3°C in the 21st century. Health problems *could* increase in temperate latitudes as tropical diseases *might* spread to these regions due to higher summer temperatures.

If ... happened, ... would happen (probability):

If cultural regions were based only on language, they *would* be relatively easy to define.

Assuming ... happened, ... would happen (probability):

Assuming working hours were reduced, the cost of manufacturing *would* increase.

If ... had happened, ... would have happened (speculation about the past):

If a similar mudflow had hit a town in a rich country, fewer homes *would* have been destroyed.

Predicting using a negative construction

Unless ... happens, ... will not happen / ... will not happen, unless ... happens:

Unless more oil is found, or energy use is controlled, the world's oil supply *will not* last beyond the end of the 21st century.

The population of the island *will not* be evacuated *unless* there is a real perceived threat from the active volcano.

If / When ... does not happen, ... will happen / ... will not happen:

If the rain *does not* fall, it *will* cause drought, crop failure and famine.

When the tide comes in beyond the markers, the fishermen *will not* be able to lay their nets.

Common lexical phrases

Whether ... happens depends on ... / ... happening requires ... (entails, calls for, demands, needs):

Whether river erosion happens quickly or slowly *depends on* hardness of rock, volume of water and river speed.

Maximising a crop harvest *demands* a lot of forward planning and preparation and *calls for* a certain amount of pure luck.

A requirement (condition / prerequisite / necessity) for ... to happen is ... / One of the conditions for ... is ...:

Conditions for effective distribution (*to happen*) include access to wide, well-surfaced routes, and airports or ports.

One of the conditions for effective distribution *is* access to wide, well-surfaced routes, and airports or ports.

For ... to happen, ... is essential (necessary/crucial/vital):

For rice to grow effectively, waterlogged conditions are *essential*.

<p align="center">Junior ALARM Steps 7 – 9</p> <p align="center">Which verb is used in the question? Follow the steps in the column that correspond to that verb.</p>									
									To what extent is the effect/impact effective?
								What is the effect and/or impact of the component?	What is the effect and/or impact of the component?
								What is the function or purpose? Give evidence to support. 'Why' <u>may</u> need to be addressed.	What is the function or purpose? Give evidence to support. 'Why' <u>may</u> need to be addressed.
								What are the features and characteristics?	What are the features and characteristics?
		What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?
What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?
IDENTIFY (Main Concept)	DESCRIBE	EXPLAIN	ANALYSE	EVALUATE					

Designed and developed by Blaxland High's A.L.A.R.M. team

<p align="center">Senior ALARM Steps 10 – 12</p> <p align="center">Which verb is used in the question? Follow the steps in the column that correspond to that verb.</p>									
									To what extent is the impact effective?
								What is the impact? How does this relate to the set criteria/main idea?	What is the impact? How does this relate to the set criteria/main idea?
								What is the function or purpose? What is the effect of component? Give evidence. 'Why' <u>may</u> need to be addressed.	What is the function or purpose? What is the effect of component? Give evidence. 'Why' <u>may</u> need to be addressed.
								What are the features and characteristics?	What are the features and characteristics?
		What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?	What are the features and characteristics?
What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?	What is the main component?
IDENTIFY (Main Concept)	DESCRIBE	EXPLAIN/ANALYSE	CRITICALLY ANALYSE	EVALUATE					

Designed and developed by Blaxland High's A.L.A.R.M. team

<https://www.virtuallibrary.info/alarm.html>

Topic Name —

Paragraph 1:

Definition and Explanation

What is the topic or process about (1-2 sentences)

Introduce the topic

Criteria for Evaluation What are some of the value judgement type words that can be used to demonstrate that the impact or effect of the topics or process?

Positive: benefits, increases, sustains, enhances, improves, prevents, promotes, gains, allows. **Negative:** decreases, diminishes, harms, reduces, limits.

Name and Identify

What are the main components of the issue? Where was the research done?

Define/Describe

It involves

It includes

It can be described as

Explain

How and Why? Cause and Effect of each component. What does it do and why?

Analyse

How are the impacts of this components related? Explain intent, flow on impacts and concerns. Suggest reasons.

Examples

This illustrates
As was demonstrated in
An example of this is

Paragraph 2:

Paragraph 3:

Paragraph 4:

Conclusion

Appreciate Topic Concept. Why is this topic process important for life, where is it relevant, Why should it be learned, why is it important to evaluate the overall situation?

