



Assignment 2 – Unit of Work

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How can an information report be used to share knowledge about Australia's close neighbour Indonesia?

Year Levels:3

Learning Areas: English, Geography

Strands: Literacy, Language, Geographical knowledge and understanding

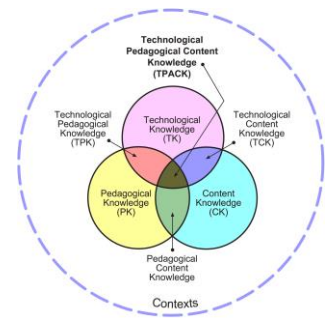
Duration: 10 lessons - 3 weeks

Inquiry Overview

This unit of inquiry is the production of an information report on Indonesia, in which students will create a digital resource that is sharable with other students in the online domain. The report will require students to locate, collate, appraise and interpret information, from a variety of sources, which will then form the foundation of knowledge that students will use to create reports that are engaging for other students, teachers, and classes. Students will be expected to use skills of inquiry to source information and will use a variety of ICT and numeracy skills to enhance the quality of their resource.

Justification

In this section you are required to explain how your unit plan draws together your Technological Pedagogical Content Knowledge (TPACK). Please respond to the following guiding questions:



1. Identify the technologies that will be used by yourself and students in this unit.

Teacher: Personal computer, IWB, Skype, Public Screen

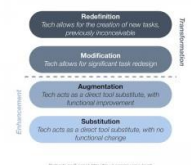
Students: IWB, student computers, school intranet, personal server/devices, online websites, Popplet Lite app, iPads, voice recording devices, Skype, Scootle object 'Snappy'.

2. As the teacher, how does your use of these technologies draw together your technological pedagogical content knowledge?

The unit synthesizes the three key areas of the TPACK Framework. Diverse pedagogies have been adopted, including individual, small group and whole class activities, assessment strategies, extensive questioning and scaffolding, and modeling of explicit tasks to best enhance student achievement outcomes. Pedagogical knowledge has influenced the selection of technologies across the unit to give opportunities to students with a variety of understandings and ability levels. Technological knowledge is drawn on, and demonstrated by the choices of technologies in meeting the transformational level of the SAMR model. The knowledge of technology has been used to modify and redesign learning tasks to enhance learning opportunities for students, such as their ability to share and discuss a final product in an online learning community. Finally, content knowledge is expressed through the specific learning outcomes and content descriptors linked with the Australian Curriculum throughout the unit. The technologies used across the unit enhance the student ability to meet the content descriptors and elaborations for the unit, for example, the use of the Popplet app and iPads allows students to mind map ideas and support their group collaboration as is stated by the curriculum for English: Listen to and contribute to conversations and discussion to share information and ideas and negotiate in collaborative situations (ACELY1676). The variety of technologies used across the unit link together the essential elements of the TPACK framework.

3. Which level of the SAMR Model would you describe the use of technology in this unit? Why? See <http://bit.ly/13EZ1U6>

The unit of inquiry responds to multiple levels in the SAMR model. Some technologies have been used at the augmentation level, while others have transformed the lesson, reaching the modification stage. The major assessment and overarching outcomes for the lesson require students to produce a digital resource using the 'Snappy' learning object from Scootle, which shares similarities to Prezi, and results in a presentation with a URL address for sharing with an online audience. Skype in the Classroom will also be used to connect with individuals and "experts" with knowledge in the field of research to build the students' information bank. Both these learning tasks reflect the SAMR modification level, as the technology significantly changes the set tasks and allows students to expand their understanding of how information can be gathered. Without the use of these technologies, the tasks of sharing student created resources and finding authentic information sources would be impossible, and as such the technology is fundamental to improving student understanding and knowledge. Furthermore, other technologies, such as the Interactive Whiteboard, the Popplet Lite app, and iPads engage with the Augmentation level of the SAMR model, where technology substitutes existing tools, but with significant functional improvement. The iPads and Popplet application allow students to brainstorm ideas in a way that can be saved, stored and shared with others. Likewise, the use of the IWB allows for students to share digital projects with the class and edit them immediately, enhancing the task through functional improvements.



