



New Lanark

WORLD HERITAGE SITE
For SCHOOLS



Information Notes for Teachers about New Lanark

These information notes are designed to help teachers prepare for a visit to New Lanark. Each section provides basic background information and a description of key exhibitions.

Additional resources and publications mentioned can be obtained from our Gift Shop, or by mail order. A listing of educational resources and publications is contained in your Education Pack Booklet.

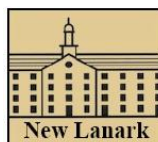
If you require further information on a particular topic of interest contact the Education & Access Officer: education@newlanark.org or tel: 01555 661345

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For up to date information about our facilities and resources, visit the New Lanark websites:
www.newlanark.org www.robert-owen.com

Pupils will have fun learning with Annie McLeod in our kids' pages! www.newlanark.org/kids



1. New Lanark Mills – A Brief Introduction

The Old Statistical Account for Lanarkshire records that David Dale (1739-1806) feued the site of New Lanark from Lord Braxfield. It seemed an unlikely location for what was to become the largest cotton manufacturing business in the country, as it was deep in the valley, marshy, and a long way from Glasgow over bad roads. However, there was a plentiful supply of cheap energy provided by the nearby Falls of Clyde, and it was this feature that attracted Dale to the site.

In 1784 he brought Richard Arkwright, the inventor of the 'water frame' to view the Falls, and they entered into an agreement to establish cotton spinning mills, Dale undertaking the excavation of the mill lade, and the building work, while Arkwright provided the technical training of Dale's men to build and operate the spinning frames. This partnership was dissolved after only a year, and Dale continued to expand the mills and village, building four mills and tenement housing for a population of about 1500 by 1795. Among the workforce were several hundred pauper children who were brought from workhouses in Glasgow and Edinburgh and apprenticed as mill-hands, as well as a substantial number of Highlanders.
(See section: The Pauper Apprentices)

Robert Owen (1771-1858) was by the 1790's a mill manager in Manchester, and he met David Dale through his business contacts in Glasgow. He married Dale's eldest daughter in 1799 and formed a partnership to buy the New Lanark Mills from his father-in-law for £60,000. He became the managing partner on the 1st January 1800. He set about improving and expanding the business, and by 1813 the value of the mills had risen to £114,000.

Robert Owen also introduced a series of social and educational reforms designed to improve the quality of life for his workforce. These included phasing out the use of child labour and establishing progressive schools, including the world's first nursery school. The village store at New Lanark, which under Owen was run for the benefit of the community, is regarded as the cradle of the co-operative movement. Prices were kept low by bulk buying, and the profits helped to meet the running expenses of the schools. As a result of this pioneering work in social reform, New Lanark became internationally famous.

The cotton-mills continued in production until 1968. In response to changes in technology, the ten water wheels, which drove the mills, were gradually replaced by three water turbines, and the mills generated their own hydroelectricity from 1898. (See: The Power of the River) Probably due to its isolated location, the village of New Lanark has survived with few changes since the time of the Industrial Revolution. It is now designated as an outstanding conservation area, and all the buildings are listed in the highest Category A. The village and its surroundings remain untouched by modern developments. It is still a living community, with a resident population in the beautifully restored housing. (See: Restoration & Revitalisation) The international significance of New Lanark's social, industrial and architectural heritage has been recognised through its inclusion on UNESCO's list of World Heritage Sites.

2. The River Clyde and the Falls

At Bonnington, just over two miles upstream from Lanark, the River Clyde changes from a broad and placid river, and for some miles becomes a fast flowing torrent, as it passes through the Clyde gorge. At Bonnington there is a fall of about 10 metres, known as Bonnington Linn, then about a mile further downstream is Corra Linn, long famous as a beauty spot. This is a fall of almost 30 metres, where the river cascades down in three stages over steep rocks. Above Corra Linn, stand the ruins of Corra Castle. Just on the edge of New Lanark itself is Dundaff Linn, less spectacular at 3 metres, but very attractive nevertheless.

About 175 acres of land to the east of the village on either side of the river is managed by the Scottish Wildlife Trust, and is known as the Falls of Clyde Wildlife Reserve. The Scottish Wildlife Trust has a Ranger Service and a Visitor Centre based in the former Mill Dyeworks of New Lanark.

