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One of the key aspects of student teacher learning is the ability to plan coherent, well detailed lesson plans that offer increasingly challenging conceptual and skills development. Looking forward to the second half of the Initial Teacher Education (ITE) year, we should expect that student teachers are also able to develop a sequence of learning that is more akin to a unit of work. This is an important aspect of ITE development because it gives the student teacher the opportunity for big-picture thinking about the direction of learning and what planning for progression might look like.

Unit planning is a challenging task for beginners, and so the guiding role of the mentor-teacher to ask questions and assist with the planning is important. Student teachers have been helped by their mentors who ask such questions as 'Why have you sequenced learning in this order?'; 'How have you reinforced skills throughout the unit?'; 'How explicit are the big ideas?' and 'In what ways are the selected resources aligned to your goals?'. What student teachers find less rewarding is when they are asked to independently plan a unit of work. Occasionally, student teachers have been expected to plan an entire unit of work from scratch, for a topic that has not been taught in the department before. While student teachers bring new ideas and energy to a school, taking advantage of them is unlikely to make planning a rewarding experience. We are all conscious of the potential of burn out in the early years of teaching, so collegial collaboration is a vital component of the ITE year and beyond. Unit planning is an obvious context in which such collaboration can happen: we all know the maxim that two heads are better than one.

The structure of unit plans is an important safety-net to guide student teachers' planning. On the following pages we have adapted a unit planning structure from Biddulph, Lambert and Balderstone's (2015) *Learning to Teach Geography in the Secondary School*. Our shared enjoyment of chocolate may well have influenced the Year 11 topic theme: and is sure to interest a few school aged students as well. It has to be said, however, that the knowledge gained from compiling this sequence leaves a rather bitter-sweet taste. Hence the title of the unit.

A key aspect of the unit is that it is question driven. We have done this to avoid an information delivery approach to geography. We hope that that the unit signals an inquiry approach, in which students seek out knowledge and understandings while building skills because there is a 'need to know' [Roberts, 2013]. The hooks at the beginning of most lessons in the unit plan are an attempt to generate the curiosity that students require to develop the aforementioned need to know.

The big ideas are also an important part of the unit, because they set the direction. All these key understandings can be sequenced in a 'What is where, why there, and why care' framework (Gritzner, 2002), which is particularly well aligned to Year 11 geography as it stands. The key understandings are framed in a way that both the conceptual (transferable ideas) and contextual knowledge (of West African cocoa production in particular) are foregrounded.

There is not space to present all the possible worksheets that accompany this unit plan, but if you want to give it a go, email mieke.k.jansen@gmail.com or crosbynikita@gmail.com and they will be happy to send you some resources we have developed to accompany the unit of work. The several hyperlinks in the unit plan are helpful resources. Like all 'off the shelf' unit plans it will require tweaking, editing and adaption to suit the context of your Year 11 classroom.

Length of unit: Approx. 20 hours [NB note that each section is flexibly timed and does not necessarily equate to a single lesson].

A Bitter/Sweet Taste?: A Geography of Chocolate

Unit rationale

This unit develops understanding of the global pattern of cocoa production and consumption, the factors responsible for these patterns, and the consequences of these factors for stakeholders in the production chain of chocolate. The unit helps develop understanding of the influence of natural and cultural factors that shape primary production of a commodity that is produced by relatively few, but consumed by many. As an introduction to school geography it is underpinned by a '[What is where, why there, and why care?](#)' approach, in which locational and contextual knowledge are developed as well as more abstract conceptual understanding.

Key Competencies:

Thinking & relating to others – explore viewpoints and values of chocolate production stakeholders; critical thinking; futures thinking.
Using language, symbols and texts – mapwork; tabulated statistical information; interpretation of texts; written communication.
Participating and contributing – questioning; discussing; co-operating; collaborating.

NZC Geography Achievement Objectives

6.1: Understand that natural and cultural environments have particular characteristics and how environments are shaped by processes that create spatial patterns.
 6.2: Understand how people interact with natural and cultural environments and that this interaction has consequences.