4. How does your unit of work and selection of ICT incorporate the three principles of Universal Design for Learning?

The three principles for Universal Design are as follows: Multiple means of representation, multiple means of action and expression, and multiple means of engagement. These three areas are incorporated across the unit to support the inclusivity of learning for all students.

Multiple means of representation is demonstrated throughout the unit in a number of ways. Explicit examples are lessons in which the IWB is used to visually model tasks, while the teacher simultaneously verbalizes the expectations and outlines the tasks. Another example is when students will be given opportunities to share information and ideas by using visual representation such as butcher's paper mind mapping, the use of technology such as the IWB and Popplet Lite app, as well as by verbally communicating with peers in class meetings/discussions.

Multiple means of action and expression involves the organization of ideas and the way in which the students present information. While all students are expected to create an information report, there are opportunities for students to express thinking by using voice recording software to record their knowledge and understanding, as well as to create visual representations of information through data displays, images and diagrams. A variety of both formative and summative assessment is also used to gauge student understanding in authentic, effort-based ways.

Students will be engaged in learning through a diverse number of activities and tasks. In particular students will be presented with the opportunity to use different technologies and work in different groups. Students will also be engaged by the inquiry based unit, and the opportunities created to investigate their own areas of interest within a prescribed topic.

Stage 1: Learning Intentions (desired goals)

What is worthy of understanding?

Established Goals: Australian Curriculum

General Capabilities

- Numeracy
 - Estimating and calculating with whole numbers
 - Recognising and using patterns and relationships
 - Using fractions, decimals, percentages, ratios and rates
 - Using spatial reasoning
 - Interpreting statistical information
 - Using measurement
- ICT
 - Investigating
 - Creating
 - Communicating
 - Managing and Operating ICT
 - Applying Social and Ethical Protocols and Practices
- Literacy
- Critical and Creative Thinking
- Personal and Social Capability
- Ethical Understanding
- Intercultural Understanding

Relevant Learning Continuum Descriptions:

Numeracy: At level 3, by the end of year 4. Student will:

Interpret data displays: collect, record and display data as tables, diagrams, picture graphs and column graphs

ICT: At level 3, by the end of year 4. Student will:

Locate, generate and access data and information: locate, retrieve or generate information from a range of digital sources

Collaborate, share and exchange: use appropriate ICT tools safely to share and exchange information with appropriate known audiences

Recognise intellectual property: acknowledge when they use digital products created by someone else, and start to indicate the source

Learning Area	
English	
Relevant Strands and Content Descriptors	Relevant Elaborations
<p>Strand: Literacy Sub-strand: Creating texts</p> <p>Content Descriptor: Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose (ACELY1682)</p> <p>Content Descriptor: Use software including word processing programs with growing speed and efficiency to construct and edit texts featuring visual, print and audio elements (ACELY1685)</p> <p>Sub-strand: Interacting with others</p> <p>Content Descriptor: Listen to and contribute to conversations and discussions to share information and ideas and negotiate in collaborative situations (ACELY1676)</p>	<ul style="list-style-type: none"> • using print and digital resources to gather information about a topic • selecting appropriate text structure for a writing purpose and sequencing content for clarity and audience impact • using appropriate simple, compound and complex sentences to express and combine ideas • using vocabulary, including technical vocabulary, relevant to the text type and purpose, and appropriate sentence structures to express and combine ideas • using features of relevant technologies to plan, sequence, compose and edit multimodal texts • participating in collaborative discussions, building on and connecting ideas and opinions expressed by others, and checking students' own understanding against group views
<p>Strand: Language Sub-strand: Text structure and organisation</p> <p>Content Descriptor: Identify the features of online texts that enhance navigation (ACELA1790)</p>	<ul style="list-style-type: none"> • becoming familiar with the typical features of online texts, for example navigation bars and buttons, hyperlinks and sitemaps
Geography	
<p>Strand: Geographical understanding and knowledge</p> <p>Content Descriptor: The location of Australia's neighbouring countries and their diverse characteristics (ACHGK016)</p>	<ul style="list-style-type: none"> • describing the similarities and differences between their local place and places in neighbouring countries in their natural and human characteristics
Cross-Curriculum Priorities	
<p>Cross-Curriculum Priority: Asia and Australia's engagement with Asia Organising Idea: Asia and its diversity</p> <p>OI.1 The peoples and countries of Asia are diverse in ethnic background, traditions, cultures, belief systems and religions.</p>	

