




Transport through time

The isolated nature of islands provides unique challenges for transportation and travel. Island communities have been great adventurers throughout history and have been inventive in their means of transportation. A wide variety of modes of transport has been developed in response to the need to explore beyond the confines of the island.

STRATEGY	SUGGESTED IDEAS:
<p>ANALYSIS</p>	<ul style="list-style-type: none"> ▪ Explore the history of island transport by looking at the postage stamps. For example: <div> </div> <p>What conclusions can you make about island transportation from viewing the stamps?</p> ▪ In what ways do the airports influence transportation and industry on your island? In what ways might transportation and industry be interdependent on your island? Present your findings as a PowerPoint documentary.
<p>SYNTHESIS</p>	<ul style="list-style-type: none"> ▪ Some islands, such as Singapore, have thrived economically as major Asian transportation hubs, as they are strategically lying on sea and air trade routes. Singapore's history has been closely tied to the growth of its transportation industry since the establishment of its port. Singapore is an aviation hub. <u>Singapore's Changi Airport</u> has a network of 81 airlines connecting Singapore to 179 cities in 57 countries. Approximately 30 million passengers passed through the airport in 2004. Is your island as well placed as a transportation hub for sea and air transport? Prepare a map to show your sea and air trade routes and compare with other islands. ▪ Research how imports get to your island. Choose an imported item and track its transport journey to your island and to you. Map the transport routes and type of transport.
<p>PARADOX</p>	<ul style="list-style-type: none"> ▪ Modern transportation has brought prosperity to many island communities, but at the same time it has seen the collapse of many unique cultures. What changes have taken place on your island over time as transport and communication methods have improved? Complete a 'Plus, Minus, Interesting' (PMI) exercise that analyses the impact on the community. If you had the power to reverse one of these changes, which would it be? Explain why. <div> </div>
<p>ATTRIBUTE LISTING</p>	<ul style="list-style-type: none"> ▪ From what countries do people visit your island, either for trade or tourism? Are you more popular with some countries than others? Visit your local tourism office or equivalent and list the countries of origin of visitors to your island. ▪ In what ways do people travel to and from your island? Around the island? Share your list with others. ▪ Many island nations such as Japan are interconnected by an extensive system of tunnels and bridges. Highway and railroad tunnels burrow through Japan's central spine of mountains and under the sea. Using a blank map of Japan can you predict where the links between Japan's four major islands could be located? Explain your reasons for each selection. Can you describe any significant tunnels and bridges on your island? Show these locations on a map.