In 1926 the Bonnington Power Station was constructed just below Corra Linn to generate hydroelectricity. A tilting weir above Bonnington Linn regulates the flow of the river, maintaining adequate depth at the intake to the tunnel and pipeline, which bypasses Corra Linn and delivers water to the Power Station's turbines. The station has an output of 1100 KW. On four Sundays in the year, known as 'Waterfall Days', the turbines are closed down to allow the full flow of water to come over Corra Linn. However in a normal Scottish summer, the Falls are rarely very low, and they can be quite spectacular after heavy rainfall or melting snow.

Geology and Physical Characteristics.

The gorge is formed from reddish sandstone, which was laid down in Devonian times around 400 million years ago. These rocks are clearly exposed in the gorge, but the unstable cliffs make this an unsuitable point to get a close look at them. The most accessible area is the old quarry face, just across from the Dyeworks in New Lanark, where it can be seen that the sandstone is layered, and that the layers vary considerably in texture and hardness. The horizontal layering indicates that the water was shallow, because there are 'fossil' ripple marks visible in parts of the gorge. Apart from a few later additions in brick, the village of New Lanark was built from locally quarried sandstone.

The surrounding landscape is much less rugged than the gorge, and the bedrock is covered by steep grassy hillocks made of sand and gravel, as can be seen at any of the many quarries in the area. These are the remains of rocks, which were crushed and powdered by the glaciers as they moved over the countryside. The ice was also responsible for forming the gorge itself.

During the last 10,000 years or so, the river has not deepened the gorge very much, but it is slowly eating away at the edges, under-cutting the cliffs, and causing periodic rock falls. These can happen anywhere, and visitors should keep to the footpaths and stay clear of the cliffs.

Further Information

- Access to the Falls of Clyde Wildlife Reserve is free. Guided walks in the Falls of Clyde Wildlife Reserve by the Scottish Wildlife Trust are available for school groups. Contact SWT: Tel 01555 665262 for more details.
- Use our Learning Pack: *New Lanark and the Falls of Clyde*
- Read our Information Fact Sheet: *Background notes for Geographical Studies*
See Resources & Publications in your Education Pack for more details.

3. The Pauper Apprentices

David Dale, in common with many of his contemporaries in the textile industry, entered into agreements with charity workhouses in Glasgow and Edinburgh to take on orphan or pauper children as apprentices. These children were given no wages, but were provided with food and clothing and a basic education. Unlike many mill-owners, who exploited and ill-treated their child workers, David Dale honoured his agreements, and the children were well treated by the standards of the day.

They were housed in the upper part of Mill Four, and although the apartments were basic, they were kept clean, and well aired. Clothing was provided - cotton suits in summer, woollen ones in winter, with dress suits kept for Sundays. These clothes were washed fortnightly, while their 'linens' (underclothes) were changed weekly. Their diet was wholesome if plain and unvarying - beef or cheese with barley broth, potatoes, barley bread, oatmeal porridge with milk in summer, or a sauce called 'swats' (made of molasses and beer) in winter. Occasionally fresh herrings were served as a change.

Dale employed teachers to educate the children who attended from 7pm until 9pm. David Dale was a deeply religious man, and the children all attended church service on Sundays, as well as receiving religious and moral education from the teachers.

However favourable the conditions for child workers at New Lanark were, compared with those elsewhere, it was still hard work for these orphans. When Dale's son in law, Robert Owen, became mill manager, he did away with this form of child labour.

Further Information

- Nursery Buildings, as the name suggests, was built by Owen to provide accommodation for these apprentices. This building is found facing the Village Square, beside the Village Store.
- Visit the Working Textile Machinery Exhibition Area in Mill 3, Level 4 to experience the atmosphere of a working mill.

4. Highlanders in New Lanark

David Dale found it impossible to recruit enough workers for his new mills in the locality, which was a sparsely populated agricultural area. He therefore had to look further afield. In 1791, a shipload of emigrants from Skye and the Highlands set sail for America, but the ship was storm-damaged off the West Coast, and put back into port at Greenock. Dale sent a representative to offer these would-be emigrants work and houses in his new mill village. Over 100 accepted, and Dale, who like many of his contemporaries was worried by the drift of population away from the Highlands and Islands, pledged himself to build houses for 200 families, and advertised for more workers. (NB. These events took place before the later notorious Highland Clearances. Dale was involved in several schemes to try and provide employment in the Highlands). Many people subsequently came from Caithness - so many that one of the village streets was named Caithness Row.

Although these Highlanders would have no doubt found it difficult to adjust to living and working in a mill village, they could at least earn a better living than their previous subsistence farming.

Further Information

- Read our Information Fact Sheet - *The Story of the New Lanark Highlanders*. See Resources & Publications in your Education Pack for more details.
- Visit the Millworkers' House to find out about living conditions in the village in the 1820s.

