CASE STUDY: USING AERIAL PHOTOGRAPHS TO INSPIRE CREATIVITY

Exploring landscape and cultural change over time

CURRICULUM LINKS: Key Stage 1 & 2 - Geography, History, Art & Design

IMAGE COLLECTION: www.britainfromabove.org.uk

CREATED BY: Angie Turner Designs, Staffordshire
INTRODUCTION

Britain from Above and the RHS Campaign for School Gardening commissioned Angie Turner Designs to work with a Year 4 class at Crowcroft Park Primary School in Longsight, Manchester during June and July 2014. The aim was to explore aerial images from the English Heritage Aerofilms Collection and to use these to inspire a design for a Show Feature Garden at the RHS Tatton Park Flower Show in July 2014. The pupils were to be involved in every step of the process from exploring the images to creating the garden on site at the show. The school is very multi-cultural and it was important that the project explored cultural change as well as landscape change over time. This case study illustrates the opportunity for using aerial photographs from the Britain from Above website in the classroom to inspire creativity and meet key aims of the Key Stage 1 & 2 National Curriculum in Geography, History and Art & Design.

KEY CONSIDERATIONS

SESSION PLANS: A series of four sessions (2 hours each) took place in the school before the garden was created at the RHS Tatton Park Flower Show. These explored the heritage of the area around the school in terms of both landscape change (rural and urban) and cultural change over time. The garden itself took 4 days to create, 2 of which the pupils were involved in.

LOCATIONS: Four locations relatively close to the school were chosen, determined by the existence of clear images in the Aerofilms Collection. These images were used to hunt for clues and gather ideas for the design of the show feature garden but they can be used with almost any focus in mind – transport change, industrial change, landscape change, lifestyle change etc. The collection of images used in this project can be seen in the School Groups Collection at www.britainfromabove.org.uk (RHS Tatton Show Project – Crowcroft School).

FIELD TRIPS: If time allows, a field trip to all or one of the aerial photograph locations (ideally where one of the main landmarks can still be seen) would provide the opportunity for pupils to see changes over time for themselves and to take modern day photographs as comparison.

METHODOLOGY

The sessions took the following format:

SESSION 1: BECOMING AN AERIAL DETECTIVE

SESSION 2: DISCOVERING ROOTS – The Dig for Victory Campaign and the school garden

SESSION 3: DISCOVERING CULTURAL ROOTS – Researching our cultural heritage

SESSION 4: PRACTICAL ACTIVITIES

SESSION 5: BUILDING THE GARDEN AT THE RHS TATTON PARK FLOWER SHOW
SESSION 1: BEING AERIAL DETECTIVES

**AIM:** to interpret the aerial photographs and facilitate a discussion about life then and now

**CURRICULUM LINKS:** Geography KS 1&2: interpret a range of sources of geographical information including maps and aerial photographs. Use aerial photographs to recognise landmarks and basic human and physical features. Describe and understand key aspects of human geography, including types of settlement and land use.

The Year 4 class of 32 students was split into 4 groups. Each group examined a different set of materials covering a particular area of Manchester. The groups rotated around the room so that everyone explored all of the images.

Each set contained -

- historical and modern maps,
- modern google earth images,
- historical and modern photographs,
- ipads for exploring the images online (stored on the RHS Tatton Show - Crowcroft School group page)
- a number of aerial photographs from the Aerofilms collection.

The pupils were tasked with ‘Becoming Aerial Detectives’ and were asked to consider 3 key questions as they explored the materials:

- What has changed?  
- How has it changed?  
- What has stayed the same?

Each group was given a series of questions to ‘look for clues’ and encourage exploration of the old and new images:

1. **What do they think life was like when the photograph was taken?**
   - Where do people live?
   - Where do people work?
   - How do they travel?
   - Where do they shop?
   - Do they have their own garden?
   - Is there a lot of green space?
   - Do they have a local park or somewhere special outside that they can visit?
   - Can you tell what materials have been used for building?

2. **What is life like now?**
   - Can you see any landmarks or important buildings that are there both then and now?
   - Can you work out where the photograph is - do you recognise any of the features on the images today?
   - Does this place still exist? Do you know anyone who lives or works here now?
3. Can you find....?

Each set of images also had a list of features for the pupils to find linked to the photograph they were examining eg. Large buildings / water courses / factories. Image specific questions were also asked to draw attention to particular aspects of the photographs – How many chimneys / churches can you count? How many allotment sheds can you count? How many cars / trains / trams can you count?

