Developing generative learning

The Ofsted Research Review: History highlights the importance of developing children’s understanding of key substantive concepts, ideas that are woven through historical content such as settlement, invasion, power. Children’s understanding grows more complex as they encounter these ideas in different contexts, enabling children to grow increasingly sophisticated schemas that support future understanding. Ofsted refers to this as generative learning. The meaning of these concepts will be different in different contexts and therefore, as teachers, we need to consider how to use our substantive subject knowledge to identify and develop understanding. Ofsted suggests that ‘Planned, systematic encounters with substantive concepts in specific contexts are likely to be highly generative.’ (Ofsted 2021:8). As teachers therefore, we need to consider which substantive concepts will be developed through our different units of study. As subject leaders we need also to identify how these concepts may be experienced across the school curriculum so that this generative learning can develop.

Trade across the empire

At the height of the Roman Empire a million people lived in Rome. Keeping them supplied required a sophisticated and extensive trade network, by land, river and sea. The empire required vast amounts of raw materials that had to be transported back to Rome. The security of these networks and the upkeep of the infrastructure was maintained by the Roman army and navy, who also needed payment and supplies.

Food was fed into Rome from different elements of the empire. The Romans built 370 major roads linking the different parts of their territories, creating almost 50,000 miles. That is equivalent to going twice around the world! Traffic within the major cities was very congested at times, however. Roads needed to be constantly maintained. While much of this was done by army engineers, merchants and civil authorities also contributed. Roads served two main purposes, to allow the army to move swiftly and to move trade goods.

While the Romans are known as road builders, it was cheaper and faster to send goods by sea than by river or land. The sea was useful for speed, efficiency and bulk but it was also the riskiest mode of transport with

Other Roman articles in Primary History

Primary History 87 – ‘I have got to stop Mrs Jackson’s family arguing’: developing a big picture of the Romans, Anglo-Saxons and Vikings – Carol Jackson and Darius Jackson
Primary History 85 – Teaching the Romans in Britain: a study focusing on Hadrian’s Wall – Sue Temple
Primary History 83 – ‘Miss, did the Romans build pyramids?’ – Alf Wilkinson
Primary History 80 – Ordinary Roman life: using authentic artefacts to achieve meaning – Hugh Moore
Primary History 70 – The Roman Empire and its impact on Britain – Sue Temple; and Reconstructing the Romans – Catherine McHarg

Trade – lifeblood of the empire: how trade affected life in Roman Britain

Karin Doull

www.gov.uk/government/publications/research-review-series-history

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bad weather and piracy. The Roman navy created safe harbours, built lighthouses and patrolled the seas for pirates.

Typical Roman vessels could carry about 75 tons of goods or 1,500 amphorae. Big vessels carried 300 tons. Many vessels carried goods from different merchants. A shipwreck was discovered with wares from eleven different traders, including pottery, metal ingots, olive oil and sweet wine. Many commodities were carried in bales or amphorae. The latter came in different shapes, showing where they were from or what they were carrying.

They were stamped or marked with information about their origin. This has allowed archaeologists to track what was being traded and where it was going. Although they look unwieldy and do not stand up, amphorae were specifically designed to be stacked with in ships.

**Amphorae**

Different goods had different shapes. Different regions had different shapes. They were also often marked either with stamps or painted information known as *tituli picti*. This gave details of what it contained. Archaeologists have catalogued the different shapes. This is known as the Dressel system, after Heinrich Dressel. This allows us to trace origins and trade routes. Further information here: https://archaeologydataservice.ac.uk/archives/view/amphora_ahrb_2005/info_intro.cfm

We know, for example, that ‘Dressel 20’ amphorae containing olive oil from Guadalquivir River in Spain were sent to Hadrian’s Wall, possibly to the Aurelian Moors stationed at Carlisle.

(Activity – trace the olive oil)

Look at these places on the map: Carlisle, Guadalquivir River, Dover, London. Using maps of Roman road and sea networks try to work out a route to get the olive oil from producer to consumer.

Many local museums have amphorae:

- see if you can work out what shape they are using Dressel classification,
- what they might have contained and
- where they might have come from.
- what does this tell us about your area?
The Roman Empire had a money economy using the same coinage throughout the empire and with a relatively simplified system of custom duties. This encouraged trade and private entrepreneurs. There was some state control of ingots of metal for example to guarantee purity but much was unregulated and open to merchants.

Above you can see a map of the Mediterranean with the major sea routes marked (and one set of road networks from Britain to Rome).

The journey from Carthage (Carthago) to Rome took three days for example. The three big areas of spending for the empire were entertainment, the army and infrastructure.

- Entertainment, (such as games, processions, triumphs) were used to keep citizens compliant.
- The army needed to be paid, fed and resourced.
- Infrastructure facilitated movement of the army and trade while also ensuring that the citizens were comfortable.

All of this required raw materials and manufactured goods.

This animal in this picture was probably destined for the amphitheatre.

**Activity – finding raw materials**

Split your class into three and give each group one of these three categories, entertainment/army/infrastructure. Allow them some time to research their area or use what they know already.

Next, get them to think about what we mean by raw materials or goods. Thinking about the focus area, what sort of items or raw materials would be needed? Make a mind-map to record your ideas.

Next, use the commodities grid below to consider where those goods might come from. Link the goods to places on your map.