5. The Power of the River

The New Lanark Mills were built beside the River Clyde to take advantage of the waterpower. Towards the end of the 18th century new textile machinery was being invented, which revolutionised the production of cotton and woollen yarn. Machines that could be driven by water wheels quickly replaced traditional spinning wheels, and large factories or mills were built to accommodate the new machines and the workforces, which tended them.

The New Lanark Mills were the result of an agreement between the Scottish industrialist David Dale (1739-1806) and the inventor of the 'water-frame', Richard Arkwright. Dale was involved in the building of the mills, water wheels, and houses, whilst Arkwright dealt with the machinery.

The waterwheels, were situated in the basements of the mills, and water was fed to them from the mill lade. After pouring over the wheels, it flowed back into the river. Vertical shafts transferred the power from the wheels up through the buildings to the machinery, by a system of gearing, line-shafting and belt-drives.

In the 1880's, the water wheels began to be replaced by water turbines, which were more efficient. A ground plan of the mills in 1851 shows three water wheels in the basements of each of Mills One and Two. These six wheels were replaced by a single turbine, situated between the two buildings, while a second turbine was installed in the basement of Mill Three. Mill Four was destroyed by fire in 1883, and never rebuilt. The last water wheel, 21 feet in diameter, was taken out of the Dyeworks in 1929, and replaced by a turbine in the Mechanics' Workshop. A restored waterwheel can now be seen in the wheel-pit of the former Mill Four.

The Engine House

The cotton-mills at New Lanark were in continuous production from 1786 until 1968. During this entire period the main source of power was waterpower. For the first 100 years, the natural energy of the river was developed by huge water wheels, found in the basements of the mills. Towards the end of the 19th century the wheels began to be replaced by more efficient water turbines, and the last wheel was taken out in 1929. Steam power had been applied to many other textile mills early in the 19th century, but the River Clyde apparently provided an adequate supply of waterpower most of the time, as it was not until 1873 that the company purchased its first steam engine, to be used as a back-up source of power.

Under the new management which took over New Lanark Mills in 1881, it was decided to install a much bigger engine, which could provide steam heating for the mills and dyeworks, as well as providing extra power when the river was low. To accommodate the engine, built by Petrie's of Rochdale, an Engine House was built adjacent to the Institute. Its location allowed the engine's flywheel to be linked to the machinery in Mill Three.

During the 1950s it was decided to give up steam power, in favour of electricity. At this time, the boiler houses and the huge chimneystack, which had dominated the village square, were demolished; the Petrie steam engine scrapped.

Further Information

- The engine you see today in the Engine House exhibition is slightly smaller than the original one from the engine house, but is similar to many used in textile mills. As you leave the Engine House and cross to Mill Three, you follow the route of the rope-drive, which linked the flywheel to the drive shafts in the mills.

Hydro-electricity

In the early days, the mills and village houses were lit by candles and oil lamps. Later a Gasworks was built, beside Dundaff Linn, the only remnant of this surviving today being the Retort House chimney. In 1898 the gas lighting in the mills was replaced with a supply of electricity from a dynamo driven by the turbine in Mill Three. The village houses were also linked into this supply free of charge. Finally in 1955, the village was connected to mains electricity, when the increased demand for new electrical gadgets could no longer be supported by the Mills' own supply. The ugly concrete sub-station, which was built at this time was demolished in 1989, and new plant concealed in the 1880s Engine House basement.

The Mills continued to generate hydroelectricity to run their machinery, until closure in 1968. The turbine in Mill Three was connected to an induction motor, and power was cabled through the mills. This turbine has now also been restored to working order and is once again generating hydroelectricity. A video at the turbine house viewing window on the south side of Mill Three explains how power is generated.

Further Information

- Read our booklet *The New Lanark Power Trail*. A guide to power at New Lanark, past and present. Use this for a self-guided tour.
- Information Sheet 6 deals with Water Power/ Steam Power
See Resources & Publications in your Education Pack for more details.

6. The Spinning Mule

The Platt's spinning mule that you can see and hear when you enter Level Four (the floor below the ride) has been installed as a working exhibit, and is ideal in showing pupils just how large and noisy mill machinery was. It is also a good opportunity to explain the processes involved in cotton manufacture, and discuss working conditions in the mills.

