Curriculum Clarity Template

Gaining clarity of the curriculum intent for a unit of study
(a guide with prompts and examples can be found here: https://school-inclusion.com/inclusion-in-action/teaching-and-learning/ )

**Biomes** and Food Security – Year 9 Geography

1. **Achievement Standard**

By the end of Year 9, students explain how geographical processes change the characteristics of places. They analyse interconnections between people, places and environments and explain how these interconnections influence people, and change places and environments. They predict changes in the characteristics of places over time and identify the possible implications of change for the future. Students analyse alternative strategies to a geographical challenge using environmental, social and economic criteria.

Students use initial research to identify geographically significant questions to frame an inquiry. They evaluate a range of primary and secondary sources to select and collect relevant and reliable geographical information and data. They record and represent multi-variable data in a range of appropriate digital and non-digital forms, including a range of maps that comply with cartographic conventions. They use a range of methods and digital technologies to interpret and analyse maps, data and other information to propose explanations for patterns, trends, relationships and anomalies across time and space, and to predict outcomes. Students synthesise data and information to draw reasoned conclusions. They present findings, arguments and explanations using relevant geographical terminology and digital representations in a range of appropriate communication forms. Students propose action in response to a geographical challenge, taking account of environmental, economic and social factors, and predict the outcomes and consequences of their proposal.

2. **Assessable Content Descriptions**

<table>
<thead>
<tr>
<th>Geographical Inquiry Skills</th>
<th>Geographical Knowledge and Understanding</th>
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<tbody>
<tr>
<td>• Represent multi-variable data in a range of appropriate forms, for example scatter plots, tables, field sketches and annotated diagrams, with and without the use of digital and spatial technologies (ACHG5065)</td>
<td>• Distribution and characteristics of biomes as regions with distinctive climates, soils, vegetation and productivity (ACHGK060)</td>
</tr>
<tr>
<td>• Interpret and analyse 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 (ACHG5067)</td>
<td>• Human alteration of biomes to produce food, industrial materials and fibres, and the use of systems thinking to analyse the environmental effects of these alterations (ACHGK061)</td>
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<tr>
<td>• 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 (ACHG5070)</td>
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3. Identify the key components of curriculum, cognition, context and complexity

Achievement Standard and Content Descriptions:

Explain geographical processes that change places. Predict changes over time and the implications of this. Record and represent data in a variety of forms. Map using cartographic conventions. Interpret and analyse maps, data and other information to explain patterns, trends and anomalies. Predict outcomes. Synthesise data and information to draw reasoned conclusions. Present and explain using relevant geographical terminology.

Year Level Description:

- Examining distinctive aspects of biomes in Australia and across the world
- Investigating the role of the biotic environment and its alteration

Elaborations:

- Identify and describe major aquatic and terrestrial biomes of Australia and the world, and their spatial distribution
- Examine the influence of climate on biomass production
- Identify biomes that produce foods fibre
- Investigate ways that production of food and fibre has altered biomes
- Create a diagram to illustrate flow of nutrients and energy within a biome
- Analyse and compare maps
- Present explanations using visual aids including maps

Critical and Creative Thinking:

- Organise and process information
- Identify and clarify information and ideas
- Reflect on processes
- Organise and process information
- Seek solutions
- Evaluate procedures and outcomes

Numeracy:

- Interpret maps and diagrams
- Recognise and use patterns and relationships
- Interpret data displays

Literacy:

- Interpret and analyse learning area texts
- Read and comprehend texts
- Understand how visual elements create meaning
- Understand learning area vocabulary
- Compose texts
- Express opinion and point of view
4. Consolidate this information into a Learning Objective and Success Criteria for the unit of study

Students are learning to identify characteristics, location and distributions of biomes, and to identify consequences of human impacts and draw conclusions about future outcomes

They will be successful when they can:

- Explain how geographical processes change the characteristics of places
- Predict changes in the characteristics of places over time
- Identify the possible implications of change for the future
- Interpret and analyse maps and data to propose explanations for patterns, trends, relationships and anomalies across time and space and to predict outcomes
- Synthesise data and information to draw reasoned conclusions
- Record maps using cartographic conventions
- Present findings and explanations using relevant geographical terminology in a range of communication forms

In addition, teachers may wish to articulate what students need to know, be able to do and think about in order to be successful in the assessment task.

This process draws alignment between the achievement standard, curriculum elements and the context of the assessment task, explicitly identifying the aspects required for success. It demonstrates the connection between curriculum input and output expectations.