Achievement Standard aligned to AO

[91013 / Geog 1.7](#)
 Describe aspects of a geographic topic at a global scale

Professional readings: Roberts, M. (2013) *Geography through inquiry: approaches to teaching and learning in the secondary school*. Sheffield: GA (UK)
 Gritzner, C.F. (2002) What is where, why there, and why care? *Journal of geography*, 101 (1), pp. 38-40

Key Question	Key understandings	Suggested Learning activities and teaching strategies	Skills	Key Resources	Assessment opportunities and evidence
How global is chocolate production?	Chocolate is a manufactured product, reliant on primary production, transport and trade across a range of continents.	<ul style="list-style-type: none"> Hook: How global is chocolate? View Whittaker's 'Bean to Bar' segment of website. Interpret global -flows of Cocoa trade (Emphasise producers, exporters and importers) using three maps Students to categorise countries by continent. What processes are in place to ensure a high quality value chain? Students watch: Cocoa a sweet value chain [STDF, 2016] Comprehension task (with key vocab) about process of chocolate manufacture. Mix 'n' match activity: which images match which stage of process? 	Multimedia and Print comprehension Multiple Map interpretation [Establish start of glossary and build throughout unit]	https://www.whittakers.co.nz/en/NZ/bean-to-bar/ Map 1: Cocoa Bean (basic) Map 2: Cocoa Top 5 worldwide production and export global (Intermed.) Map 3: 'World of chocolate' (Advanced) STDF Youtube: [8min:53] https://www.youtube.com/watch?v=5UAnYcqQTR4 'How does Chocolate get to us?' and 'Cocoa Production Chain' sheets.	Students are able to identify, name, and describe stages and locations of chocolate production. Students are able to describe processes that ensure the quality of the value chain is maintained.

<p>How is Cocoa grown?</p>	<p>Cocoa is grown and harvested from a tropical tree by small scale landowners.</p>	<ul style="list-style-type: none"> • Hook: Blind Taste test How much cocoa is in this chocolate? Watch Youtube video on ‘Cocoa Tree to Chocolate Bar’. <p>Chocolate doesn’t grow on trees, but cocoa does</p> <ul style="list-style-type: none"> • Students to view a series of photographs to describe, draw and label: <ul style="list-style-type: none"> a. What a cocoa pod looks like b. How cocoa is extracted from a pod c. What a Cocoa tree looks like in relation to surrounding canopy d. The set-up of farms who grow, harvest and dry cocoa <p>Students to describe cocoa farming using SPADES acronym</p> <ul style="list-style-type: none"> • <i>Exploring influences on levels of cocoa productivity</i> <ul style="list-style-type: none"> a. Students to engage with text, using an active functional literacy strategy such as text coding. b. Students to complete cloze activity summarising text. 	<p>Photograph interpretation</p> <p>Diagrams and annotation</p>	<p>https://www.youtube.com/watch?v=V-4FsJ6-bzc [First 3 mins on Cocoa Pods]</p> <p>Cocoa harvesting images</p> <p>What affects levels of Cocoa Productivity? information sheet</p>	<p>Description of cocoa farming includes:</p> <p>Senses [sights, sounds, smells]</p> <p>Parts described</p> <p>Adjectives to illustrate what you would see</p> <p>Dimensions</p> <p>Evidence/examples</p> <p>Spelling/Saying of terminology is accurate</p>
<p>Where is Cocoa grown?</p>	<p>Cocoa production is confined to 20 degrees north and south of the equator in the tropical belt, mostly in West Africa, South America and South East Asia.</p>	<ul style="list-style-type: none"> • Hook: In groups using a heap of chocolate confectionary and cocoa butter products identify country of origin. • Students to interpret table of cocoa production in 2015 for 12 countries and shade in results on the world map based on teacher prepared choropleth map [differentiation: digital choropleth map construction] • Using a world map and an Atlas, students to describe the linear pattern of cocoa production. Reinforce Tropic of Cancer and Capricorn as the limit of equatorial region • Use Quizlet app to test students on location on six key country locations: Ivory Coast / Ghana / Nigeria / Sierra Leone / Brazil / Indonesia 	<p>Statistical interpretation and ranking.</p> <p>World map interpretation</p> <p>Locating Continents and countries</p>	<p>Cocoa based products (or images) in which country of origin is labelled</p> <p>Blank world map: http://odtmaps.com/images/contents/hobo-dyer-large.jpg or http://metrocosm.com/wp-content/uploads/2016/05/gallery-peters-map-projection-large.png or https://mapchart.net/world.html for digital choropleth map construction.</p>	<p>Accurate transfer of tabulated stats to shaded world map [choropleth]</p> <p>Accurate description which:</p> <ol style="list-style-type: none"> 1. Uses terminology 2. Names continents and countries
<p>Where is chocolate mostly made?</p>	<p>The manufacture of cocoa products is dominated by</p>	<ul style="list-style-type: none"> • Hook: ‘Anticipation Guide’: Some True or False Statements on the consumption of chocolate around the world. 		<p>Blank maps</p>	