How does it link to the **BIG ideas of geography?**

SUSTAINABILITY/CHANGE/PLACE/ENVIRONMENT/INTERCONNECTION/SCALE

Question:

In your answer you should focus on:

- Demonstrating knowledge and understanding relevant to the question
- Applying relevant commercial information, terms, concepts, relationships and theory
- Presenting a sustained, logical and cohesive response

Key: Name & Define | Describe | Explain | Examples | Evaluate

Paragraph 1 Introduction	
Paragraph 2 Seawall	
Paragraph 3 Sand Nourishment/ Replenishment	
Paragraph 4 Conclusion	

Lexical Density – Pushing the Paragraph

(an excerpt – see full article for methodology)

<http://lukebartolo.blogspot.com/2018/10/pushing-paragraph.html>

The Goal

In getting students to write paragraphs I want them to be mindful of what they're writing rather than simply trying to write as much as possible. Part of keeping them focused is to make them aware of the lexical density of their writing.

Lexical density refers to the amount of lexical items found in a piece of writing. A lexical item is any word or word-group that carries meaning on its own, IE. A noun, a verb, an adjective, or an adverb. These are words that we can easily define or can swap with synonyms. If a word isn't a lexical item then it's a grammatical one - these are all the joining or connecting terms, some examples being 'with', 'what', 'it', 'the', 'however', 'in other words', etc. What we want to do is to have students write paragraphs and then test how dense they are with lexical items.

Testing the lexical density of a paragraph is to see how much 'content' is in a piece of writing. The key here is not to think about lexical density in terms of a higher amount of content equalling better writing, it's more a measurement tool that can help pick up patterns and identify trends in writing on repeated examination.

Some things to keep in mind:

A high lexical density (say, a piece of writing that is 80% made up of lexical items) might indicate a piece of writing that is too jargonistic, or convoluted, or loaded with words that the writer doesn't necessarily understand.

A low lexical density (below 50%) might demonstrate too much colloquialism, informality in sentence construction, or a lack of appropriate vocabulary.

I'd probably say that the 'sweet spot' would be anywhere between 55% and 75%, but I'm not completely nailed down on this yet. Ask me again after I've collected data from a few more classes over the next 5 years!

The goal is to have students produce something within the 'sweet spot' bracket but, more importantly, to generate a word-count of 180 words or so within the 7 minutes given. The lexical density testing is a byproduct of building speed; by having the students focused on vocabulary in this way it ensures that they are keeping some kind of standard in mind in terms of ensuring that quality isn't sacrificed in order to just increase speed.

$$\frac{\text{Lexical Items}}{\text{All items}} \times 100$$

To think about: students involved in the planning phase of field work.

Extracts taken from: Field 'Work' Vs 'Feel' Trip: Approaches to Out-of-Class Experiences in Geography Education Lou Preston Senior Lecturer in Education at Deakin University, Waurn Ponds Campus, Geelong Victoria

- The literature review found that engagement increases when learning goals and skills are discussed with students during the planning phase (Oost et al., 2011). Based on the data and literature review, students should be given increased opportunities to create their own inquiry
- Additionally, it was found that no opportunities were given for students to evaluate the way in which inquiry data were classified or sequenced (Appendix 3)..... This showed that teachers are highly skilled and focused on designing fieldwork booklets that scaffold student abilities in making sense of data. However, it is notable that none of the fieldwork booklets provided opportunities for students to clarify their values in relation to the data (Appendix 4). This limits the opportunity for students to reflect and think critically about how their personal values relate to the data
- The literature review found that students may derive long-term benefits, including enhanced cognitive awareness and geographic inquiry skills, from a student-centred approach that includes reflection on the inquiry process (Fuller, Rawlinson, and Bevan, 2000).

References from the text:

1. Oost, K., De Vries, B., & Van der Schee, J. (2011). Enquiry-driven fieldwork as a rich and powerful teaching strategy – school practices in secondary geography education in the Netherlands. *International Research in Geographical and Environmental Education*, 20(4), 309–325.
2. Fuller, I., Rawlinson, S., & Bevan, R. (2000). Evaluation of student learning experiences in physical geography fieldwork: paddling or pedagogy? *Journal of Geography in Higher Education*, 24(2), 199–215.

Example of students planning field work.

A Case Study of Progressing Geography Fieldwork Skills Over Years 7–10

Julian Woolhouse Graduate from the Master of Teaching at The University of Melbourne

Geographical Education Vol 29, 2016

Table 3: Summary of fieldwork reports by year level.