Relevant links to the Year Level Description and Achievement Standards:

Year Level Description:

- In Years 3 and 4, students communicate with peers and teachers from other classes and schools in a range of face-to-face and online/virtual environments.
- Informative texts present new content about topics of interest and topics being studied in other areas of the curriculum.
- Students create a range of imaginative, informative and persuasive types of texts including narratives, procedures, performances, reports, reviews, poetry and expositions.
- Students use the geographic concepts of environment and space to examine the similarities and differences between places in terms of the climate and the types of settlements.
- Students' mental maps of the world and their understanding of place are further developed through learning about the representation of Australia and the location of Australia's neighbouring countries, and comparing places both within and outside Australia.

Achievement Standard:

- Students understand how language features are used to link and sequence ideas. They understand how language can be used to express feelings and opinions on topics. Their texts include writing and images to express and develop in some detail experiences, events, information, ideas and characters.
- Students create a range of texts for familiar and unfamiliar audiences. They contribute actively to class and group discussions, asking questions, providing useful feedback and making presentations. They demonstrate understanding of grammar and choose vocabulary and punctuation appropriate to the purpose and context of their writing.
- They identify interconnections between people and places. They describe the location of selected countries and the distribution of features of places.
- Students pose simple geographical questions and collect information from different sources to answer these questions.

Knowledge (key concepts)	Skills
<p style="text-align: center;"><i>Students will KNOW that:</i></p> <ul style="list-style-type: none"> • The purpose of an information report is to inform the audience about a topic of interest • The key language features of a report are a formal tone, topic sentences, paragraphs, a general statement, and a concluding statement. • Multimedia elements, including images, audio recordings and data representations can be used within a digital report • Online texts have a number of features, specifically sitemaps, navigation toolbars and hyperlinks • Listening and contributing to discussions is fundamental in the process of sharing information and collaborating ideas • There is a variety of software available for both the constructing and editing process of creating texts • Australia has a vital relationship with close, neighbouring countries of Asia, specifically Indonesia. • The diverse characteristics and location of Indonesia. 	<p style="text-align: center;"><i>Students will BE ABLE to:</i></p> <p><i>Learning Area:</i> English</p> <ul style="list-style-type: none"> • Plan, draft and publish an information report, demonstrating their ability to control the text structure and language features. • Present information competently using topic sentences, a general statement, paragraph structure and a concluding statement. • Sequence content in an appropriate way for the text style, and to maximize impact on the desired audience. • Demonstrate a broad vocabulary of technical terms when making statements. • Implement the use of relevant technologies to compose and edit texts • Recognise the value of, and participate in collaborative group discussion, to enhance personal understanding of content. • Describe the human, cultural, societal and environmental features of Indonesia. <p><i>Numeracy general capability:</i> Element: Interpreting statistical information</p> <ul style="list-style-type: none"> • Examine displays of data and statistical information, and consequently display findings as diagrams and tables. <p><i>ICT general capability:</i> Element: Investigating</p> <ul style="list-style-type: none"> • Retrieve and interpret information and data from a range of online sources including prescribed websites and search engines. <p>Element: Communicating</p> <ul style="list-style-type: none"> • Use appropriate technologies to collaborate, share and exchange knowledge with other learners, educators, and experts in the online domain. <p>Element: Applying Social and Ethical Protocols and Practices</p> <ul style="list-style-type: none"> • Recognise the meaning of intellectual property, and begin to acknowledge the work of others and indicate the source of digital products.

Enduring Understandings	Essential Questions
<p>Students will <i>UNDERSTAND</i> that:</p> <ul style="list-style-type: none"> • An information report conveys factual information to a prescribed audience, and is the simplest form of factual reading material including newspaper and magazine articles, online journals, websites, and even books. • Technology can be used to communicate with others and share information, to edit and produce texts, as well as to share published work. • Language features can be used to dramatically change the tone and style of a text. • There are significant diversities and similarities between Australia, and close neighbours Indonesia. • The peoples and countries of Asia are diverse in ethnic background, traditions, cultures, belief systems and religions. (OI.1) 	<p>Key questions to guide the inquiry will be:</p> <ul style="list-style-type: none"> • <i>What are the key features of an information report?</i> • <i>What types of information will be necessary to inform the audience about the topic?</i> • <i>How will information about the topic be sourced?</i> • <i>Through what media could the information collated be transmitted to others?</i> • <i>What practices are necessary to be a safe, responsible and ethical user of ICT?</i> • <i>What are some of the key similarities and differences between Australia and Indonesia?</i> • <i>What is the significance of the relationship between Australia and Indonesia?</i> • <i>What is the purpose of producing an information report?</i>