PLENARY SESSION: A plenary session at the end allowed thoughts to be collected and shared, and ensured that key aspects of the images had been explored and considered eg. the lack of cars, the high number of industrial chimneys etc. The pupils were asked what they could remember from the aerial images and the answers were used to begin our design.

“I've learnt that olden times didn’t have nice gardens and parks. Also I've learned that there are lots of allotments in olden times and there are lots of houses that are tiny and ours are big.” Zairah, age 9

“There aren’t many cars in the 1900’s.”
Arafat, age 9

Ipad explorers
Stereoscopes

USING AERIAL IMAGES TO EXPLORE CHANGE IN GARDENS

Our images illustrated a number of aspects of garden history in the UK which influenced our garden design:

1. The change in working class housing and access to gardens

Our first heavily industrialised image in 1927 showed cramped rows of back-to-back houses with back yards, no garden and no easily accessible open spaces. Our image in 1931, showed the first Council Estates being built at the Mellands Estate in Manchester. This introduced curves and crescent shapes into the urban landscape, with each home having their own front and back garden and small areas of open space within the estate. For the first time, the majority of working class families had their own gardens.

2. Private gardens and allotments

Our images also showed private gardens with formal flower beds and large lawns. The aerial images of Belle Vue Zoological Gardens (1927 & 1947) provided an excellent case study as the aerial images spanned 20 years allowing us to examine differences over time. One key change evident in the landscape was the increase in allotments just after the war and this led to the exploration of the Dig for Victory Campaign in Session 2. The gardens were open from 1836 – 1980 and many parents remembered visiting the gardens in their childhood, providing first-hand memories of the site. Modern day photographs allowed direct comparisons to be made with the old images of the gardens at the height of their popularity.

The following worksheet was used to facilitate the investigation of the aerial photographs;
SESSION 1 WORKSHEET: Being Aerial Detectives

<table>
<thead>
<tr>
<th>NAME:</th>
<th>PHOTO:</th>
<th>DATE of PHOTO:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>THEN</td>
<td>NOW</td>
</tr>
<tr>
<td></td>
<td>What was life like when the photo was taken?</td>
<td>What is life like now?</td>
</tr>
</tbody>
</table>

Where do people live?

Where do people work?

How do they travel?

Where do they shop?

Do they have their own garden?

Is there a lot of open green space?

Do they have a local park or somewhere outside that they can visit?

Can you tell what building materials have been used?

What is life like now? Use the maps to find out if you do not know the area.

- Can you see any landmarks or important buildings that are there both then and now?
- Can you work out where the photograph is - do you recognise any of the features on the images today?
- Does this place still exist? Do you know anyone who lives or works here now?
SESSION 2 – DISCOVERING ROOTS: The Dig for Victory Campaign and the School Garden

**Aim:** to use historical records to develop an understanding of the Dig for Victory Campaign; to explore the school garden and compare foods eaten then to foods eaten now; to identify and learn about growing plants. To explore the basics of garden design within the context of the school garden.

**Curriculum links:** Geography KS 1&2: interpret a range of sources of geographical information including maps and aerial photographs. Use maps, atlases and globes to locate countries and describe features studied. Physical geography: including climate zones. History KS 1&2: Pupils should be taught about: changes within living memory, revealing aspects of change in national life; significant historical events, people and places in their own locality. This session also linked to the Mathematics KS 1&2 curriculum: measuring distance, estimating.

It is extremely useful when images of the same location are found amongst the Aerofilms Collection spanning a period of time. Our images of Belle Vue Gardens (1927 and 1929) provided evidence of change over a 20 year period. Apart from a change in housing stock, it was apparent that allotments had increased in the area, presumably as part of the Second World War Dig for Victory Campaign. This provided a focus for the start of our second session, which explored the tradition of growing vegetables and fruit in this country in the 1930’s and 1940’s and comparing it to the contents of the school garden in 2014.

