

TEACHERS GUIDE – TEA & SUGAR

CURRICULUM APPLICABILITY

The Tea & Sugar module is principally applicable to the junior and middle high school curricula for History, Geography and elements of other Human Society and its Environment (HSIE) studies.

The key geographical concepts covered by the module include:

- The characteristics and spatial distribution of environments
- How people and communities modify, and are affected by, the environment
- How physical, social, cultural, economic and political factors shape communities, including the global community

Key historical concepts included are:

- Knowledge and understanding of Australian Aboriginal and Indigenous peoples of the world and the nature of contact
- Knowledge and understanding of significant developments in Australia's social, political and cultural history in the 20th century, and in particular the post-WW2 period
- Use of film as an historical source

For other elements of the HSIE curriculum, topics such as civics, commerce, multiculturalism, work, employment and enterprise are applicable to the module. Key aspects include;

- Australian Identity
- Ideas of self, family, community
- Significant Australians, national symbols, celebrations and popular images
- National heritage: natural and built environments
- Population composition and changes

CONTEXT / BACKGROUND INFORMATION

The Tea & Sugar was the nickname given to a train that ran along the Trans-Australian Railway between Port Augusta (SA) and Kalgoorlie (WA). The primary purpose of the train was to supply the railway workers and their families who lived along the track across the Nullarbor Plain. From its early days dropping off dry provisions, the Tea & Sugar developed into an institution that hauled purpose-built shopping carriages stocked with fresh food and groceries. It also brought health and financial services to some people in the isolated communities.

In this module, students will view footage of the Tea & Sugar train, the communities it served and learn about the battle to build a railway across our continent.

BRIEF HISTORY

The Trans-Australian Railway was completed in 1917. It was a standard gauge line that linked the industrial centre of Port Augusta with the gold mining town of Kalgoorlie. At either end of the line, tracks of different gauges connected the line to Adelaide and Perth respectively. (See notes on rail gauges below.) During construction of the line, the thousands of workers were supplied in an ad-hoc manner by trains moving forward as the tracks progressed. However once the two ends of the line were linked, there was a need to establish more permanent workers' settlements across the Nullarbor. The men stationed at these places would carry out routine maintenance on the stretches of track, as well as provide the infrastructure for re-supplying the steam trains with water and fuel.

Owing to the full-time engagement of these workers, their families moved out along the line with them. Tiny settlements were born, often hundreds of kilometres from major towns.

Supplying the families with food and groceries was the responsibility of the Commonwealth Railways. Once a week a provisions train would run in both directions. It brought the men their pay and their wives things to spend it on. The train became known as the "Tea & Sugar", after two of the staples it carried.

It was not only dried and packaged food that the Tea & Sugar sold. A butcher's van had space for a shop front, live sheep and a small sleeping area for the butcher himself. The sheep were slaughtered as needed and sold through a window fronting onto the platform wherever the train pulled up. By the 1940's these butcher vans also incorporated large refrigerated compartments. They supplied the restaurant cars of passing passenger trains as well as the workers.

Besides meat, the train sold bread (baked at key points along the route), vegetables, fruit and household groceries. From the late 1970's onwards a mobile health clinic was attached, providing the families with access to a doctor or nurse, as well as baby health and mothercraft lessons. Banking services were available, as were religious ones, with a travelling clergyman being an occasional inclusion.

Up until the late 1970's, the shopping cars operated like a corner store. Orders were placed at the window and a staff member retrieved the items from a shelf and handed them over. Just as with the rest of the country though, such personal service became a thing of the past. In 1979, two new carriages were implemented. These were more like supermarkets and let the shoppers wander through and choose whatever they wanted. The butcher vans were dropped in 1982 in favour of pre-packaged meat.

But it was not just the mode of shopping that was changing. It was the shoppers themselves. As more and more of the line was re-laid with concrete sleepers, the need for regular work gangs fell. Likewise, the use of modern, long-range diesel locomotives diminished the requirement for en-route refueling. As the customer base dried up, the Tea & Sugar became redundant. It was eventually removed from service in 1996. A few of its shopping cars remain in the National Rail Museum in Adelaide.