Required Resources	
<ul style="list-style-type: none"> • Scootle Learning Object – ‘Snappy’ TLF-ID L11652 [http://www.scootle.edu.au/ec/pin/WHTSPO?userid=170416] PIN: WHTSPO <p>NOTE: will need to ensure the necessary software has been installed on student computers before commencement of unit.</p> <ul style="list-style-type: none"> • Ongoing access to students computers and personal servers. • IWB access • List of prescribed websites/search engines made accessible via the school intranet 	

Stage 2: Assessment For Learning

What evidence will determine understanding?

Evidence will be gathered from:

<ul style="list-style-type: none"> <input type="checkbox"/> K-W-L chart <input type="checkbox"/> Brainstorming <input checked="" type="checkbox"/> Mindmapping <input type="checkbox"/> Graphic organisers <input checked="" type="checkbox"/> Observations <input checked="" type="checkbox"/> Class discussions <input checked="" type="checkbox"/> Prompts <input checked="" type="checkbox"/> Questioning <input type="checkbox"/> Portfolios 	<ul style="list-style-type: none"> <input type="checkbox"/> Checklists <input checked="" type="checkbox"/> Peer feedback <input checked="" type="checkbox"/> Exit cards <input type="checkbox"/> Practical demonstration <input type="checkbox"/> Journal entries 	<ul style="list-style-type: none"> <input type="checkbox"/> Surveys / quiz <input checked="" type="checkbox"/> Work samples <input type="checkbox"/> Oral presentations <input checked="" type="checkbox"/> Anecdotal comments
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Summative Assessment

- The summative assessment task for this unit will be the final production of an information report that will be shared online with other students, and evaluated by peers ('2 stars and a wish' – 2 things that were excellent and one thing the students wish had been included), as well as by the teacher against a holistic rubric.
- A holistic rubric will be used to assess students using the following success criteria:
 - The student has produced a high quality, digital information report using the interactive presentation tool 'Snappy', and has demonstrated the ability to plan, draft and publish work.
 - The work is free from spelling and grammatical errors, and shows appropriate expression in sentences. Key features of the information report have been adopted by the student (i.e. general statement, topic sentences, paragraphs, and concluding statement).
 - The student has incorporated mixed media to enhance the presentation.
 - The student has identified the sources from which information and media has been gathered, demonstrating safe, ethical and responsible use of ICT.
 - Statistical information has been included through the use of diagrams, tables, and other appropriate visual data displays.
 - The student has used terminology appropriate to the text type and has provided accurate information to the audience.
 - A rich understanding of Indonesian society and its environment, people, and culture has been demonstrated by the student.
 - The student has shown critical thinking towards the crucial relationship between Australia and Indonesia.

Formative Assessment Strategies

Refer to <http://bit.ly/14746uj>

Strategic Questioning

Deliberate questions will be posed to students through the 'fish bowl method' (child chosen at random) as to give all students the opportunity to engage in critical thinking. A combination of both closed and open-ended questions will allow for assessing students' understanding, as well as to stimulate cognitive processing. Allow students time to organise thoughts and prompt for elaboration and explanation of answers. Questions that will be posed are specifically the essential questions that underpin the unit of inquiry (identified in stage 1).

Teacher Feedback (see <http://bit.ly/12FlsYZ>)

Over the course of the unit students should be provided with both oral and written feedback on the standard of their work, their strengths and weaknesses, advice on how to improve and best reach the educational outcomes, and should have no comparisons to the work of others. Feedback should be specific, concise and constructive, and should aid students in reaching the success criteria for the unit.