**The Dig for Victory Campaign and the school garden**

The following materials from the Imperial War Museum website were explored as a method of introduction to the Dig for Victory Campaign via an interactive screen in the classroom:

- A short black and white film clip, published by the Ministry of Information in 1941 (part of the Imperial War Museum Collection) which provides an insight into the Dig for Victory Campaign: [http://food.iwm.org.uk/?tag=dig-for-victory](http://food.iwm.org.uk/?tag=dig-for-victory)
- A number of old photographs showing people growing their own during the campaign were explored ([www.iwmprints.org.uk](http://www.iwmprints.org.uk))
- The Ministry of Agriculture list of vegetables grown during the campaign was discussed ([www.earthlypursuits.com/AllotGuide/DigforVictory1/DigForVictory1_1.htm](http://www.earthlypursuits.com/AllotGuide/DigforVictory1/DigForVictory1_1.htm))

An open discussion asked their views on what they had seen, what they thought life must have been like during the war and what they thought people would have grown and eaten.

The students were given a copy of the Ministry of Agriculture list of vegetables grown during the Second World War and invited to explore their own school garden: could they see any similarities in the foods being grown then and now? They were encouraged to consider why certain plants were grown in this country (nutrition, climate, soil) and whether they grew any edible food in their own gardens / back yards.

This session also explored the basic considerations of garden design – what plants are placed where and why.

The following worksheet was used to guide this session and develop understanding of how a garden is designed (eg. taller things at the back, sun-loving flowers or fruit in the sunniest locations);
WORKSHEET SESSION 2: Basic garden design principles

Exploring the art of Garden Design….or is it a science?

In your school garden, work out:

Where does the sun come up in the morning? (where is the sun in the garden during your first class?)

What type of soil is in the garden? (if it is crumbly it is sandy, if it is sticky and smooth it is clay, if it is in between it is a silt)

How rainy is the area? (do you know the annual rainfall – how could we find out?)

How cold does it get in winter? (what was the lowest winter temperature – how could we find out?)

How big is the garden? Use your stride to pace out the garden and do a quick sketch of the shape here:

Now measure your average stride on the measuring tape and write it here:

You can now work out the distance and write it on the shape you have drawn above.
WORKSHEET SESSION 2: Basic garden design – understanding plants

What is in the garden already?

Find 3 plants and write down the following things about them:

<table>
<thead>
<tr>
<th>PLANT NAME &amp; COLOUR</th>
<th>FORM (shape)</th>
<th>TEXTURE (how does it feel?)</th>
<th>HEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>3</td>
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</tbody>
</table>

Why is it important to know the height of a plant for a garden?
Developing our garden design

Our design was based on the images that the students could remember from their exploration of aerial photographs. These included tall smoky chimneys; crescent shaped council house estates and rows and rows of allotments.

Identifying suitable materials

Students could remember the use of bricks and tiles in the aerial images, so it became important to use these materials in the garden. Visits to reclamation yards yielded a number of useful materials that could easily be used within the garden design with minimal hard landscaping and a short timescale.

Reclaimed materials: chimney pots, roof tiles and old bricks

Time was spent laying out the drawing using chalk to ensure that we would have enough space in our 4m x 4m plot. This allowed us to make changes to the design if required before any drawings were created.

A playground surface could easily be used for such an activity, engaging the children in developing the design, the shapes and the flow of the garden.

Marking out the design using chalk
Gathering ideas for our design

The design was developed by selecting the key images the students could remember and turning these into visual representations using chimney pots, roof tiles and bricks as the basic materials within the design.

- Different chimney pots to illustrate houses and old industry
- Beech trees to represent the English landscape
- Roof tiles for our model houses
- Images of Belle Vue gardens inspired our formal flower bed with numbers telling the date of the photographs
- Our brick name path contained names from the 1930’s as well as modern names
- Red flowers to represent the sparks of the Foundry in our photos
- Dark plants for our smoky 1920’s industrial area
- Mini vegetable rows to represent our allotments from the air
- A multi-cultural mix of plants – banana, chillies, grapes, peppers...
- Formal Belle Vue flower beds
- A multi-cultural mix of plants – banana, chillies, grapes, peppers...
SESSION 3 – DISCOVERING CULTURAL ROOTS

**AIM:** through collecting memories from local community members, explore our own cultural heritage and how this influences the foods we eat and grow.

**CURRICULUM LINKS:** Geography KS 1&2: Use maps, atlases and globes to locate countries and describe features studied. Physical geography: including climate zones. History KS 1&2: Pupils should be taught about: changes within living memory, revealing aspects of change in national life; significant historical events, people and places in their own locality.

This session focussed on a ‘Community Talk’ exercise. Six members of the school community were invited into the classroom to speak to the students about their home countries’ and where their families were living in 1930’s and 1940’s (the era of our aerial images). The aim was to discover more about the student’s own family heritage and the tradition of growing fruit and vegetables in their country of origin.