Sadly, once the train stopped running, those few people who had wanted to remain behind in townships like Cook had no feasible way of buying fresh supplies. Since they were technically living on railway property anyway, the settlements were abandoned.

RAIL GAUGES

The biggest problem with uniting the country by rail was in the choice of gauge: the width between the tracks. From the beginning of major construction programs in the 1850's, the various Australian colonies adopted different railway gauge widths for reasons of tradition, cost and stubborn rivalry. Therefore, despite Federation, the states of Australia tolerated different widths of railway. In the case of some states, they even had multiple gauges operating internally. This meant that interstate passengers, freight and livestock had to change trains when crossing a border or at other internal points where gauges differed. This was a time-consuming and costly process. In 1924 the Commonwealth Government funded a uniform gauge from Sydney to Brisbane which opened in 1932. This was not extended to Melbourne until 1962. The gauge problems came to head during World War 2 when military movements northwards were badly hampered by the need to change trains and the lack of appropriate rolling stock.

The three gauges used in Australia were:

Broad (1600mm or 5'3")

Used in Victoria and parts of SA.

Standard (1435mm or 4'8.5")

Initially used only in NSW and by the Commonwealth Railways between Port Augusta and Kalgoorlie. Later used for certain lines in most states

Narrow (1067mm or 3'6")

Used in Qld, WA, SA and Tasmania. Victoria also built four 2'6" (762mm) 'narrow' gauge lines.

	NARROW GAUGE	STANDARD
PROS	Cheap to build. Cheap to maintain. Lighter, cheaper rolling stock. Can be built to turn sharper corners and climb steeper grades, meaning fewer detours over rugged country.	Can carry heavier load. Was a European standard. Was compatible with British-designed rolling stock. Smoother and faster travel

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CONS	<p>Limited load can be carried.</p> <p>Not as comfortable to travel on owing to increased movement.</p>	<p>More expensive to build.</p> <p>Required more surveying and ground preparation.</p>
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Up until the 1930's, a train journey between Brisbane and Perth would have meant changing trains at the border with NSW, then again at Albury for the trip to Melbourne and on into South Australia. Another change would have taken place at Port Augusta for the standard gauge line to Kalgoorlie and then once more for the final leg to Perth. This obviously slowed travel time and required complete sets of rolling stock for each gauge.

South Australia was perhaps the state most crippled by the 'break of gauge' issue, since it utilised all three systems in different places. In the case of the northward rail link, narrow gauge was chosen to expedite cost and construction time. This eventually became a handicap though, as there was no linkage with lines running from other states and it also limited the amount of weight the coal trains could carry. As the state developed and its need for larger amounts of coal increased, the line had to be completely replaced.

The Trans-Australian Railway between Port Augusta and Kalgoorlie was operated by the Commonwealth on standard gauge tracks, which of course didn't match the South Australian systems. It was only in 1982 that Adelaide was linked to the national railway system by a standard gauge track. Even then, it took until 1995 before an uninterrupted train trip between Perth and Melbourne was possible.

This issue of rail gauges had far-reaching effects on the development of some states, not least Australia's over-dependence on road transport for so much of its freight.

INDIGENOUS AUSTRALIANS

It's not hard to notice that most of the film clips used in "On The Rails" don't feature Indigenous Australians at all, or at least only incidentally. This is largely due to the cultural paradigms present at the time the films were made in the middle of the 20th century. At this time, Indigenous people were considered an unimportant and insignificant element of Australian society.

This would have been particularly the case in films such as those we have taken our clips from: films about railways that praised European concepts like technology, industry, modernisation, progress, mineral exploitation and 'taming a savage and/or worthless land'. Film-makers (and audiences) of that time would have felt that these concepts had little to do with Indigenous societies and so not bothered to feature the traditional landowners whose territories these trains traversed.

This absence of Indigenous people in the film clips is worth drawing to the attention of students. The very use of film as an historical record can raise issues of inclusiveness. Whose stories are being told in such a technological medium? Whilst there are plenty of ethnographic pieces that document Indigenous Australian life in Film Australia's archive, these people were often left out of documentaries that strove to portray Australia as a modern and progressive nation.