Peer Feedback

Will occur in the form of group/class meetings throughout the unit. It is an open, accepting environment in which there is zero tolerance for put-downs. 'Two stars and a wish' will be used over the course of the unit (including as part of the final, summative assessment), however, during the unit this will be an opportunity for students to provide one-another with feedback on how to improve their work, and to identify when students have achieved the success criteria. If students are competent in this style of feedback, it can be developed further through the use of the 'traffic light model', in which students can review the work and give visual cues (green for success criteria, and amber for improvement) to support the understanding of their classmates.

Student Self-assessment

This requires students to have a competent understanding of the success criteria, so that they are able to analyse their work, their strengths and weaknesses. Students can be provided with a rubric featuring the success criteria, which students can use to monitor the quality of their work. Students may also lead a three-way-conference with teachers and parents to verbally communicate their understanding of the success criteria and learning outcomes.

Formative use of summative assessment

While summative assessment is defined as assessment *of* learning, formative assessment is assessment *for* learning. However, the understanding of students determined by summative assessment can be used to improve understanding and outcomes in other learning areas and future topics. It is vital that the teacher makes use of the results obtained from summative assessment and that assessment responds to all learning styles, with a particular focus on the Universal Design for Learning. It also has a particular focus on using summative assessment to identify 'where the student is at' and 'where the student needs to be'.

Stage 3: Planning the Learning Activities

'What learning experiences will enable students to achieve the desired results?'

Using the Stages of Inquiry Learning

See <http://bit.ly/15Qslq8> and <http://bit.ly/122fMyq>

Tuning In

Lesson #1:

- Introduction to unit of inquiry
- Pre-assessment activity (Think, Pair, Share), students identify what they know about writing an information report, the features of a report, where they have seen reports before etc.
- Establish students understanding of why we might write reports, the purpose, invite students to ask questions.
- Introduce specific topic area for inquiry, identify what students know about Indonesia and why it is significant to Australia (create mind map on IWB). Allow students to relate personal experiences.
- Express focus of the unit: ability to create an information report, as well as understanding of the relationship between Indonesia and Australia.

Finding Out

Lesson #2:

- Introduction to safe, responsible and ethical use of ICT –model how to appropriately save documents and identify authorship of online data.
- Scaffold the process of using a search and navigation tools
- Students begin researching, using worldbookonline.com, commons.wikimedia.org, worldatlas.com, factmonster.com, and nationsencyclopedia.com as an initial starting point (these will be hyperlinked through the school intranet).
- On IWB visit [<http://www.asiaeducation.edu.au/sites/goindonesia/index.htm>] and explore site as a whole class activity.

Lesson #3:

- Continued time for research, opportunity to explore outside of prescribed sites.
- First group meeting time to reflect on understanding so far and to share knowledge with others.
- Modeling will occur during this lesson on how to construct and organise the report i.e. topic sentences and paragraphs (this should run on from previous English literacy units, in the form of summative assessment used as formative assessment)

Lesson #4:

- Model on IWB creating visual data representations for reports. If necessary, students may be directed to prescribed websites [<http://www.factmonster.com/ipka/A0107634.html>] and [<http://www.factmonster.com/ipka/A0107296.html>]
- Using Excel (this will have been used in previous science lesson) students must create the following:
 - A comparative table showing differences between Australia and Indonesia. Brainstorm information that may be relevant to include in the tables e.g. population, number of islands, life expectancy, coastline etc.
- Students will be able to save their creations as images/documents for use in reports
- Questioning, written anecdotal notes (teacher feedback) and peer feedback for assessment for learning.

Sorting Out

Lesson #5:

- Analysis of information collected and process of determining what is good-quality, relevant material.
- Students to identify the topic areas for their report and to organise information appropriately. Opportunity to use any creative method, such as using word processing software to create subheadings, using butcher's paper/ Popplet app & iPads to mind map ideas etc.
- Topic sentences developed using MS Word under sub-headings. Students will also be given the opportunity to make voice recordings of their thoughts, ideas and information, particularly those having difficulty typing.
- Specific questions during lesson to gauge understanding and to determine engagement with the purpose of the inquiry process (formative assessment).
- Peer feedback using 2 stars and a wish.