The community members fell into one of two groups:

1. A Manchester family (who had links with the area since c.1930s) able to talk about British food crops / gardening
2. A family who had moved into the area able to talk about non-British food crops / gardening

The students were split into 6 groups and tasked with creating a Mind Map detailing the life of their guest. They were given a list of questions to start them off in their quest.

“Our Community Talk Mind Maps: Georgia and Manchester

“I liked finding out information about my mum when she was a child.” Callum, age 8

“I loved working with the adults and telling us about when they were born.” Zairah, age 9

“I have learned that even the people from the olden times grew plants. Also growing plants is fun!” Islam, age 9
At the end of the session they were tasked with asking the same questions to their parents’ and to bring back their own Cultural Mind Map to the next session. This would hopefully provide a list of plants relevant to the students, some of which could be included in the RHS Tatton Park show garden. The following worksheet was used to guide this session;

**SESSION 3 Worksheet: Discovering Cultural Roots**

1. Where did you grow up?

2. Can you point at it on a map or can we find it online?

3. Does it still exist?

4. What was life like when you were young?

5. What was your home like?

6. Where did your parents work?

7. Did many people have a car?

8. Did you have a garden or did you visit anywhere special?

9. Do you remember anyone in your family growing anything (fruit, vegetables, flowers?)

10. Does anyone in your family remember the Second World War and the Dig for Victory campaign?

11. Do you grow anything now?

12. What fresh ingredients do you use in your cooking (fruit & veg)?

13. What is your favourite recipe?

**Make up some of your own questions:** What else would you like to know?

14

15

16
SESSION 4: Practical activities

AIM: to facilitate hands-on activities to teach basic skills of handling and caring for different plants; to create items for the show garden

CURRICULUM LINKS: Art and Design KS 1&2: Pupils should be taught: to use a range of materials creatively to design and make products; to use drawing, painting and sculpture to develop and share their ideas, experiences and imagination

For this very practical workshop, the Year 4 class of 32 students were split into 4 groups. Each group created a different set of items for the show garden. The groups rotated around the space so that most students had the opportunity to try each activity.

**Activity 1: Name Bricks**

Bricks were and still are a common building material for this area of Manchester. The design included using old bricks to form an informal ‘path’ within the garden. It was important that all of the pupils had something of their own in the garden, so each pupil was asked to decorate and write their name upon a brick. This increased the sense of ownership, but it also allowed us to illustrate the cultural change that had occurred in this area of Manchester since our earliest aerial image (1927). By including some of the names of 1930’s pupils from the first class in the school alongside more modern names, it reflected a change in culture and fashion over time.

**Table 2: Aeroplanes**

The photographs the students have been looking at were taken from an aeroplane. In addition to a number of knitted aeroplanes provided by the teachers, each pupil made and decorated a small aeroplane to be used in the show garden.

*Painting the name bricks*

*Making the aeroplanes*
Images of houses were well remembered by the students, so they became part of the design. The tight timescale meant that it was not possible to create detailed models, but the ridge tiles at the reclamation yard had given us an idea. All we needed to make was the house ‘box’ for a row of back-to-back terraced houses and a few detached houses for the council house crescent. Paint, hammers and nails proved to be a popular activity!

![Image of children making models]

Making the model houses

Table 4: Planting mini allotment rows

Some seeds grow really fast. Although the school gardening club had already grown some marigolds and strawberries, the tight timescale meant that larger vegetables would be not fully grown in time for the show. However, the allotments we had observed were mini-rows from the air. It was possible to reproduce these by sowing mini-rows of seedlings which would germinate well in time for the show.

![Image of children planting seeds]

Sowing mini rows; radish, lettuce and beetroot

“I have loved painting bricks and painting other names and also loved making planes to go in our garden. We also loved making plants like radish, lettuce, cress and peas.” Zairah, age 9

“I liked writing my name on the bricks and colouring on the airplanes and painting the houses.” Sameer, age 9

“I enjoyed planting seeds.” Aeman, age 8

“I liked growing the plants in the garden.” Alecha, age 9
BUILDING THE GARDEN AT RHS TATTON PARK FLOWER SHOW

The garden was situated within the Schools Gardens section at RHS Tatton. Organised by the Winsford Education Partnership and the RHS Campaign for School Gardening, it was in a secure compound which allowed the students to create the garden safely. The garden took 4 days to create, 2 of which the students were involved in.