	five multinationals located in NW Europe and N.America.	<ul style="list-style-type: none"> Students to interpret table of chocolate consumption in 2015 for 12 countries and shade in results on the world map based on choropleth map [building on skill introduced previous lesson] Using a world map and an Atlas, students to describe the clustered pattern of chocolate consumption. 	Statistical interpretation and choropleth map construction.	https://mapchart.net/world.html for digital choropleth map construction. Atlases Paragraph writing skills.	<p>Accurate transfer of tabulated stats to shaded world map [choropleth]</p> <p>Accurate description which:</p> <ol style="list-style-type: none"> Uses terminology Names continents and countries
What are the natural factors that influence the global distribution of cocoa bean production?	Cocoa is grown in equatorial regions which have specific climatic characteristics [temperature, rainfall, & humidity	<ul style="list-style-type: none"> Hook: prior knowledge – what do we know about where it is grown? What assumptions based on this knowledge can we make about the climate in these areas? Students to view a series of maps to describe and label: <ol style="list-style-type: none"> What temperature range cocoa is grown at What rainfall amount and frequency is required What humidity % is required Students to compare how the different factors combined make the ideal environment for cocoa growth <ol style="list-style-type: none"> Students to list Top 5 countries for each factor Compare each list to see how the combined factors are what contributes to the cocoa environment (not just hot or wet, but both) Compare the lists with list of top 10 cocoa production countries to see if they match up Using Quizlet or Kahoot to gauge students understanding of temperature, rainfall and humidity ranges for key cocoa countries 	<p>Map skills and interpretation</p> <p>Diagrams and annotation</p> <p>Statistical interpretation and ranking</p> <p>Cause and effect understanding</p>	<p>Maps and diagrams</p> <p>Atlases</p> <p>List of Top 10 Cocoa production countries</p> <p>Quizlet/Kahoot</p>	<p>Accurate identification of temperature, rainfall and humidity ranges required for cocoa growth</p> <p>Accurate ranking which shows: which countries rank for each factor and how they compare to cocoa countries</p> <p>Understanding of specific requirements for cocoa, and country examples (for assessment)</p>
What was the human influence on the global pattern of cocoa production?	The distribution of cocoa production was strongly influenced by the trade patterns of colonialization.	<ul style="list-style-type: none"> Hook: If cocoa beans are native to Central America: Speculate: Where was chocolate ‘invented’? Why did it spread to other countries? <ul style="list-style-type: none"> Video interpretation Timeline overview on board Annotate the spread of cocoa plantations on blank map with relevant countries labelled 	Map skills	<p>Video link: https://www.youtube.com/watch?v=ibiUpk9lagk</p> <p>Blank world maps</p>	<p>Students can construct timeline of spread of cocoa, with annotations.</p> <p>Students to be able to locate countries that were</p>