<table>
<thead>
<tr>
<th>Know</th>
<th>Do</th>
<th>Think</th>
</tr>
</thead>
<tbody>
<tr>
<td>Types of biomes and their characteristics</td>
<td>Identify and describe biomes</td>
<td>What are the different types of biomes? What are the characteristics of each?</td>
</tr>
<tr>
<td>Distribution and influences of biomes</td>
<td>Use data to explain why a biome is found in a location Explain how climatic factors and biome types influence the environment, people and settlement Explain trends in land devoted to agriculture for Australia and the Asia region across time</td>
<td>Why are there different biomes? Why do biomes differ across places? How do biomes influence where we live? What percentage of land has been used for agriculture across time? Are there any anomalies? What might have influenced the increase/decreases shown?</td>
</tr>
<tr>
<td>How to determine absolute location of a place (longitude and latitude)</td>
<td>Use longitude and latitude to locate a specified place</td>
<td>What is longitude and latitude? How is it used in mapping?</td>
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<tr>
<td>Human impact on biomes</td>
<td>Explain how human activity has altered a biome Draw a conclusion about effects that agriculture has on natural biomes</td>
<td>What impact does human activity have on a biome? What effect does this have on the biome over time? What impact does agriculture have?</td>
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</table>
Predict what changes will occur if such impacts are continued  |  What will happen if impacts are continued?
---|---
**Cause-and-effect consequences for the future of biomes**  |  Explain negative cause-and-effect consequences as a result of human impact  |  What impact are humans having?  
What are the causes and consequences of change?  
What are the future implications?  
How can change be managed?
**The purpose and use of choropleth maps**  |  Create a choropleth map using BOLTSS  |  What does a choropleth show us?  
What does BOLTSS stand for?  
Why do we use BOLTSS?

5. Consider the literacy demands and proactively plan how these will be taught and adjusted:

<table>
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<th>Literacy Demand</th>
<th>Support/Adjustment</th>
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| Interpret and analyse data tables and graphs | Consider complexity of tables and graphs  
Questions/prompts about the data (range from literal to inferential)  
Graphic organiser to draw out main points |
| Read and comprehend texts | Reader  
Text to speech  
Clarify understanding  
Comprehension scaffolds |
| Understand how visual elements create meaning | Brainstorm what information can be obtained from visual elements  
Create a PMI chart about what visual elements add to meaning |
| Understand Tier 2 and 3 vocabulary | Explicitly teach and review key words  
Provide visual prompts  
Student friendly definitions  
Semantic webs |
| Express opinion and point of view | Sentence starters  
Graphic organisers to collate ideas  
Questions/prompts  
Role play/modelling |
| Compose texts | Modelled responses  
Sentence starters  
Speech to text  
Scribe  
Video/voice record verbal responses |

*Note: The general capabilities literacy continuum can be utilised to inform supports and adjustments to the literacy demands.*
6. **Consider the summative assessment conventions (technique, type of text, mode and conditions) and the provision of access adjustments (universal):**

The current exam is 16 pages long and is to be completed in one 60 minute sitting under exam conditions. It includes a mix of multiple choice questions where responses are recorded on a separate sheet, short answer questions with pre-determined space provided for handwritten responses, and an extended response requiring students to compose text with 3 paragraphs.

**Things to consider:**

- Can the time be extended (it is currently a demanding exam for the time given)?
- Can the exam be broken across days?
- Can the exam be broken into sections and completed at intervals throughout the unit (eg. complete the choropleth mapping after that content has been taught and practiced in class)?
- Can students circle their multiple choice responses on the exam page instead of the separate sheet to reduce tracking barriers and errors?
- Can the exam be provided digitally to access text to speech functions, to zoom in on images, enlarge text etc?
- Can students use speech to text to record answers?
- Can students verbally explain their knowledge and understanding?
- Can visual prompts be included to support key vocabulary?
- Can the complexity of the written instructional language being altered?
- Can sentence starters be provided?
- Can prompts be included to support the interpretation of tables and graphs?
- Can more choice be incorporated?

7. **Consider any additional adjustments for individual students:**

Does the student who accesses an alternate access point for maths require support to read and interpret numbers, recognise and use patterns and relationships? Does the complexity of the tables and graphs need altering?

Are all students able to comply with exam conditions, or will some need supports around this? – e.g. visual timers, different seating, access to breaks, self-regulation strategies. Are there better ways for some students to demonstrate their learning outside of an exam?

Do the students requiring more focused support with literacy skills require additional clarification and break down of questions? How will this be facilitated? Do they require further scaffolds and graphic organisers?

Are there any alternate modes of communication used by students? How will adaptation and implementation around this occur?