Year 7	<ul style="list-style-type: none">• Report instructions specify how and which data to represent.• Data are used to present observations and descriptions of what is there.• Conclusion: <i>Describe how Melbourne's water supply benefits from closed catchments, like Maroondah Reservoir, and how this water comes from our reservoirs to our taps.</i>
Year 8	<ul style="list-style-type: none">• Teacher guides class on how and which data to represent.• Data are used to describe and explain the natural processes and human impacts.• No conclusion, instead a creative response: <i>Imagine you have been given a contract to improve Half Moon Bay. Present an annotated plan to show and explain how this would improve Half Moon Bay.</i>
Year 9	<ul style="list-style-type: none">• Teacher gives option and advice on the how and which data to represent.• Data are used to describe, explain, compare, evaluate and support a point of view.• Extended response: <i>"The location and features of the Yarra River are the most important influences on agricultural production of the Yarra Valley." To what extent do you agree?</i>
Year 10	<ul style="list-style-type: none">• Students choose how and which data to represent; teacher provides some modelling.• Data are used to evaluate (liveability).• Conclusion: <i>Make an overall evaluation of the pros and cons of Laurimar and its liveability in relation to the people who might live there. Make a judgement about whether you think further urban-fringe developments, such as Laurimar, are a good solution to housing Melbourne's growing population.</i>

Inquiry Progressions

Stage 4	<p>Students:</p> <ul style="list-style-type: none"> • develop geographically significant questions and plan an inquiry, using appropriate geographical methodologies and concepts (ACHGS047, ACHGS055) • collect, select and record relevant geographical data and information, using ethical protocols, from appropriate primary data and secondary information sources (ACHGS048, ACHGS056) 	<p>Students:</p> <ul style="list-style-type: none"> • evaluate information sources for their reliability and usefulness (ACHGS049, ACHGS057) • represent data in a range of appropriate forms, with and without the use of digital and spatial technologies (ACHGS049, ACHGS057) • represent the spatial distribution of different types of geographical phenomena by constructing maps at different scales that conform to cartographic conventions, using spatial technologies as appropriate (ACHGS050, ACHGS058) • analyse geographical data and other information using qualitative and quantitative methods, and digital and spatial technologies as appropriate, to identify and propose explanations for spatial distributions, patterns and trends and infer relationships (ACHGS051, ACHGS059) • apply geographical concepts to draw conclusions based on the analysis of the data and information collected (ACHGS052, ACHGS060) 	<p>Students:</p> <ul style="list-style-type: none"> • present findings, arguments and ideas in a range of communication forms selected to suit a particular audience and purpose, using geographical terminology and digital technologies as appropriate (ACHGS053, ACHGS061) • reflect on their learning to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic and social considerations, and predict the expected outcomes of their proposal (ACHGS054, ACHGS062)
Stage 5	<p>Students:</p> <ul style="list-style-type: none"> • develop geographically significant questions and plan an inquiry that identifies and applies appropriate geographical methodologies and concepts (ACHGS063, ACHGS072) • collect, select, record and organise relevant data and geographical 	<p>Students:</p> <ul style="list-style-type: none"> • evaluate information sources for their reliability, bias and usefulness (ACHGS065, ACHGS074) • represent multi-variable data in a range of appropriate forms, with and without the use of digital and spatial technologies (ACHGS065, ACHGS074) • represent the spatial distribution of geographical phenomena on maps that conform to cartographic 	<p>Students:</p> <ul style="list-style-type: none"> • present findings, arguments and explanations in a range of appropriate communication forms selected for their effectiveness and to suit audience and purpose, using relevant geographical terminology and digital technologies as appropriate (ACHGS070, ACHGS079) • reflect on and evaluate the findings of an inquiry to propose individual and collective action in response to a contemporary geographical challenge, taking account of environmental, economic and social

	<p>information, using ethical protocols, from a variety of appropriate primary data and secondary information sources (ACHGS064, ACHGS073)</p>	<p>conventions, using spatial technologies as appropriate (ACHGS066, ACHGS075)</p> <ul style="list-style-type: none"> • evaluate multi-variable data and other geographical information using qualitative and quantitative methods and digital and spatial technologies as appropriate to make generalisations and inferences, propose explanations for patterns, trends, relationships and anomalies, and predict outcomes (ACHGS067, ACHGS076) • apply geographical concepts to synthesise information from various sources and draw conclusions based on the analysis of data and information, taking into account alternative perspectives (ACHGS068, ACHGS077) • identify how geographical information systems (GIS) might be used to analyse geographical data and make predictions (ACHGS069, ACHGS078) 	<p>considerations; and explain the predicted outcomes and consequences of their proposal (ACHGS071, ACHGS08</p>
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Tools progression