A possible classroom activity that would parallel the European, modernist perspective of these film clips is to ask students to research the cultures of the Indigenous populations who traditionally lived along the route of the east-west and north-south railways. What tribal areas are represented? How might the railway have affected their lifestyles? To what extent were Indigenous people involved in the building of the railways and the industries which the lines made possible (mining, agriculture etc.)?

Another intriguing avenue of study is to explore similarities the films had with other forms of popular culture of the time, such as literature and song. How were Indigenous Australians regarded? Why were they so often left out of portrayals of Outback life or at least portrayed negatively? For example:

"Some blacks were ready to be hostile if the occasion arose. At first they approached the camps in fear. With a little more boldness they asked for

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'Chewbac'. The early Tea and Sugar train attracted them in hordes, all clamouring for supplies. Hostile blacks bailed up a railwayman's wife at a lonely outstation because she had refused them food, or maybe because she'd given refuge to an outcast woman of the tribe.

On this occasion, the crew cut waddies, waited for the blacks to creep close to the camp and then took to them and chased them off. I've had to use a gun to frighten them."- From East Goes West by Frank Berkery, 1944.

GENERAL “CHALLENGE” NOTES

Students progress through a journey by solving challenges at different 'stops' along the way. Most of these challenges are based around the viewing of archival footage of the towns, people, geography and history of the rail line. Some of the videos are directly related to train travel and rail history, whilst others are more concerned with the society and culture of the places en route. Each clip or exercise will generate discussion points that can be pursued in class.

There are five types of challenges that the students might encounter along the way:

Multiple choice: pick the correct answer from four alternatives.

Hidden word: fill in the correct answers to reveal a word running vertically.

Drop and Drag: pair up answers and questions from a scrambled list.

Jigsaw Puzzle: arrange a broken image into its complete form.

Game: Play a simple animated game and reach a minimum score.

At the end of the module, students will be provided with a certificate with their name and school. This can be printed off as 'proof' of completing the journey.

LOCATION CHALLENGES

1) PORT AUGUSTA

The challenge is a simple video game that has students helping to load the Tea & Sugar train with supplies. There is no set maximum score they must obtain. It is intended that whilst being fun, this challenge will also get students thinking about what goods might be necessary to support isolated communities out on the Nullarbor. Note that the game will prompt students to move on if they do spend too long playing it.

Suggested discussion areas:

- What would have been the bare necessities to supply people with?
- What food items would have been problematic to supply?
- What sort of things would have been luxuries?
- How do you think the Australian diet of 50 years ago differed to that of today?
- Which part of the local community is absent? Why?

Suggested classroom/homework activities:

- Make a list of the major food items that your family goes through in a week. Try and estimate the quantities.
- Research the cost of staple foods in the 1950's relative to average income. Compare with today.

2) WOOMERA

Named after the aboriginal word for “throwing stick” or “spear launcher” the rocket range at Woomera was a major source of prestige for Australia in the decades after World War 2. At the time, Britain was actively competing in the Space Race and Australia would ride into orbit by association. The testing of new weaponry and aircraft was also a central task carried out at Woomera as the Cold War raged.

As Britain abandoned its space ambitions due to cost, Woomera gradually declined in importance. Flight experiments are still carried out there today, but the emphasis is more on peaceful science rather than military paranoia.

The clip is from 1965. It’s a typical newsreel of the time, highlighting Australia’s role in assisting European nations into space. Students will be presented with a multi-choice question asking about the purpose of the rocket featured in the clip. (It was intended to boost satellites into orbit.)

A discussion of the displacement of the Indigenous inhabitants of the lands encompassed by the rocket range is appropriate. Their battle for compensation and resettlement lasted for decades. Attention may also be drawn to the similar situation on the Maralinga nuclear testing grounds further west, and the effects of radiation and displacement upon the Indigenous population there.

Suggested discussion areas:

- Why was Australia an attractive option for rocket testing?
- What other nations might have been involved in testing at Woomera?
- Why didn’t Australia develop its own space program?
- How many countries today actually have their own space program?
- What happened to the Indigenous inhabitants of the region?
- Is this mentioned in the clip? Why not?

