THEME +

Campaign! Action and Reaction

Curriculum Links: History, Literacy, ICT

Learning Objectives:

- To learn to use local maps to identify changes in industrial growth and development
- To learn about the development of the woollen industry in Leeds
- To undertake research and campaign for or against industrial change

This is designed to complement the secondary History curriculum and provides pupils with the opportunity to explore the main changes of the eighteenth and nineteenth centuries through a study of local industry and enable them to set local patterns in the context of national changes.

BACKGROUND INFORMATION

The Industrial Revolution changed the world in which we live in and began in Britain in the eighteenth century. Britain was already a force to be reckoned with as a trading power and enjoyed freedom from trading regulations that many other countries were subject to. Many forward thinking men with good ideas seized the opportunity, using their enterprising skills to implement their ideas and get their names in history books.

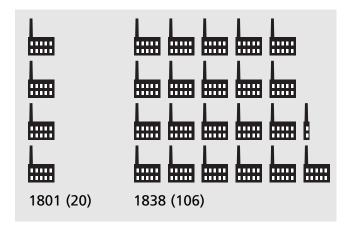
One such man was Richard Arkwright, an Englishman who recognised that although other countries were using new technologies to improve the cloth making process, there were many more improvements to be made. Arkwright invented the modern factory system, applying large numbers of machines to manufacturing processes to achieve cheap mass production.

Another prominent figure in the history of the industrial revolution, and from Yorkshire, was a man called Benjamin Gott who owned Leeds Industrial Museum at Armley Mills.

Leeds has a long history of involvement in the wool trade, a history which in the 19th century would see its skyline dotted with tall mill chimneys as shown in the Bird's Eye View of the Town of Leeds, illustrated by J Stead.

Prior to the age of steam, humans, animal, water or wind were the main sources of power. Water

Number of factories in Leeds:



being the most favourable option. The natural flow of rivers and streams was used to turn large wheels and these in turn provided relatively stable power for such activities as corn grinding, cloth fulling and wool spinning.

The river Aire at Armley, Leeds, was chosen as an ideal site for these activities because at this point the river ran wide and deep and was capable of turning any number of water wheels from the largest to the smallest.

The earliest record of milling at Armley dates from the middle of the 16th century. In 1788, by which time the Industrial Revolution and factory production was well under way, Armley Mills was bought by a Colonel Thomas Lloyd who rebuilt the mills, making them into not only Britain's largest fulling mills, but the biggest fulling mills in the world. He then leased them to Israel and John Burrows who had two semi-detached houses built above the Leeds and Liverpool Canal which can still be seen today. Visitors can contrast the lifestyle of the managers with reconstructions of the living quarters of the working class weavers. As is still

the case today, we can easily see that money bought everything.

In 1804 Benjamin Gott agreed to buy Armley Mils from Lloyd. In November, 1805, the mill was almost entirely destroyed by fire and Gott decided to rebuild using the latest technology to rebuild in fireproof brick and iron.

Gott's incentive to buy the mill was that it would be significantly more efficient and profitable if the spinning of the wool he required could be undertaken under one roof. Not to mention the fantastic location of the Mill, with improved transport links thanks to the completed Leeds and Liverpool canal in the 1780s. Armley Mills thrived under Gott's management, exporting its wares to North and South America, Europe and the Far East and he became one of the wealthiest employers in Britain.

Gott was a very enterprising man, introducing new technologies, such as steam power, and ways of working into the Mill.

Pupils might like to pit their wits against him by visiting www.mylearning.org and trying the 'Be a Victorian Millionaire' enterprise game.

Armley Mills is rich with giant machines that would have been used in the textile process. In the textile industry as a whole, women and children made up a significant part of the workforce. Working days were often dictated by your age, sex, skills an abilities. Children would carry out simple jobs, women were seen as dextrous and men would perform physical labour or management (overseer) roles. Factories were heavily ruled and regulated and during busy periods, all staff would be expected to work through the night to meet demands.

Conditions were not always good and in 1822, 13 year old George Dyson, lost his life working on the large and unforgiving Carding machine. The mill was damp with greasy floors (grease from the wool) and dust and woollen fibres in the air would have been swallowed by workers making them ill. Machines contributed heavily to the poor state of working conditions; the noise of the machines would make workers deaf, flying bobbins and shuttles would hurtle themselves at the women working the machines and whirring gears and belting had no guards or covers on them.

Pupils can use a visit to the Mill to try and imagine what poverty the workers of these boom times lived in and appreciate the appalling conditions in which many of them worked.