Going Further

Lesson #6:

- Using 'Skype in the Classroom', communicate through video calling people living/working in Indonesia, or with an "expert" about Indonesian culture. Focus of this lesson is on using alternative methods and technologies to source information.
- Following the "interviews" students will be able to share the information they have gained with small groups in the class and continue to add new information to their word processor documents/voice recordings/other media such as diagrams.
- Opportunities for students to suggest and seek other methods of sourcing valuable information e.g. communicating with people in the community, art gallery etc.

Making Conclusions

Lesson #7:

- Exploration activity as formative assessment to gauge shifts in the students' understanding from the commencement of the unit.
- In groups students will source a variety of resources that could be defined as an information report including websites, books, posters etc., and will use mind mapping on paper, IWB or the Popplet app & iPads to brainstorm a list of the successful and unsuccessful features of the report, use a jigsaw learning style process
- Developing questions about the process so far and the purpose of the inquiry, as well as to make suggestions about further ways of sourcing and displaying information they may now wish to include.
- Introduction to the Scootle object 'Snappy' and how to access presentations. Students to explore the object and experiment with its features.
- Class meeting as final discussion and questioning before students begin to create presentations.

Taking Action

Lesson #8:

- Allocated time for students to produce presentations using 'Snappy' (Scootle learning object pre-installed to student computers). Students to collate information from previously saved files including word processed files, images, voice recordings, tables etc.
- Students will be given time to ask questions about the process, and share feedback with other students in the class using the traffic light model.

Lesson #9:

- Lesson 9 will be a follow-up to lesson 8, continue working on, and complete presentations for drafting and publishing.
- Students will share their work with a partner, as a method of peer-editing and appraisal.
- Draft, edit and complete presentations.
- Discuss and identify what they can now DO with their completed piece of work.
- URL links will be posted to the class blog to share with other classes at a local, national and international level, as well as with parents and the local community.

Reflection

Lesson #10:

- Students will reflect on the process by:
 - Sharing presentations with that class
 - Self-assessing work and linking their product with the success criteria for the unit, as well as making statements about what they now know and can do
 - Posing and answering their own questions in terms of how their understanding has changed.
 - 2 stars and a wish process of assessing peers
 - Communicating with audience and accepting comments and feedback online
 - Class discussion about the unit and the inquiry process

Stage 4 – Lesson Plan

Lesson Number #4

Inquiry Learning Stage: Finding out

Lesson number in this stage: 3

Learning Intentions

Learning Area(s):

English > Creating texts

Geography > Geographical knowledge and understanding

Content Descriptors:

- Use software including word processing programs with growing speed and efficiency to construct and edit texts featuring visual, print and audio elements (ACELY1685)
- Plan, draft and publish imaginative, informative and persuasive texts demonstrating increasing control over text structures and language features and selecting print, and multimodal elements appropriate to the audience and purpose (ACELY1682)
- The location of Australia’s neighbouring countries and their diverse characteristics (ACHGK016)

Links to Numeracy general capability

The numeracy capability for interpreting statistical information explicitly states that students will interpret data displays: collect, record and display data as tables, diagrams, picture graphs and column graphs.

Links to ICT general capability

The ICT capability for investigating explicitly states that students will locate, generate and access data and information: locate, retrieve or generate information from a range of digital sources.

Specific Learning Outcome(s):

All students must:

- Define what statistical information is, and Identify areas of comparison between Australia and Indonesia that can be represented as statistical data.
- Brainstorm effectively as a member of a small group
- Attempted to use, and experimented with Microsoft Excel to create a table for collected data.
- Have an understanding of similar and different characteristics of Australia and Indonesia.

Most students should:

- Identify the relevance of statistical data in an information report
- Successfully produce a table using Excel to organise statistical data
- Understand statistical data is typically represented numerically and gives specific information

Some students could:

- Seek further statistical data to include within report
- Use Software to create additional data representations of relevant material, such as a graph
- Question mathematical terminology represented in statistical data, such as percentages

Resources

- Student computers
- IWB
- Microsoft Excel
- [<http://www.factmonster.com/ipka/A0107634.html>] and [<http://www.factmonster.com/ipka/A0107296.html>] to prompt students with difficulty locating online sources.
- Example poster featuring statistical data display.