The invention of spinning machines replaced the work of hand spinners, with each machine capable of doing the work of over 300 individual spinners. The machines pulled, twisted and combined the cotton strands to produce a strong even thread, which would then be woven into cotton cloth. In 1769 Richard Arkwright patented his 'water frame' - a revolutionary spinning machine, which used the power of water to produce a strong yarn.

Not long after the discovery of the 'water-frame' came Samuel Crompton's 'spinning mule', first patented in 1779. It was called a mule because it was a cross between a water-frame, and an earlier machine named the 'spinning jenny'. It was particularly suitable for spinning fine yarns. Platt's mules, like the one in our present day exhibition, were used in Mill 3 during the 19th century, but as New Lanark moved with the times, they were superseded by more up-to-date machines. However, the mule is a wonderful example of 19th century textile engineering, and has been installed as a working exhibit to give visitors a realistic impression of a period in history of New Lanark Mills, which is now beyond living memory.

Further Information

- Read our Information Fact Sheet 7- *Spinning Mule/ People and Cotton*
See Resources & Publications in your Education Pack for more details.
- The spinning mule on Level Four is a working exhibit. It produces woollen yarn, which we sell in our Gift Shop.

7. Restoration and Revitalisation

The New Lanark cotton mills closed in 1968 after approximately 180 years of production. By 1970, increasing decay of the physical fabric of the buildings, and the sale of the industrial area to a scrap metal company, threatened the continual existence of the village. If New Lanark was to be saved from demolition as an industrial slum, intervention by government and conservation bodies was vital.

New Lanark was designated as an outstanding conservation area in 1973, and all the village buildings were listed in the highest category, Grade A. In 1983, the industrial buildings were finally reclaimed from the scrap metal company by means of a compulsory purchase order, confirmed by the Secretary of State for Scotland.

New Lanark Association, formed in 1963, have been responsible for the restoration of the village housing, which is rented out to the village residents. There are 45 houses leased by New Lanark Association, whilst 20 houses in the village have been sold to private owners, who are responsible themselves for the internal restoration. 'Wee Row' has been converted to a comfortable Three Star Youth Hostel.

The mills and community buildings have been carefully restored by New Lanark Trust, the body who are responsible, overall, for the restoration and development of New Lanark village. The listed buildings are required to retain their historical character on the outside, but have been converted to a variety of purposes by interior redesigning. Profits from all of the Visitor Centre operations are ploughed back into the continuing programme of restoration and development.

New Lanark is the best-preserved example of a cotton-spinning village from the early period of Britain's industrialisation, and is of international significance in terms of economic, architectural and social history. The high standard of the conservation work has been recognised by numerous awards, and the village is now included in UNESCO's list of World Heritage Sites.

The 'Saving New Lanark' exhibition in the School for Children chronicles the extensive restoration and conservation programme that has taken place since the late 1960s. Large projected images show the individual buildings before and after restoration, highlighting the improvements, which have taken place in the village since the closure of the mills. Touchscreen PCs allow access to a comprehensive database of digitally stored photographic records with accompanying text. Visitors with a special interest in this project can access further information in the 'details' section of the programme. Children (and adults!) will enjoy the touchscreen game - place the village buildings in their correct location to bring New Lanark back to life! Remnants of the original water wheels, and a stove found when excavating the School building, can also be viewed in this exhibition.

8. The Millworkers' House and Village Store

These exhibitions are housed in New Buildings and Nursery Buildings, facing the Village Square. They are included in both the guided tour and the passport ticket. Both have been designed to give an impression of living conditions for the millworkers at two different periods in the history of the village: in the 1820s under Robert Owen's management, and in and around the 1920s and 1930s.

The Millworkers House, New Buildings

Today almost all of the village housing has been modernised internally, with a population of around 250 living in the restored tenements. To show visitors what it was like to live in New Lanark in the past, two homes have been reconstructed, one typical of the 1820s, the other the 1930s. The reconstructed rooms have been based on oral history documentaries and the evidence of surviving unrestored rooms and artefacts. 'Set-in' beds and a cast-iron fireplace characterise

the 1820s single-end, while the 1930s home boasts electric light, a wireless and a 'stairhead cludgie'.

Further Information

- For more detailed information about the village housing and living conditions, read our booklet: *Living in New Lanark*.
- Use our learning packs: For Primary – *Living in New Lanark* & Secondary Standard Grade – *Investigating New Lanark Series*
See Resources & Publications in your Education Pack for more details.

The Village Store

The Village Store was originally built by Robert Owen around 1813 as part of his plan to improve the standard of living for his workers. It was at one time a substantial three-story building in the Village Square. Now only the ground floor is occupied as a shop and exhibition.