Protest movements of the Industrial Revolution: did everyone agree with the changes?

Mechanisation had a big effect on the cottage industries, where once many processes were carried out in the home, they were then taken over and run in the factories by machines.

Gott's Mill originally provided a service for local weavers and dyers who used the spinning and fulling machinery in the Mill. All Gott did was spin and full and local weavers did their work in their homes, bringing the finished cloth to him.

Weavers would buy their yarn from suppliers like Gott who carded and fulled the yarn for them using machinery at the Mill. This was initially good for weavers as it meant there was a quicker turnaround and they held less cloth in their homes.

Ultimately, mechanisation would replace the majority of skilled positions.

Most of us have heard of the Luddites and Rebecca Riots which were protest movements against automation and mechanisation.

Named after the General Ned Ludd, the Luddites were 'croppers', men who worked cloth and were highly skilled. They were starting to be made redundant because of the introduction of new cropping frames into the mills. These frames could be operated manually by an unskilled worker and production was much higher than it had been previously. Annoyed at their rapid loss of status and wealth, the croppers soon became Luddite protestors.

The Luddites tried to destroy the frames across the northern mill towns. The Prime Minister, Stanley Perceval, introduced the Frame Breaking Act which imposed the death penalty on any man caught breaking a frame.

More commonly in Yorkshire and the Midlands were the 'Plug Rioters'. These were groups of workers who would pull the plugs out of steam engine boilers in a bid to revolt against the engines that were de-valuing their skills.



Campaign! Action and Reaction (continued)

Local examples of individuals affected by protestors were:

'Billy' Hirst

William Hirst started his own factory in Leeds which used hydraulic presses for the first time. Eventually all the mechanisation he had brought in began to cause him problems as he was taking away the work of the travelling jobbers, the people who travelled round selling their expertise to the mills. This was the time of the Luddites. At one stage Hirst had to employ ten armed men to protect his mill at night, and he always carried loaded pistols with him.

Murder of William Horsfall by Luddites, 1812

Mr. William Horsfall, a very extensive woollen manufacturer, was assassinated on a public road in Marsden (about seven miles from Huddersfield) when returning from the market. His murder was linked to Luddite protestors who knew that his mill at Marsden was heavily guarded so an attack on the machines would have been impossible.

GALLERY INFORMATION

At Armley Mills we have created examples of a typical Weaver's Cottage and the hallway/parlour of the Mill Manager's house. These buildings were lived in, but would not have been presented as you see them today. They are simple representations designed to encourage visitors to think about how the different classes might have lived in the Victorian era.

The majority of the machines introduced into the Mill are still in situ today. Visitors can get a sense of the size and limited health and safety precautions that were in place.

Interpretation and signage is available throughout the Museum, including original factory signage.

ACTIVITIES TO DO WITH YOUR CLASS!

PRESENT...

Students could be split into groups to develop either of the following (pupils to choose the best way of presenting this):

- A letter to Benjamin Gott complaining about the introduction of new technology into the Mill from the point of view of one of the workers.
- A presentation, from Mr Gott to his employees, explaining that new machinery was going to be introduced at Armley Mills. The presentation should be used as a tool to get employees on side with the changes.
- Make a local TV or radio news interview about conditions in the Mill, using the results of all investigations on a visit.

The pupils should use this as an opportunity to use persuasive language and could present their work to the rest of their class in their groups.

DISCUSS...

Luddite songs and other songs of protest were written and sung to celebrate successes, to rouse and inspire crowds and to lament hardships. They were, in essence, primarily about working conditions though.

Poverty Poverty Knocks!

This poem was probably written by Tom Daniel, a weaver from Pudsey and was recently remixed by local band, Chumbawumba. Versions by both Chumbawumba and the Haughton Weavers can be found at www.youtube.com.

Discuss: Protest groups used to focus on work-related issues. What are the kind of things that people protest about today and what high profile groups are in existence?

COMPARE...

Using Maps!

Using the Baines Map (1934) and the Bird's Eye view of the Town of Leeds (1875), as well as maps of Leeds today (e.g. www.multimap.com), pupils could make comparisons between the skyline of the city during the industrial revolution (and the birth of the factories) and Leeds as we know it today.

Links & Additional Resources

The Baines Map is part of a series, developed as a teacher's resource, by Leeds Libraries Service. This is available from the Library Manager, Information and 'e' Services Unit, Central Library, Calverley Street, Leeds, LS1 3AB. The price is £14.99 (plus £2.00 postage and packing).