Assessment

The assessment task for this lesson will be the student's ability to produce a quality table, including appropriate and accurate information. Anecdotal notes will be recorded on students' willingness to brainstorm ideas as part of a group. Note when students suggest types of information that may be relevant, as well as on the ability of the student to locate data using online resources. The lesson will also conclude with a class discussion, in which specific questions and prompting will be used to gauge student understanding; teacher feed-back will be offered throughout the lesson to optimise student outcomes.

Lesson Outline

Connect / Starter

5 min

- Show students example poster featuring statistical information. Ask: Is this an information report?
- Open discussion about language features of an information report. Ask: What is the significance of the tables/graphs in this poster? How does this type of information make you feel about the poster?
- Introduce concept of statistical information. Ask: Where have you seen this type of information before? (Scaffolding: on the news, in information books), How do you think this type of data display would support an information report?
- State to students the intended outcomes for the lesson

Activate

20 min

- Explain to students explicitly what statistical data represents, and the different ways of displaying data.
- Ask: How might we go about making our own table to support the reports? What kind of information would we be looking for? (Numerical data), what steps would we need to follow?
- As a whole class produce procedural list using IWB
 - List should include:
 - Brainstorm types of information to seek online
 - Use internet browsing skills to locate information to be included
 - Create a table of information
 - Save documents to personal server or device
- Invite students to form small groups and brainstorm types of information. This may require extensive scaffolding for this age group, depending on ability. If necessary ask: What are the kinds of things you want to find out about a country quickly? E.g. how many people live there? How big is the country? How many children go to school? How many cities? How many islands? Etc.
- Encourage students to use correct terminology such as ‘population’, ‘statistics’, ‘country’, ‘continent’ etc.
- Teacher should spend brainstorming-time moving between groups and offering prompts where necessary and stopping class if needed to provide further scaffolding.
- As a whole class share ideas
- Explicitly model to students how to produce a table using Microsoft Excel

Demonstrate (Assessment for Learning)

20 min	<ul style="list-style-type: none"> • Students are given time to investigate the areas they have chosen to research and to produce tables of statistical data. • The teacher will walk around the classroom monitoring student progress and provide specific verbal feedback where appropriate to encourage and support student understanding of the task and content, for example, note where students have been successful in their work and identify weaknesses for improvement. • Allow students time to explore the Excel program; some students may complete work quickly and move on to creating other data representations. • Students will be able to communicate privately with their peers and to gain further understanding of the task. • During the process stop class and ask: does anyone have any questions they would like to ask? Does anyone want to share what they have done so far with the class? • Take time to have students at a lower-ability level verbalise their choices and understanding, make anecdotal notes to ensure these students are assessed appropriately, and are provided with further support in developing their research skills and Excel tables.
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Consolidate / Plenary	
10 min	<ul style="list-style-type: none"> • At random, invite students to share what they have produced with the class using the IWB. Ask students to identify where the success criteria has been met for the unit of inquiry, the lesson outcomes, and how they might apply this to their own work. • Using a 'think, pair, share' strategy ask students to identify one significant thing they have learnt from the lesson. Use these responses as anecdotal notes for assessment for learning. • Identify real life scenarios that students may use statistical information.

<p>How will this lesson cater for the needs of all students?</p> <p>This lesson will cater to the needs of all students in the sense that demonstrations will be given visually, using IWB, and verbally to students. The inquiry task allows for high-ability students to expand their personal understanding by experimenting further with statistical information, while lower-ability students will be given an opportunity to verbalise and/or graphically represent their understanding and knowledge for assessment. The assessment of the topic is formative, and while the focus is to create tables of statistical information, there is also assessment of students' ability to work within a group, and effort-based assessment involving experimentation with software.</p>
<p>What questions will you ask to evaluate students' learning, the design of the lesson and your teaching effectiveness?</p> <p>Student Questions:</p> <ul style="list-style-type: none"> • What are the key features of an information report? • What types of information can you incorporate in statistical tables? • How can information be sourced to use in a data display? • What are some of the key similarities and differences between Australia and Indonesia? • What is the significance of the relationship between Australia and Indonesia? <p>Teacher Question:</p> <ul style="list-style-type: none"> • Did students understand what was expected of them? • Was I clear in my instructions? • Did the lesson flow smoothly between the four stages of the learning cycle? • Were the students able to reach the outcomes for the lesson? • How could I adapt this lesson in future?