Build timetable:

Garden Build Day 1 – A raised bed formed the main edges to the garden. The heavy large trees, grapevine and chimney pots were positioned prior to the school arriving on site.

Garden Build Day 2 – The following activities were carried out by the school;

- Filling the chimney pots with soil and planting them
- Raising the height of the garden within the raised bed (moving soil)
- Painting the backdrop
- Painting the aeroplane for the backdrop
- Starting the main planting

Garden Build Day 3 - The following activities were carried out by the school;

- Filling the chimney pots with soil and planting them
- Raising the height of the garden within the raised bed (moving soil)
- Laying turf
- Completing the main planting

Garden Build Day 4 - Final preparations. Final coats of paint, dead-heading plants and watering.
Creating the garden at RHS Tatton Park Flower Show

Moving soil, filling and planting chimney pots

Painting the backdrop, planting and levelling the soil ready for the turf

Filling chimney pots, creating our number flower beds, using the spade to plant flowers
The finished garden

The final garden, with the aerial photographs laid out in-front

Inspired by Gorton Foundry images 1927:

The smoky black chimney pots and brown hues of industry, the red-flower sparks of the foundry (Crocosmia Lucifer), the workers’ rows of back-to-back houses
Inspired by Belle Vue images 1947:

Mini-salad seedling rows representing Dig for Victory allotments as seen from the air. Lettuce, cress, beetroot and radish seedlings jostle for space in the mini-rows.

Below: Name Bricks

Inspired by images of Melland Playing Fields 1935:

A crescent of houses representing the new council house crescents, with gardens and green spaces.
Inspired by the pupils at the school:

A multi-cultural planting mix in the chimney pots representing the plants which would have been grown in the pupil’s family garden in the 1930’s. The garden travels around the world and includes Bananas, chillies, peppers, aubergine and coriander all wrapping around a standard grape vine inspired by a family who used to own a vineyard in Lebanon.

Inspired by the pupils at the school:

An multi-cultural mix of names on the bricks from traditional British names in the 1930’s school (Mavis, Doris, Derek) to the names of the pupil’s today (Samara, Islam, Callum).
One of the pupils, Callum, visiting the garden during RHS Press Day. He is holding an image of the 1927 Gorton Foundry aerial photograph and his own name brick.

“I’m proud to have helped make the garden.” Callum, age 8

“It feels like I’ve done an adult’s day’s work!” Samara, age 9

“It’s so beautiful!” Aeman, age 8

“It’s been a wonderful experience for the children and the staff. I never realised how much time and hard work went into the planning, design and physical aspects of creating a show garden. It has been an amazing experience!”

Hazel Shaw, Teaching Assistant and School Garden Club coordinator, Crowcroft Park Primary School

Although the garden was not intended to be judged, the organisers of the show encouraged us to enter the judging for Show Features (gardens with an educational remit). We were delighted when the top award was presented to us – Highly Commended.
The garden was constantly staffed during the Show, giving the public the opportunity to see the aerial images, ask questions, visit the website and gain a greater understanding of the purpose and inspiration for the garden. Many visitors had a personal connection with the garden – many had visited Belle Vue Gardens in particular and could tell stories about the amusement rides and the animals in the zoo. Others knew the housing estates, with one lady actually able to point out her house on the Melland Estate aerial photographs.

After the show, the elements of the garden were relocated to the school and a new garden will be built within the school grounds during 2014/2015. It is hoped that the school can use this experience to engage more parents with the school garden activities and move up a level on the RHS Schools Benchmarking Scheme.

Anne Gunning, RHS North West Regional Schools Advisor said;

“The children were actively involved at the show and carried out the majority of the work, learning new gardening skills. They gave me a guided tour of the show garden and explained how they had designed and built it. They were certainly very proud of their work and knew all the names of the wide range of plants which were on display. It was thrilling to see how the children talked about the plants as food rather than flowers or plants, which shows how they are making the link between growing, cooking and healthy eating. They could easily use this project to increase their level on the RHS Schools Benchmark Scheme.”

It is amazing what can be inspired by an old aerial photograph!

What will you do with yours?
For further information about this project please visit the following websites:

1919 - 1953

Britain from Above
www.britainfromabove.org.uk
RHS Tatton Park – Crowcroft School (School Groups section)

Angie Turner Designs
www.angieturnerdesigns.co.uk

RHS Campaign for School Gardening
www.rhs.org.uk/schoolgardening

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