		<ul style="list-style-type: none"> Identifying colonies: shade the annotated map colours that represent which European country colonised: e.g. Nigeria / Ghana / Cameroon / Ivory Coast / Caribbean Use 'word mat' to describe influence of colonial trade on spread of primary production of cocoa . 	Writing generalisations	Laminated 'Word Mats'	<p>colonised by European nations.</p> <p>Students can describe purpose of colonisation and the resultant trade patterns that influenced the spread of cocoa production.</p>
Where does the money we spend on chocolate go?	Most value added to a bar of chocolate takes place in the manufacture and retail of the chocolate bars.	<p>Hook: Revisit STDF video (lesson 1) and then watch Ivory Coast's bittersweet cocoa industry (Al Jazeera, 2011. Youtube 2:26). What did the STDF video not say? Sanitisation of chocolate industry?</p> <p>Students to describe diagram that shows distribution of profits of a bar of chocolate to different stakeholders.</p>	<p>Critical thinking skills</p> <p>Pictures to words: paragraph writing.</p>	<p>https://www.youtube.com/watch?v=qA-dm0TSmpk</p> <p>Supply chain and profit diagram handouts.</p>	<p>Students critique media narratives.</p> <p>Students can describe the varying levels of profits distributed throughout the supply chain.</p>
What are the work conditions of cocoa farm labourers?	Work conditions of farm labourers is often very poor, and some West African cocoa farms include unlawful child labour practices.	<p>Hook (preparing for viewing): <i>Still images from videos below – speculate what is happening.</i></p> <p>Chocolate – Not So Sweet After All (10min Youtube) Modern day slaves from Mali in Cote d'Ivoire Cocoa production (ALERT: Some disturbing imagery).</p> <p>The Dark Side of Chocolate (45 mins Youtube – break down into 10 minute sections)</p> <ul style="list-style-type: none"> Decoding activity (e.g. Cloze) to be shared around class 3 Level reading guide activity students to describe the factors that are responsible for poor working conditions for cocoa labourers. <p>Speculation: What could primary producers of cocoa do to increase their income? Students consider possible, probable and preferred futures for cocoa production.</p>	<p>Video interpretation</p> <p>Reading on, between and beyond the lines of text.</p> <p>Thinking skills: hypothesise / futures thinking.</p>	<p>Not So Sweet: https://www.youtube.com/watch?v=4Gktid0YO9s</p> <p>Dark Side: https://www.youtube.com/watch?v=7Vfbv6hNeng</p>	<p>Students can describe and explain the poor labour practices on some cocoa farms.</p>
Can cocoa farming ever be sustainable?	The Konye farming cooperative [Cameroon] undertakes	<p>Hook: What is meant by sustainability? Paired discussion of Pillars of Sustainability image.</p>	Diagram interpretation	Image of the sustainability stool	Students can write a definition of sustainability that focuses on economic, social and environmental

	practices to support economic, environmental and social sustainability	<ul style="list-style-type: none"> Students to watch Video of Konyee cooperative, taking notes of examples of environmental, social and economic sustainability. Students tabulate different forms of sustainability in the Konye farm cooperative Students to discuss & write an evaluative response to: “There is no incompatibility between development and Forest Protection” <p>[differentiate: lower ability focus on Konye, more able students take a broader view of Cocoa Industry]</p>	Thinking and writing skills	Konyee farming [Greenpeace, 2015, Youtube 7:45] https://www.youtube.com/watch?v=tm_LjHV47C8	<p>wellbeing for future generations.</p> <p>Students state examples of economic and social benefits of diversified organic farms of Konye that produce Cocoa.</p> <p>Students evaluate whether they think cocoa farming can become sustainable.</p>
<p>How might cocoa production become more sustainable in the future?</p>	Fair-Trade cooperatives bring benefits to local cocoa farming communities, such as guaranteed prices; division of profits; increased decision making; training and education; and community projects.	<ul style="list-style-type: none"> The chocolate trade game <p>This game [spread across two lesson] highlights the difficulties Ghanaian workers in the chocolate trade face, as well as the positive part that trade can play in communities that are developing their economies.</p> <ul style="list-style-type: none"> Explore local community views on the International Cocoa Initiative ‘Yen Daakye’: what signs are there that this is ‘Fair Trade’? Students to design a leaflet to go with a new brand of fair trade chocolate, explaining what benefits it brings to cocoa producers. Students to Complete Structured Overview Graphic Organiser Unit Summary written response: What are your new understandings about, and feeling towards global chocolate production? 	Participatory skills of co-operation	<p>Trade Game downloadable pdfs [including instructions; and role-play cards; follow up discussion; and cocoa in Ghana]: https://www.christianaid.org.uk/index.php/schools/chocolate-trade-game</p> <p>https://www.bing.com/videos/search?q=Testimony+of+cocoa+labourers&gpvt=Testimony+of+cocoa+labourers&view=detail&mid=92B17BCED90CEE5112BD92B178CED90CEE5112BD&rvsmid=F445F4569882252D7B14F445F4569882252D7B14&FORM=VDOVAP</p> <p>Yen Daakye vox pops worksheet</p> <p>Graphic organiser</p>	<p>Students are able to demonstrate participatory outcomes.</p> <p>Students discuss aspects of game that demonstrate fair trade.</p> <p>Students are able to identify viewpoints and values of Yen Daakye stakeholders and Fair Trade NGOs.</p> <p>Students to write a personal response, with a focus on the ‘What is where, why there, and why care?’ framework</p>

Summative Assessment NCEA Internal 1.7: *Sweet As? The global distribution of cocoa production*