Global Education

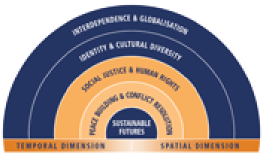
Teacher resources to encourage a global perspective across the curriculum

Globalisation and the car industry

Issue: Globalisation
Country: Australia, China
Teaching activities: The global car industry

Car manufacturing has been a global industry since its beginning. It has been a major employer and, over the last 100 years, has provided safer and more accessible transport for increasing numbers of people, including in newly industrialised countries. However car-related pollution and congestion have become an issue in many major cities.

Henry Ford introduced the assembly line. This led to mass-production, which in turn led to cars becoming more affordable.



Identity and cultural diversity
Interdependence and globalisation
Sustainable futures

Revolutionary changes

It is hard to imagine that a little over 100 years ago the car was still a new mode of transport that only the very rich could afford. Prior to the Industrial Revolution, travel was by foot or horse-drawn carriages on rough roads. From the late 1700s, there were major changes in technology, with steam-powered engines replacing manual labour. Factory assembly lines introduced new forms of work for ordinary people. There was rapid economic and social change.

Horse and buggy to automobile

A self-propelled, steam-powered tricycle, built by French inventor Nicolas-Joseph Cugnot in 1769, is recognised as the first automobile. In 1807, the French Niépce brothers developed an internal combustion engine. The first petrol-powered automobile was produced by Karl Benz, a German mechanical engineer, in 1886. The automation of the assembly line by Henry Ford sped up the production rate of cars and reduced costs, leading to them becoming more affordable.

Globalisation

The car industry has been globalised from its early days. There has been fierce competition between countries to invent better cars and obtain finance to manufacture. Countries such as Australia imported or assembled cars from Europe or the USA. Cars are still often designed in one country and built from components that originated in a number of countries by a company based in a third country.

Australia's first car, the Holden FX, combined American finance and design, cheap, unskilled migrant labour and a nationalistic and affluent Australian consumer market. The Mini was made by the British Motor Corporation (a merger of Morris and Austin, which merged with Leyland and became the Rover Group) from 1959 to 2000. The German company BMW (Bavarian Motor Works) bought the Rover Group and built the Mini in England using engines sourced from Brazil.

The USA led car manufacturing until the 1980s when Japan became a major producer. Since 2009, China has produced the highest number of cars, nearly four times as many as the USA.

Over time, car manufacturing has become increasingly automated and workers more skilled.

Australian production

Australia's distance from other countries and the distances between Australian cities led to many automobile inventions. Australia's first petrol-driven car with a fully enclosed body was produced by Harley Tarrant in 1897 in Melbourne. By 1909, Tarrant was a manufacturer, importer and distributor, building his own cars as well as acquiring the Ford franchise.

The first Ford car was imported in 1904 and, in 1908, the Model T was being produced in assembly plants in Geelong, Adelaide and Brisbane. In 1909, there were 348 sold.

General Motors-Holden's, originally established as a saddlery and leather goods business in Adelaide in 1856, evolved into a mass manufacturer of car bodies and it produced the Holden FX, Australia's first manufactured motor vehicle, in 1948. By 1958, Holden accounted for 43 per cent of car sales and, by 1960, one million had been sold. Clever advertising on the newly introduced televisions developed a loyal following for these cars.

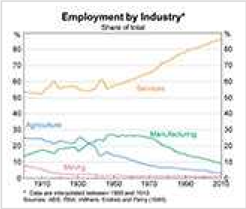
The number of passenger vehicles registered per 1,000 population increased from 153 in 1955, to 250 in 1965 and to 695 in 2010. By 2012, only 12.6 per cent of Australian passenger vehicles were built in Australia, having fallen from 30.2 per cent in 2002, as the demand for cheaper and more fuel-efficient cars or luxury SUVs increased.

Australian protection and free trade

The newly federated Commonwealth of Australia imposed customs duties on imported cars from 1901 to raise revenue for its responsibilities, encourage local manufacturers and ensure workers received a fair wage. In 1964, the Menzies government introduced local content plans. In 1980, under the Button plan, tariffs began to be reduced and assistance was provided to support transition to an open market.

Car manufacturers have had to become more efficient and export-oriented, integrating into the global system. Low production rates and the high Australian dollar have meant unit costs are high. Government assistance and cost reductions through reduced numbers of shifts and redundancies have not prevented factory closures. Nissan ceased manufacturing cars in Australia in 1992, and Mitsubishi in 2008. The remaining three companies have announced plans to close their Australian operations, Ford in 2016 and Holden and Toyota in 2017.

In 2012, the manufacturing industry directly employed 48,000 people, of whom around 17,000 worked at Ford, General Motors-Holden's and Toyota.



Emerging markets

In 2010, the world's population of cars reached one billion. High growth rates of car ownership in Thailand, Indonesia, China, India and Brazil reflect economic development and catch-up demand in those countries.

The rapidly rising middle class in China is engaging with the world through the internet, television and mobile phones, and purchasing luxury items at a vast rate. Bo, a 31-year-old teacher who lives in interior China, recently bought an American model car, whereas his parents travelled by motor scooter and his grandparents travelled by bicycle or walked.

Motor vehicles (per 1,000 people)

Data from World Bank

Private car ownership in China is increasing rapidly. The total number of motor vehicles has grown from 37 per 1,000 people in 2008 to 47 per 1,000 in 2009 and 58 per 1,000 in 2010.

Future car ownership

Globalisation has meant increasing wealth and demand for cars in newly emerging economies. Expanding markets mean continued growth for car manufacturers and related employment. Congestion, pollution, fuel and steel availability challenge future expansion, but research continues to improve safety and efficiency.