In the 1820s exhibition area, there is a display of the types of food and household goods that would have been available to the millworkers at that time, as well as information about the Co-operative movement, which considers the New Lanark village store as one of its fore-runners.

Next door in the 1920s period store, you can see how shopping habits had changed a century later, with the advent of packaging and advertising posters. As well as being an exhibition area, this part operates as a shop, selling old-fashioned goodies like 'soor-plooms'.

Further Information

- For information on the store, and Robert Owen's links with the Co-operative movement read our booklet: *The New Lanark Village Store*
See Resources & Publications in your Education Pack for more details.

9. Robert Owen's House

The building known as Robert Owen's House is one of only two detached houses in New Lanark. These detached houses date from the late 18th century and were originally the Owner's and Manager's Houses. Owen became managing partner of the cotton-mills in 1800, and set up home in the village after his marriage to Caroline, eldest daughter of David Dale. The Owen family lived here until 1808, when they moved to Braxfield House on the outskirts of the village. As the children grew up, they enjoyed a happy childhood in New Lanark, and were encouraged to become involved with the life of the community, especially the village schools.

Later, 'Robert Owen's House' was occupied by a succession of Works Managers and senior company staff, and by the 1880s had been divided into upper and lower flats.

The house now allows visitors to compare a mill manager's house with a millworker's house, both of the late Georgian period. The manager's house is obviously more roomy and comfortable, with servants to help with household chores.

On display in the furnished rooms are items connected with Owen's regime at New Lanark, e.g. an original Ticket for Wages, Silent Monitor, pages from Mill Cash Books, an 1818 export label etc. There is also a section of the exhibition devoted to his father-in-law, David Dale. Here among other things, you can see original pauper apprentice buttons and a knocker from the Jeanie House at Dale's cotton mills at Catrine in Ayrshire.

Further Information

- For a brief guide to the life and work of Robert Owen, see *The Story of Robert Owen* booklet. See Resources & Publications in your Education Pack for more details.

10. The Institute for the Formation of Character

The Institute for the Formation of Character was opened by Robert Owen in 1816. Its intriguing name derives from Owen's belief that your character is formed for you, and not by you, and is influenced by your living and working environment, and your education. He believed not only in the importance of education, but recreation, too, and the Institute became like a community centre for the 2500 residents of New Lanark.

New Lanark had the world's first infant school, which the children could enter as soon as they could walk. No doubt this was a great benefit for the working mothers of the village. The little ones were not to be 'annoyed with books', but rather to have freedom to play and run about, learning to socialise and play with one another.

Robert Owen did not allow young children to work in the mills, and instead provided a progressive education for them. No corporal punishment was allowed, and he encouraged the teachers to make their lessons interesting and enjoyable. Music and dancing played an important part of the curriculum, which included nature studies, history, geography, and drawing as well as reading, writing and arithmetic. The children were supplied with a special tunic as a uniform, which was like a white roman tunic, made of cotton, with a maroon band around the bottom. The children were kept neat and clean, and 'bathing machines' were installed in the Institute.

Evening classes, balls, lectures and a weekly concert were held in the Institute, which had light and airy rooms, conforming to Owen's belief in the importance of a pleasant environment. It continued to be the social centre of the village until the mills closed in 1968. Even today it has been converted to our Visitor Centre, and is used for a variety of functions such as weddings, parties and conferences.

11. Robert Owen's School

Robert Owen's School for Children, with its spacious classrooms and musicians' gallery, held day classes from 1817 until the 1880s. It was taken on by the Parish Board in 1876, and then moved to the top of the brae in 1884. The 'new' school at the top of the brae is still the local primary school today.

Meanwhile the School for Children has been carefully restored and adapted to accommodate new exhibitions and facilities for the Visitor Centre. Visitors to the building will enjoy the following exhibition areas, described below.

- **Harmony in the Future** (film shown in the theatre) – Meet Harmony from the year 2200 as she travels back in time to learn about Robert Owen and life in New Lanark Mills in the 1800s. Using innovative technology, Harmony appears as a 3D figure on the stage of our state-of-the-art theatre. Each show lasts 10 minutes. An induction loop and foreign language commentary is available on request. Please ask at the School reception for a free transcript of the ride commentary.
- **The Historic Classroom** Based on illustrative and documentary evidence of Owen's progressive system of education, the Historic Classroom room takes you back to schooldays of the 1820s. Striking features of this room include the Musicians' Gallery and the canvas wall hangings, which were used as visual teaching aids. A short audio-visual programme narrated by one of Owen's teachers, James Buchanan, gives his insight into the advanced system of education at New Lanark. Visiting school groups will enjoy trying on the replica cotton tunic uniforms and writing on slates.
- **Saving New Lanark** An exhibition chronicling the extensive conservation and restoration project. For more details see page 6.

