

Regeneration Awareness Programme for Schools



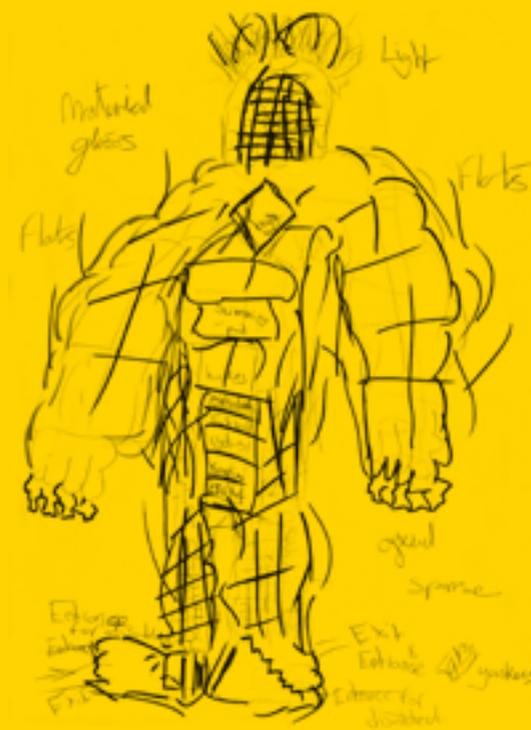
# Bridging the Gap



Bridging the Gap is a regeneration awareness programme for schools, which aims to give children and young people an exciting and creative introduction to architecture and show their teachers how they can use the local built environment across the whole curriculum.

Over 1400 Newham pupils have taken part in the pilot phase of this programme which is now ready to roll out across the rest of the borough's schools.

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# Foreword

I am delighted to introduce this report on the pilot phase of Bridging the Gap, our schools architecture programme commissioned by Newham's 2012 Games Unit in June 2006.

I want every young person in Newham to have the chance to learn about the regeneration of their borough and I want them to understand how they can be part of this massive effort to transform their environment for the better.

Bridging the Gap goes a long way to achieving that. Over 1400 of our Key Stage 2 and 3 pupils have already benefited from taking part in the Bridging the Gap programme.

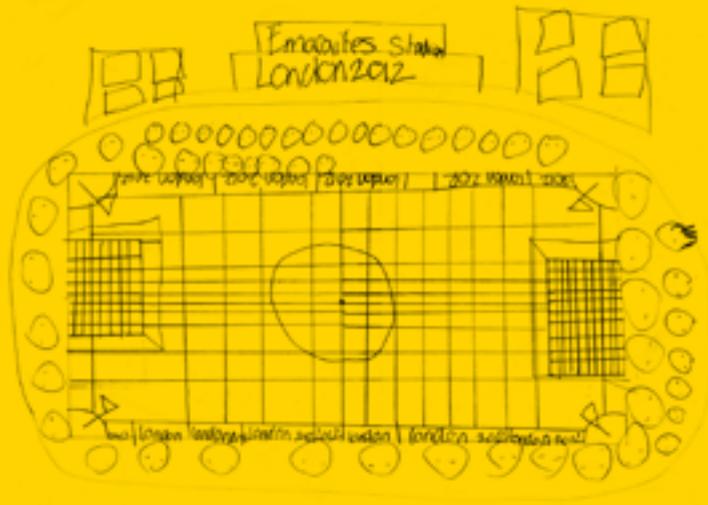
On every page of this report you will see and read about the wonderful models and ideas that the children have produced during these roadshows. We should congratulate them on their fantastic work and continue to find new ways for them to become active citizens in our borough of Newham.

Bridging the Gap is the brainchild of Fundamental Architectural Inclusion, an architecture centre based in the heart of Newham and dedicated to finding ways for all our citizens to take part in Newham's regeneration.

We are committed to continuing to work in partnership with Fundamental to achieve our goal of thriving communities.