<p>ANALOGY</p>	<ul style="list-style-type: none"> Islands are often described as <i>sanctuaries</i> for both flora and fauna, including <i>homo sapiens</i>. Their isolation fosters the evolution of unique species and the development of ecosystems unique to the island habitat. At the same time these environments are very susceptible to the introduction, either deliberate or accidental, of species which are inimical to the endemic populations. Increased readiness of access, brought about by modern transportation, has increased this risk significantly. What processes are in place on your island to safeguard endemic species and prevent importation of dangerous invaders, either animal or vegetable? Do you think your local processes are adequate? Is there an issue on your island resulting from the arrival of an unwanted species on a ship or aeroplane? How is the issue being dealt with? <p>Read the article at: http://www.abc.net.au/science/slab/starfish/default.htm for an account of the Tasmanian invasion of the Pacific Seastar. Prepare a picture book that outlines the story of transporting this species or other species, to an island.</p>	
<p>DISCREPANCY</p>	<ul style="list-style-type: none"> Some islands, e.g. the Greek island of Hydra, prohibit the use of private vehicles. In what ways does this add or detract from the island's attraction, either as a place to live, or as a tourist destination? Conduct a debate on the issue. There is a different 'feel' to an island without direct land access to powered vehicles. Can you describe this difference, either qualitatively or quantitatively? What degree of vehicle access and usage does your island have? Do you wish it had more, or less? Explain your position. 	
<p>PROVOCATIVE QUESTION</p>	<ul style="list-style-type: none"> The governing council on a small imaginary island is proposing to establish the island's first airstrip, allowing air access to the island for the first time. There are strong opposing opinions among different sections of the community about the proposal. Choose two friends and set up a 'Great Debate', where one acts as chairperson while the other two argue the opposing positions. Have someone film the event to enable it to be shared. (Picture: Norfolk Island) 	
<p>EXAMPLES OF CHANGE</p>	 <ul style="list-style-type: none"> Fact or fiction? Huge floating airstrips and airports could be developed on artificial islands to be built near densely populated coastal cities. Research this concept at: http://www.noort-innovations.nl/RFAGeneral.htm Develop your own futuristic transport plans that would meet the transport needs of your island. Share them with students on other islands. <ul style="list-style-type: none"> Draw up a timeline for the development of ocean-going transport, from the first raft or canoe to the biggest ocean liner currently afloat and compare this to a transport timeline of your island and other islands. Discuss any differences and similarities. It is often said that the world is becoming smaller and smaller. How did these changes contribute to our shrinking world? How do you think your island will change as there are new technological developments in the transportation industry? Describe a possible future of transport for your island. 	
<p>EXAMPLES OF HABIT</p>	<ul style="list-style-type: none"> Many island cultures have built their prosperity on the presence of key resources unique to the island. For example Nauru's economy has been largely dependent on the presence of phosphate on the island. How can island cultures adapt and diversify these single resource economies? Outline your response in a letter to the editor of your local newspaper. Traditional cargo was transported by traditional sea-going craft. Explore the traditional craft of your island and compare them with those of other islands. Compare and contrast highway and road maps of your island from the 19th and 20th centuries. After examining these maps, write a paragraph that best describes the changes in the road system over time. Invent a new mode of transportation for the future, and create maps of the infrastructure that this transportation system will need. Describe its benefits for your island. 	
<p>SKILLS OF SEARCH</p> <p>SKILLS OF</p>	<ul style="list-style-type: none"> The most noticeable feature of the transport network of many islands is its diseconomy of scale. Many islanders pay far above normal prices for basic goods and services (and, most noticeably for the transport sector, fuel), because it costs so much to transport them. On many islands around the world, homes, schools and hospitals cost, on average, six times as much to build because of the costs involved in obtaining materials. Where people are spread over many islands, the cost of services is also high. Research the costs of living on Light houses have been critical to many islands to enable shipping to be safe. Undertake a search of the lighthouses on your island. What is their history? 	