Stage 4	<ul style="list-style-type: none"> • sketch maps, relief maps, political maps, topographic maps, flowline maps, choropleth maps, isoline maps, précis maps, cartograms, synoptic charts • maps to identify direction, scale and distance, area and grid references, latitude and longitude, altitude, area, contour lines, gradient, local relief 	<ul style="list-style-type: none"> • observing, measuring, collecting and recording data, developing and conducting surveys and interviews • fieldwork instruments such as weather instruments, vegetation identification charts, compasses, GPS, GIS 	<ul style="list-style-type: none"> • data tables • pie graphs • column graphs • compound column graphs • line graphs • climate graphs • population profiles • multiple tables and graphs presented on a geographical theme • statistics to find patterns and trends 	<ul style="list-style-type: none"> • virtual maps • satellite images • global positioning systems (GPS) • geographic information systems (GIS)
Stage 5	<ul style="list-style-type: none"> • relief maps, political maps, topographic maps, choropleth maps, flowline maps, cadastral maps, 	<ul style="list-style-type: none"> • observing, measuring, collecting and recording data, developing and conducting surveys and interviews 	<ul style="list-style-type: none"> • data tables • pie graphs • column graphs 	<ul style="list-style-type: none"> • virtual maps • satellite images • global positioning

	<p>thematic maps, isoline maps, land use maps, précis maps, special-purpose maps, cartograms, synoptic charts</p> <ul style="list-style-type: none"> • maps to identify direction, scale and distance, area and grid references, degrees and minutes of latitude and longitude, bearings, aspect, altitude, area, density, contour lines, gradient, local relief 	<ul style="list-style-type: none"> • fieldwork instruments such as weather instruments, vegetation identification charts, compasses, clinometers, GPS, GIS or remote sensing 	<ul style="list-style-type: none"> • compound column graphs • line graphs • scatter graphs • climate graphs • population profiles • multiple tables and graphs presented on a geographical theme • statistics to find patterns and trends; and to account for change 	<p>systems (GPS)</p> <ul style="list-style-type: none"> • geographic information systems (GIS) • remote sensing data • augmented reality
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Unit of work	Primary data Skills	Driving question	Possible NESA verbs	Interpretation activities
Landscapes and landforms	Field sketch and sketch map Photo analysis Finding north	How has the Twin Waters Estate changed since 2017?	Describe Outline	Change over time – satellite photographs. Identify and list changes
Where would you live?	Survey use and analysis Create digital map.	How does the perception of liveability change with age and location?	Describe Demonstrate Distinguish Extract	Create 2 column graphs comparing perspectives of adult and teen.
Water Wars	Drawing a cross section Water quality tests Create digital map	How are catchments changed by people?	Explain Apply Account	Topo map interpretation. Transect drawing. Satellite interpretation. Results analysis
Chocolate, the good the bad and the tasty	Effective survey design and analysis	What are the potential consequences of consumer choices?	Critically analyse Compare Contrast discuss	Identify Australian and international brands. Identify brands that have positive and negative global effects. Flow chart.
Sustainable biomes and food. The place of plastic.	Sustainability assessment – sorting, weighing	What strategies can be used to increase global food security?	Critically analyse Compare Discuss Recommend	(food waste and plastic use per person) Pie graph.
Managing for sustainability	Transect, quadrats, photo taking, transect, rubbish survey, wildlife survey	What are the causes and consequences of change to mangrove ecosystems? (extension – why is understanding biophysical processes of ecosystems essential for the sustainable management of environments?)	Evaluate Analyse Interpret Synthesise predict	Photographic interpretation Graphs and tables Transect interpretation
Urbanisation and internal migration	Environmental assessment. (Overshadowing, heat, noise, wind tunnelling) Digital data collecting via	How does urbanisation create change in environments and places and require management?	Justify Assess	Story map Digital map creation Flow chart

Skill/s focus



Best method of incorporation



Driving Question:

What will the lesson arc need?



Literacy focus

What scaffolds or other supports do you need to supply?