Here are some links to materials that you might also find useful that support this particular theme:

BBC British History

http://www.bbc.co.uk/history/british/

Visit www.mylearning.org for more resources on Victorian Leeds such as:

- History of Leeds Poverty & Riches
- Be a Victorian Millionaire
- Enterprise, Industry & Benjamin Gott

For more information about Armley Mills during the industrial revolution visit the Armley Mills website at http://www.leeds.gov.uk/armleymills

Poverty Poverty Knocks!

Up every morning at five,
I wonder that we keep alive,
Tired and yawning on the cold morning,
It's back to the dreary old drive.

Chorus:

Poverty, poverty knock, me loom it is saying all day,
Poverty, poverty knock, gaffer's¹ too skinny² to pay,
Poverty, poverty knock, keeping one eye on the clock,
I know I can guttle³, when I hear my shuttle,
Go poverty, poverty knock.

Oh dear, we're going to be late,
Gaffer is stood at the gate,
We're all out of pocket,
Our wages they'll dock it,
We'll have to buy grub on the slate⁴.

And when our wages they bring,
We're often short of a string,
While we are fratching,
With gaffer for snatching,
We know to his brass he will cling.

We've got to wet our own yarn,
By dipping it into the tarn,
It's wet and soggy,
And makes us feel groggy,
And theres mice in that dirty old barn.

Oh dear my poor head it sings,
I should have woven three strings,
But threads are a-breaking,
And my back is aching,
Oh dear, I wish I had wings.

Sometimes a shuttle flies out,
Gives some poor woman a clout,
There she lies bleeding,
But nobody's heeding,
Who's going to carry her out?

Tuner should tackle me loom,
But he'd rather sit himself doon,
He's far too busy,
A-courting our Lizzie,
And I can not get him to come.

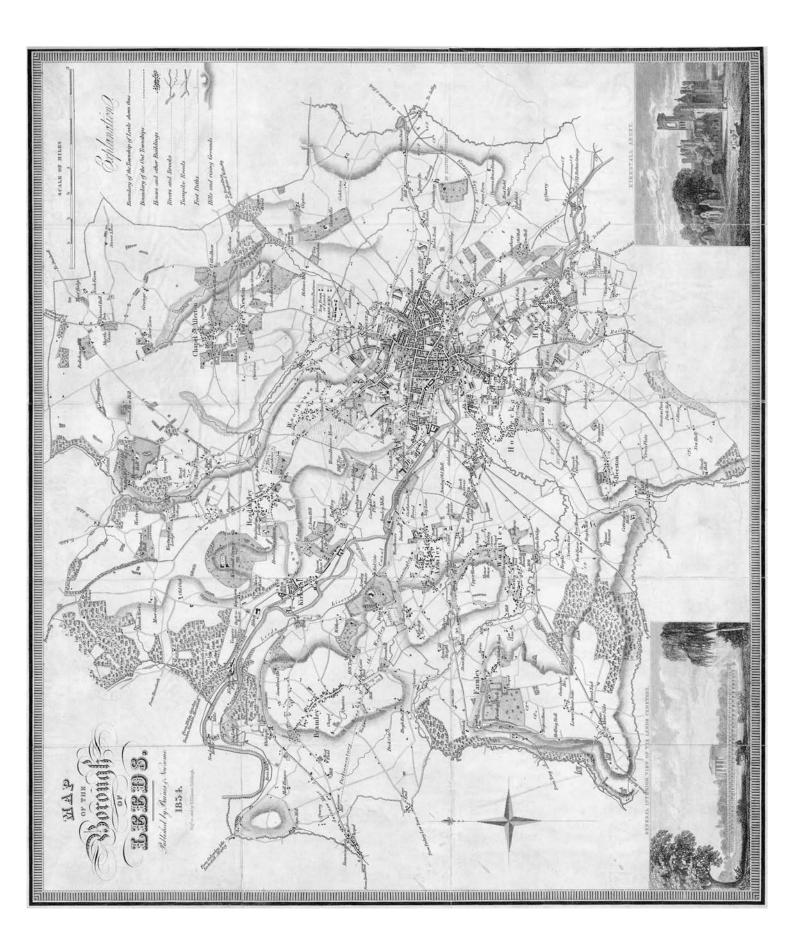
Lizzie's so easily led,
I think that he takes her to bed,
She always was skinny,
Now look at her pinny,
It's just about time they were wed.

¹ The Boss

² Stingy

³ Eat

⁴ On credit









EYE VIEW OF BIRDS