<p>SEARCH</p>	<ul style="list-style-type: none"> Deal Lighthouse is the tallest lighthouse in the southern hemisphere. What other superlatives can you find about lighthouses? For example the oldest island lighthouse, the most isolated lighthouse still manned, the most expensive to build. Talk to students on other islands to find the impact that these lighthouses have had on their island. Interview some current or former lighthouse keepers to seek their thoughts. What famous shipwrecks or shipping disasters have been associated with islands? Share stories and backgrounds, e.g. the 1917 Halifax explosion, the links between Ireland, Halifax and the Titanic, Ironbottom Sound, Bass Strait and Macquarie Island. http://en.wikipedia.org/wiki/Ironbottom_Sound http://www.parks.tas.gov.au/fahan_mi_shipwrecks/index.htm Work collaboratively to invent a board game or some other type of game based on some of the stories and information in 'Shipwrecks, Sealers and Scientists' on the Macquarie Island site. The game may involve one or two simple rules such as 'the game must have some form of currency', or 'each player must represent one of the people or animals mentioned in the stories'. <ul style="list-style-type: none"> Research early travel and the means of travel around the Pacific Islands. Map the journey of the Kon-Tiki expedition and note the islands where they stopped. http://en.wikipedia.org/wiki/Thor_Heyerdahl Students at St. Barnabas Catholic School in Chicago won the 2001 national Engineers Week Future City competition. http://www.futurecity.org/ They designed a floating city of the future, 'Maropolis', built on a platform ship 10 kilometres square. Maropolis will travel the oceans of the world in the year 2500 under fusion power, studying and developing ocean resources. Futuristic electronics and communications are just a few of the technologies developed and utilised in the city. Smaller floating islands supply farm fields, forest products, and recreational opportunities, such as Opposite Island, where the weather is always the opposite of that in Maropolis' real location. Conduct a similar competition at your school to design future islands and associated transportation systems. Share your models and reports with students from other islands.
<p>TOLERANCE FOR AMBIGUITY</p>	<ul style="list-style-type: none"> Sea-going vessels such as tankers and ocean liners weigh thousands of tonnes, but they don't sink. What are the principles at work here? Prepare a lesson to explain to a class in your school. (Picture: Sapphire Princess)
<p>INTUITIVE EXPRESSION</p>	<ul style="list-style-type: none"> Imagine you are a solitary lighthouse keeper for a long period of time. Write a series of letters to and from a loved one who lives elsewhere. Interview a lighthouse keeper on your island (if applicable) to gain an insight into the role and the nature of island transportation. Imagine you were an early settler on your island. In a story, describe the water-related transportation problems that you faced. <ul style="list-style-type: none"> Imagine the transportation of the future that will change island life. Read the ideas and transport designs at: http://www.oceansatlas.org/unatlas/about/oceansofthefuture/background/seemore3.html Design your own transport and create a design gallery. Build the models from the design.
<p>ADJUSTMENT TO DEVELOPMENT</p>	<ul style="list-style-type: none"> Consider the kinds of cargo that have travelled to and from your island over time. How has cargo been transported in the past compared with today's methods of transportation? How has the nature of the cargo itself changed? Compare the key imports and exports of your island with those of others.
<p>STUDY CREATIVE PROCESS</p>	<ul style="list-style-type: none"> How have people on your island and other islands creatively addressed the transportation issues posed by the geography of your island? For example islands without harbours, rocky cliffs, mountainous terrain. Present your findings in a documentary format.
<p>CREATIVE LISTENING SKILLS</p>	<ul style="list-style-type: none"> Record the sounds of transport on your island. Share the mystery sounds with students on other islands. Develop a podcast of your island's transport. Present it as a symphony.
<p>EVALUATIVE SITUATIONS</p>	<ul style="list-style-type: none"> The transport of goods and services in and out of island communities can be significantly affected by the weather. Collect newspaper clippings about transport difficulties on your island and / or conduct



	<p>interviews with key people associated with transport on your island to see whether the above statement is accurate or not.</p> <ul style="list-style-type: none"> Construct a pictograph of how students at your school travel to school each day. Compare this with a graph from students from other islands. Construct a similar graph from data that your parents / grandparents have given you on how they travelled to school. Conduct similar comparative studies across time and across islands.
<p>CREATIVE READING SKILLS</p>	<div> </div> <ul style="list-style-type: none"> Read <i>The Lighthouse Keeper's Lunch</i> by Rhonda and David Armitage. Undertake the science unit at: http://www.cap.nsw.edu.au/bb_site_intro/stage2_modules/Lighthse/hungry_lighthouse_kpr.htm to emphasise the isolation and importance of the lighthouse keeper's role in island transport. Review some of the early lighthouses and the more modern ones such as the automated lighthouse on St Paul's Island. <div> </div>
<p>CREATIVE WRITING SKILLS</p>	<ul style="list-style-type: none"> The coastlines of many islands are dotted with the wrecks of ships both recent and historic. Choose one wreck that is familiar to you and write a fictional account of the journey that led to its demise. Consider the purpose of the journey, the source, the crew, the cargo, the experiences and the situation that led to its being wrecked on your coast. What happened to the crew and the cargo afterwards? Present your story as an eBook. http://www.ezau.com/latest/articles/create-ebook.shtml Create a fictional island that has transportation issues. Outline the issues in an informative and interesting way. Set the era when the issues exist and develop characters that are able to represent the issues. <div> </div> <div> </div> <ul style="list-style-type: none"> Read Arthur Dorras' book <i>Isla</i>, where Rosalba and her grandmother fly over the island where she was born. Write stories about an imaginary journey where you are flying over your own island. What would you see? What would you do? Illustrate the stories in the style of Elisa Kleven's artwork http://www.elisakleven.com/. Make a class book called 'Flying over our Island'. Share it with others.
<p>VISUALISATION</p>	<ul style="list-style-type: none"> Prepare a map showing the transportation links between your island and other countries. Show the type of transport, e.g. canoe, sailboat, cargo vessel, tanker, aeroplane etc. and indicate what is carried by each. Make a poster designed to attract tourism to your island. Use CAD software to design a 3D model of your island. Allow viewers to approach from different angles. Include sectional diagrams if you can. http://www.smartdraw.com/specials/caddrawing.asp?type=31748&id=31748 Make a collage depicting public transport on your island. What conclusions can you draw about your island's public transport from viewing the collage? Take video or still shots from your car or bus trip or from your walk to school. Place the video clip or photos into a gallery and compare them with the view that other students have on their way to school. Discuss any differences or similarities. <div> </div> <div> </div> <ul style="list-style-type: none"> Prepare a mural of photos of island harbours around the world. List the similarities and differences. Evaluate which harbours are most effective in supporting island economies. Make scale models of your island's transport. Test your models in the water. Can you add a motor and remote control and test them? The fictional island of Sodor is famous for being the home of Thomas the Tank Engine and...