**Sir Robin Wales**  
Mayor of Newham



“I liked making the stadium with modelling equipment, because it was complicated and fun” Pupil



# Introduction

The London Borough of Newham is undergoing an ambitious and far-reaching physical transformation, scheduling major planning activity that is three times greater than the London average. With 50,000 new homes proposed by 2020 and 25 major regeneration projects underway, even those involved in their delivery struggle to stay abreast of developments. So realistically what hope do the people of Newham have of keeping up with the massive changes and opportunities on the horizon? Our view is that they will certainly need a helping hand.

It was probably three years ago now that Sir Robin Wales presented us with a challenge – find a way to give every child the opportunity to learn about the massive regeneration programme underway across Newham, which is now being stepped up as a result of the 2012 Olympic Games. We were delighted if not a little daunted and were determined not to sacrifice quality for quantity.

Which is why I am thrilled that we can present here a tried and tested programme, Bridging the Gap, which brings high quality regeneration awareness activity to large groups of students using their own familiar home ground as a starting point. Our evaluation shows that the programme had a huge impact on children and their teachers, as they turned their hands to model making following an architects brief, or the many other activities they threw themselves in to so enthusiastically.

I am grateful to our team of hardworking and dedicated architectural educators, whose attention to detail and passion made this the high quality programme it is. But most of all, like Sir Robin, I'd like to congratulate the young people on their enthusiasm and hard work which produced some fantastic models of the Greenway, the future Olympic stadiums and other parts of the borough which I hope they now know a little better than they did before.

**Nick Edwards**  
 Chief Executive  
 Fundamental Architectural Inclusion



# Overview

Bridging the Gap is an innovative programme of architectural education designed to inspire enthusiasm and encourage learning about the built environment, regeneration and the 2012 Olympics in Newham's primary and secondary schools. The programme was funded by Newham's 2012 Unit as part of their 'Legacy of Opportunity for Newham's Young People' programme.

Bridging the Gap is ideally placed to provide learning outside the classroom opportunities which themselves can support many of the core aims of Every Child Matters and the objectives of the Government's sustainable communities agenda. The growing emphasis on cross curricular learning and the Department for Children, Schools and Families' recent cultural offer to all pupils, make Bridging the Gap an attractive option for schools wishing to bring regeneration awareness and citizenship opportunities to their students.

The Bridging the Gap programme was piloted in a total of nine schools over three school terms in 2007. Each term the team worked with one secondary school plus two feeder primary schools located close by.

**"It's a brilliant way of bringing all the subjects together, art, d&t, geography."** Teacher

Every school was offered the same overall package, which was then tailored to meet their particular needs, including the option to tie the programme into a particular strand of the curriculum: Geography, Design and Technology or Art. The package comprised of the Bridging the Gap roadshow plus a series of measures to further embed learning, including presentations to assemblies, mounting displays of work from the roadshow and training for the teachers involved.

8 in 10 pupils said they had learnt something new about how the Olympics will affect Newham people.

Over 1400 pupils in Key Stages 2 and 3 had the chance to take part in a Bridging the Gap roadshow or wider school activities such as assemblies and presentation of results in each school. From the pilot schools, 17 teachers have received training, support or access to resources from the Bridging the Gap website, to equip them to deliver built environment education in the classroom.

**"They are so proud of the outcome as well. When they see it, they are proud of it, and they take ownership. It's a memorable experience for them."** Teacher

**The Bridging the Gap roadshow has several features which the evaluation judged to be key to its success. The roadshow is:**

## Creative

The children tackle challenging tasks using exciting creative methods which produce lasting visual results which they can display and take pride in.

## Enjoyable

The team set out to demonstrate to children and their teachers that it is fun to learn about the built environment generally and locally.

## Take risks

The team encourage children to take risks, to work as independently as they are able and to have a go, however daunting a task might seem.

## New experiences

The activities are designed with the hope that every child will find something new in the roadshow, whether it is a field trip to a new place, a new way of working, or a new creative technique.

## Inclusive

The strong visual nature of the roadshows gives them a high level of inclusiveness across language barriers and different special educational needs.