- **Interactive Gallery** Explore and experiment with light, sound and colour in this multi-sensory room. Trigger changes in the sound and colour sequences as you move around the room. Feel the emotional effect of being bathed in colour in the wigwams; make ethereal sounds by moving on the reflective cushions and make interesting shapes on the shadow sail. *The Interactive Gallery is not part of the regular guided visit option for school groups. If you would like to incorporate a visit to the Gallery speak to our Education and Access Officer about the different options on offer.* These visits are also suitable for nursery schools and pupils with special educational needs.

Further Information

- Teachers interested in replacing their guided tour with a role-play lesson, 1820s style, in the Historic Classroom, should ask the Bookings Officer about our *Historic Role Play Session*.

12. Themes of the *Harmony in the Future* film

Key themes highlighted in the *Harmony in the Future* film are:

- **Child Labour in the Mills**
When Robert Owen became manager of New Lanark Mills on New Year's Day 1800, children, including 500 orphans taken from the poorhouses, were working long hours and in poor conditions in the cotton mills. This was similar to mills, mines and factories throughout the country during the 18th and 19th centuries where children were exploited for their cheap labour, and ability to do tasks requiring small bodies. Robert Owen was opposed to the employment of young children (some at New Lanark were only six years old). He believed that having children work during their most formative years was damaging to both body and mind.
- **Robert Owen's Enlightened Management**
Robert Owen's management of New Lanark Mills was based on the principles of kindness and justice. His position also allowed him to try a social experiment, which he felt would allow him to form, in a positive way, the character of his workers. In order to do this he set about making radical changes to the way the village was run. Other mill managers thought Robert Owen was foolish spending money on decent working conditions and education.
- **Rights and Society**
Since the time of Robert Owen, workers and others have campaigned for their rights. Trade Unions were formed and nowadays, the need to consider human rights is widely accepted and supported. Many influential people will be remembered for their part in campaigning for social justice, and equal rights, for all humans. These individuals are highlighted in the Ride.
- **Child Labour Today**
Millions of children are still denied a childhood and an education in the 21st century. Children across the world remain at risk from hazardous work, poor pay and exploitation.
- **Campaign for fairer trading and working conditions**
Today many workers are still suffering poor conditions, and children are still being exploited for their cheap labour. Therefore the campaign for better working conditions still remains in the 21st century. The Fairtrade Foundation is dedicated to encouraging the sale of Fairtrade products, which in turn improve the position of poor and marginalised producers of the developing world.

- **The Early Co-operative Movement**
Robert Owen's ideas of helping improve the lives of the New Lanark villagers inspired many others. Several set up co-operatives and self-help groups. One such group, the 'Rochdale Friendly Co-operative Society' was set up by a group of flannel weavers. They opened up a retail store, and went on to play a major part in the Co-operative movement. The movement now has international support in the form of the International Co-operative Alliance.
- **Education- a basic right**
Robert Owen believed that education was the key to forming the character. He believed that by providing education, alongside fair working conditions, the villagers of New Lanark would become good citizens. Children at New Lanark attended school until they were ten years old, a concept quite unique in the 1820s. Unfortunately, today in some parts of the world children still don't receive an education.
- **Classrooms of the Future**
It is thought that in the future, computers will be able to store all the knowledge of mankind. The concept of a knowledge resource available by computer to a teenager seems realistic for the year 2200. Harmony's computer 'Antares' is named after the star, representing the futuristic possibilities of harnessing light energy.

Schools will always be important for passing on the knowledge of society, and as new technologies allow the learning process to advance in some nations, we must not forget those who have no education at all.

- **Healthy Living, and Community Responsibility**
In the 19th and early 20th century, Scotland's urban areas, which surrounded the mills and factories were overcrowded, with dirt and disease thriving in the air and water. The centres of Glasgow and Edinburgh became overcrowded with shabby tenement houses, known as 'slums'. New Lanark never seemed to reach the grim standards of other mill areas. Robert Owen had strict rules for house owners to ensure the village was kept clean. Owen's village at New Lanark, with its pleasant surroundings and strong community spirit, influenced others in the creation of ideal settlements. Movements such as Garden Cities and Utopian Communities were based on many of Owen's principles.