associated trains and trams. Read some of the *Thomas Tank* stories by Vere Awdry and view the video clips. Can you develop a model that has a similar transportation network and characters other than trains?

Develop a short video clip of the adventures of your vehicles and island transportation system, or use clay animation software.

- View the images of floating islands at: <http://yesworld.com/floatingislands/index.html> and <http://www.smugmug.com/community/Bryce/keyword/bryce#16926286> Using digital imaging software, such as Photoshop, create your own images. Use the free images at <http://www.mapsandmore.com/maps/floating.html>.
- What are the energy sources on your island? Draw a graph to depict the main sources such as gas, hydro- electricity, wind, coal, nuclear, solar and other. Conduct a survey of students at your school to see what the main energy source is for their home. Discuss your list with students from other islands. Undertake the 'Engineering the Earth' unit at: http://www.teachengineering.org/browse_curricularunits.php to gain deeper understandings in this area. Describe the current and future energy issues associated with your island and judge which you think are the best. Portray your findings in visual format.

STUDY OF PEOPLE



- Throughout history, islands have been traditional stopping places for travellers and explorers. Research the life of a significant historical visitor to your island. Has the person also visited other islands? If so, compare your research with students from those islands.
- Who are the great travellers on your island, now and in the past? Prepare a short biography of travellers.
- Record your own travels in your lifetime. Show this record as a photographic timeline or photographic essay.
- List all the types of transport you have used on your island. Collate a school list and compare it with a similar list from students on other

islands.

- Islands also attract stories of pirates and buried treasure. Does your island have any pirate legends? Write an account of a pirate episode attributed to your island history.
- Over time, many island workers have had to move off-island to find work. Has this been the case for your island? There are many recorded instances of island workers being exploited while working for other powers in other countries. Research one instance of this issue and prepare a PowerPoint presentation for your class.
- Read about the practice of 'blackbirding' in the late 1800s at: <http://www.abc.net.au/gnt/history/Transcripts/s1197807.htm>. Why might islands have featured greatly in this practice? Provide a report of this practice from the imaginary point of view of a victim. Video the retelling of the imaginary character's story, together with images and maps.
- It is common for people in island communities to travel elsewhere for education or training. Families often make great sacrifices in order for their children to be educated elsewhere. Many young people do not return, and the community derives no benefit from their acquired skills and knowledge. Do you think they should be required to return? How would you envisage an equitable agreement that would see benefits for both the individual and the community?
- Undertake the webquest titled 'The Last Lighthouse Keeper', which outlines the story of the last lighthouse keeper on Deal Island. http://www.maritimetas.org/LLK_WQ.html