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Suggested classroom/homework activities:

- Research the cost of space flight. How much did America spend on its attempts to send satellites and then men into space?
- Research one of the rocket programs that was carried out at Woomera.
- Try to find out what happened to the Indigenous people who lived around the Woomera range.
- Write your own newsreel script publicising an Australian achievement.

3) TARCOOLA

Tarcoola, despite its isolation, is a significant transport node for Australian rail. Originally on the east-west Trans-Australian Railway line, it later became the junction point for the standard gauge Transcontinental Railway to Alice Springs (ie The Ghan), opened in 1980. Since that line was extended in 2004, this small town now links both Perth and Darwin to Adelaide and the eastern states.

Unifying the states by standard gauge tracks is the dream advocated in the clip. It shows a model train travelling across Australia, hindered by the differing gauges. Students will have to complete a multiple choice challenge asking them how often passengers of the day would have needed to change trains on a trip between Perth and Brisbane.

Whilst there may be more than one correct historical answer, depending on the route, it's important to note that the wording of the challenge is: "According to the model trains in the clip", in the 1940's, how many times would a passenger travelling between Perth and Brisbane have to change trains?"

By counting the times the model train stops at a fence and the narrator says "change", students will obtain the correct answer of four changes. (Technically, there would be more changes required if the passenger insisted on going through Adelaide.)

Possible discussion points:

- Why might the different states have chosen different rail gauges?
- What effects might this have had on the costs of rail transport?
- What effects might this have had during World War 2, when Australia was threatened with invasion from the north?

Possible classroom/homework activities:

- Do some research and make a list of the pros and cons of the different rail gauges.

4) OOLDEA

The clip for this challenge shows a typical visit from the Tea & Sugar train. It depicts residents shopping and using the mobile health clinic. It's interesting to observe that most of the people depicted in the clip are women and children, the men presumably being at work. All the people depicted in the clip are also white.

Students have to answer a multi-choice question about some of the services the train provided, as explained in the clip. It's important to stress the difference between services and goods.

In the "Did You Know" section, mention is made of Daisy Bates. Bates was a journalist and self-taught anthropologist from Britain who lived for nearly two decades in a tent at Ooldea. She ministered to the welfare of local aboriginals and was adamant that contact with Western culture would be the death of Indigenous culture. Modern views on the merits of Bates' philosophies and actions vary and this can be used as a discussion point in class.

Possible discussion points:

- What services that we now take for granted were difficult for Outback workers to obtain?
- How would the limited access to medical services have affected the lives of the workers?
- What ethical issues are there in an employer (Commonwealth Railways) being the sole vendor of goods and services to its staff?
- Discuss Daisy Bates. What are the pros and cons of her actions and her beliefs?

Possible classroom/homework activities:

- Ask an older person how shopping habits have changed since they were a child, in terms of hours, product choice and frequency of shopping.
- Plan a train supply journey including all the possible services that you think isolated communities might need.
- Research the life and times of Daisy Bates.

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- Research an Indigenous community which lived in the region, and what goods and resources they might have had access to.

5) COOK

The clip shows another typical maintenance outpost for the Trans-Australia Railway. This time though, the excerpt is taken from a 1965 drama (Nullarbor Hideout) concerning the adventures of children in the Outback.

Most of the video shows children in a classroom. The chief concern is the temperature and whether school might be cancelled for the day owing to heat. The multi-choice challenge requires students to recall at what temperature point the children were officially allowed to go home for the day (110 degrees Fahrenheit.)

Possible discussion points:

- Look at the composition of the class. Why do you think there are no Indigenous children there?
- How do the classroom conditions in the clip compare with your own?
- Is there a policy at your school for hot weather?
- The children in the school at Cook were all quite young. How did older children get their schooling?
- What would it be like to have the same teacher every day for all your years of school?

Possible classroom/homework activities:

- Find the equations for converting temperatures between Fahrenheit and Celsius. Is -10 degrees colder in Fahrenheit or Celsius? What other temperature scales exist?