- You could create a large-scale pictorial version of the map and goods being traded, with symbols for the goods.
- You could create characters from different places who try to sell their goods to the Roman merchant. How would you promote your wine from Messalia as being better than that from Gades? Who are you buying wine for, a rich trader or legionaries on Hadrian’s Wall?
How trade in the Roman Empire affected Britain

The Roman takeover was shocking and brutal. It involved wrenching Britain into a new way of life. British tribes had existed mainly as subsistence farmers with a barter economy. Romans raised taxes to support the empire, for the development of towns and facilities and for the military. Money was needed to pay for goods. This stimulated the economy although most of the people remained farmers. 10% of the population were military and 10% were in the urban centres. Many of the towns were initially populated by incomers, with native Britons as unskilled labour. In towns different classes began to grow up. Both the military and those in the towns wanted luxuries and new goods. This developed long-distance trade. In the first instance these goods and services were imported, then craftsmen relocated to Britain and finally Romano-British inhabitants developed their own versions.

Horticulture

Around 57 different varieties of new plants were introduced. Many of these we now think of as native such as pears, plums, lentils, millet and turnips. In addition, a range of nuts, seeds and herbs was introduced. This broadened the dietary range extensively because horticulture developed with market gardens to supply the towns. New technologies increased farming yields, making use of irrigation, water mills and manure. This represented the biggest agricultural reorganisation in Britain since the transition to farming.

Activity – Roman horticulture

You are going to set up your garden next to your villa. Looking at the new plants imported, what will you grow. What might you still need to import? Think about the climate of where you live? Could you create a Roman garden in your school? Look at plans and images of Roman gardens.

Further information: https://historyandarchaeologyonline.com/ancient-roman-gardens/
‘londinium, copia negotiatorum et commeatuum maxime celebre’
‘London, full of merchants and a famous centre for commerce’ – Tacitus

Roman London was at a strategic crossroads, the centre of important routes across the country and down to the coast. The Thames is a tidal river with enough deep water to take ocean-going vessels, allowing resources to be brought straight to the centre of the city. It was originally populated, not by the military but by merchants and financiers eager to get rich quick, trading to this new provincial market.

The geography of London was marshes, small islands and rivers between three hills on the north bank. It had trees and mud and that was what was used to build the city. For Romans, however, creating a city included draining land, building wharves and waterfronts, putting in drainage, infrastructure and roads. Rectilinear houses in lines facing the road (strip building) grew up although there were also still round houses in the early days. By the time of the Boudiccan rebellion there were 20,000 people living there. While the majority were men there were also women and the old. Much of the early population consisted of incomers, those seeking to make their fortune.

One of the key areas was just west of the Walbrook river alongside the Via Decumana that ran east west across the city. Here a thriving commercial centre grew up. There were granaries for storing grain, a bakery, a merchant selling high-end imported pottery, spice sellers, a jeweller creating intaglios for signet rings, a tavern with wine, olive and almonds and probably all sorts of other traders. Many of these were commodities imported from the rest of the empire. They were the items that were necessary for ‘civilised Roman life’.

A piece of Samian ware. Try to get some shards of pottery yourself or see if your local museum has a handling collection. Children can get a great thrill knowing how old the piece might be.

Activity – archaeology
Source some quality images of Roman pottery or amphorae of different shapes (just an object with plain background)

Cut them into pieces and put them in envelopes. You might also want to take some pieces out. Ask the children to work in pairs to reconstruct the artefacts. Can they find out what sort of object they have?

(Keep a copy of the originals for comparison in case problems arise and you can’t work out what it is supposed to look like!)

Activity – drama
One of these traders was an importer of pottery. He had imported a variety of wares, Samian ware and oxidized mortaria from the south of France, green glazed ware from central Gaul, Pompeian red ware and German glassware. He also had amphorae with wine, olive oil, fish sauce and dried fruit. He lived in a strip building with the shop at the front and living quarters at the back. You can find a reconstruction of his shop and more information about his life and the fate of his shop here:
https://romans.lgfl.org.uk/merchants.html

We do not know where this merchant or the skilled craftsman creating the intaglios came from, but they clearly felt they could make money in Londinium.

Using the London Grid for Learning materials you can create quite a convincing portrait of life for this merchant. What we do know about them both is that their livelihoods were destroyed when Boudicca sacked London. The jeweller buried some of his stock in an earthenware pot. The remnants of the pottery merchant’s stores were found crushed and burnt.

The story of these two would lend itself to role play. Create the character of the merchant and invite children to be visitors to his shop for one reason or another. They could be a woman and her slave wanting a piece of Samian ware for a special meal, a soldier looking to get some wine for his officer, a fellow merchant stopping to chat.

• Keep the central role for yourself and allow children time to research their backgrounds.
• What sounds would they hear?
• What would it smell like? What is underfoot?
• What do the buildings look like (have images)? Where are they in relation to each other (have a plan)?
Conclusion
The Romans invaded and subjugated the native Britons. They then set about creating Britannia Romana, the northernmost province of the empire. They invaded because they wanted the resources that Britain had to offer and so linked Britain into their trade network. They also wanted to expand their political power and control. This was secured by the strength of the Roman army. When that disappeared, trade fell apart because it required security to function. Looking at what the Romans did we can draw parallels with other empires, especially that of the British. That too was motivated by the merchant traders such as the East India Company and supplemented by navies and armies. We can also look at the modern effect of globalisation and the power of big multinational companies.

Understanding how trade works is a useful skill for all children. Developing an understanding of this generative concept will allow us to recognise the importance of trade within the other areas of study that we encounter. This will allow children to expand their understanding of this concepts as they apply it to consider causality and change and continuity within different societies and civilisations.

Karin Doull is a principal lecturer at the University of Roehampton and a member of the HA Primary Committee.

Further reading

Historical fiction set in Roman Britain

_Empire’s End: A Roman Story_ by Leila Rasheed
_Eagle of the Ninth_ by Rosemary Sutcliff

Websites

[https://romans.lgfl.org.uk/merchants.html](https://romans.lgfl.org.uk/merchants.html)
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