6) FORREST

This settlement is named after Sir John Forrest, the first European explorer to cross the Nullarbor on foot. He was also one of the visionaries who supported an east-west rail link, the first Premier of Western Australia, and a Commonwealth minister and treasurer from the start of Federation. (During his time as Premier of WA he instituted a number of reforms, such as women's suffrage and a court of arbitration.)

The chief importance of Forrest throughout the 20th century was as an airfield. Before aircraft could fly non-stop between the east and west coasts, Forrest was a vital refueling point and emergency landing strip. It still has that status and is the longest sealed runway outside of our capital cities. Technically, a commercial jet could land at Forrest if it got into difficulty.

The challenge here is to assemble a jigsaw puzzle of an historic photograph. The photo depicts a mother and children receiving their weekly supply of staple foods.

Possible discussion points:

- Research Sir John Forest. What relationship did he have with Indigenous people?
- What might be the effects on some of these settlements now that they are no longer as vital to transportation?
- What happens to communities when there are no jobs for young people?
- Research an Indigenous community in the region. What was its relationship to the Trans-Australian railway?

Possible homework/classroom activities:

- Research one of the settlements along the Trans-Australian Railway. How many people live there today? (Some may no longer exist.)

7) RAWLINNA

This challenge looks at the conditions aboard trains making the Nullarbor crossing. It contrasts buffet car footage from the 1970's with early 20th century silent film of a gentlemen's saloon car. Students will no doubt have fun noticing the clothing and hair style of the periods.

The challenge asks students to hypothesize as to why there are no women or children featured in the older footage. The answer is not actually given in the clip but instead requires speculation. The reality is that just as in pubs and clubs of that era, there were facilities that were reserved for men only. This was particularly so when drinking and gambling were on offer.

The point should also be made that Indigenous Australians, regardless of gender, would have been banned from such facilities too.

Possible discussion points:

- Can you think of any places or events today where one gender is either banned or discouraged? What about segregation along racial lines?
- What are the pros and cons of gender segregation?
- Why do you think women and children were banned from mixing with men in certain premises?
- Why would Indigenous Australians have been discriminated against in this way?
- How have attitudes towards gender in reference to drinking and gambling changed? (Have they changed?)

Possible classroom/homework activities:

- Research a foreign country where the sexes are still separated in public life.
- Research the changing attitudes and laws regarding women in Australia. (For example: voting, workplace, drinking, smoking.)
- Research the changing attitudes and laws regarding Indigenous people in Australia.

8) COONANA

This short clip presents historic footage of the construction of the Trans-Australian Railway. It shows the labour-intensive methods of preparing the route and laying the tracks. Students have to extrapolate the rate of weekly progress based on the information that the labourers laid one mile of track per day for six days a week.

A possible new piece of vocabulary mentioned in the clip is “navvies”, an old term for unskilled manual labourers.

Possible discussion points:

- What technologies and methods were featured in the clip? How do they compare to today?
- What might the workers have got up to on their Sundays off?
- How might workplace safety differ between then and now?
- What are the cost advantages and disadvantages of building a railway with massed human labour compared to a more high-tech approach?

Possible classroom/homework activities:

- The building of the line between Alice Springs and Darwin, across similar terrain, only took a very short time. Research the rates of progress compared to the Nullarbor railway.
- Find the equations to convert miles and kilometres.

9) KALGOORLIE

The end of the line for this journey. The archival footage from 1949 shows open-cut gold mining at Kalgoorlie and the tremendous amount of debris produced to obtain a relatively small amount of gold. The multi-choice question asks students to recall why the miners had to evacuate the pit at one point in the clip. (Blasting was about to occur.)

Possible discussion points:

- Why is an open-cut approach used for mining gold in Kalgoorlie?
- What might be the environmental effects of such mining, including the huge mounds of mud produced?
- The mining methods shown in the clip were quite labour intensive. How did they differ from today?

Possible classroom/homework activities:

- Research the modern output of gold from Kalgoorlie in terms of weight and money.
- Research the trends in world gold prices over the last twenty years.
- Research modern methods of gold extraction, including the use of toxic chemicals to separate gold from the ore containing it.
- Find out where else gold is mined in Australia and the world.

After a correct answer for this challenge, the student will have completed this module and will be able to print off a certificate as proof of completing the Tea & Sugar journey.