Underpinning the fun, the creativity and the 'have a go' vibe of the roadshow, is a seriousness and professionalism rooted in Fundamental's whole approach to teaching regeneration awareness.

9 in 10 pupils said they had tried something new during the course of the roadshow.

# Secondary schools

Three secondary schools took part in the pilot Bridging the Gap programme, starting with the Royal Docks Community School where the team worked with 15 children over two days. The school's chosen curriculum theme was Design and Technology but other schools chose to shape the roadshow around Art or Geography.

## Introducing the area with Google Earth

Using Google Earth to zoom in on the school and its surroundings from outer space, encouraged the children to introduce their neighbourhood to the visiting Bridging the Gap team and proved to be a great catalyst for wider discussion.

## Film shows

Next, the pupils watched Masterplan, the London 2012 Olympic bid video to set the scene for the Olympics focus of the roadshow. The children were then invited to travel back in time to glimpse the docks – where their school is located – in their working days, by watching another film, Neighbourhood 15, recorded in 1946 at the start of the massive post war regeneration of East London

## Giant jigsaw map of Newham

To help pupils to explore their borough as a geographical and a civic space, Fundamental has prototyped a giant jigsaw mapping resource based on the OS Map. The children are split into 'developer' teams and each team is given a piece of the giant jigsaw map to work on. In primary schools this is a floor activity, carried out more slowly and with a lot of help from the team. Here, with Year 8 pupils, the jigsaw

9 in 10 pupils said that they enjoyed the roadshow activities; and that they now wanted to learn more about their area and about the Olympics.

8 in 10 pupils said they had learnt something new about working in a team.



“We used the most magnificent materials ever.” Pupil

“I could have a job in the Olympics, as an architect, a designer, I could help others to get a job. I have got new aims for myself, goals that I could try to reach.” Pupil



map was a quick table-top exercise to get to grips with the borough's civic and transport infrastructure and the sheer scale of brownfield sites up for development. The results were very impressive.

### Visit to Stratford

The team took the group on the Docklands Light Railway and the Jubilee line to Stratford. The group were given digital voice recorders to make a self initiated audio diary of their visit to Stratford, which included a visit to the library to see the architectural model of the Olympic Park and surrounding area.

### Viewing gallery at Holden Point

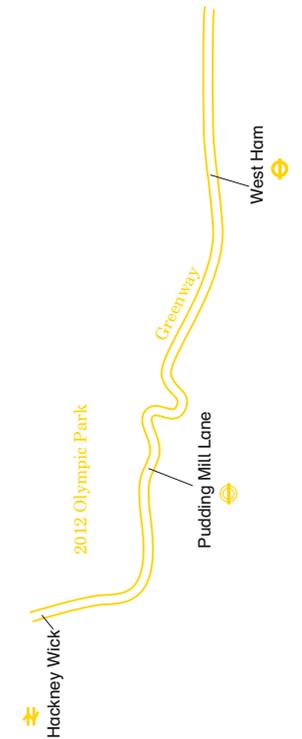
In the official Olympic viewing gallery at Holden Point, pupils fixed A2 acetate sheets on to the viewing windows, and sketched the outline of the panorama as it is now, including the London city skyline. The next step was to focus in on the massive Olympic and Stratford City construction site, which was still very empty. During their visit the pupils were also given a talk about the key Olympic site developments.

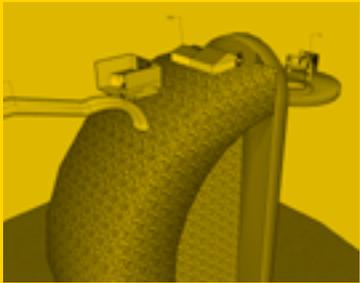
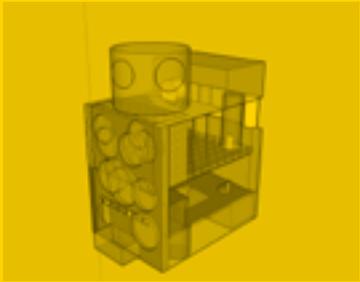
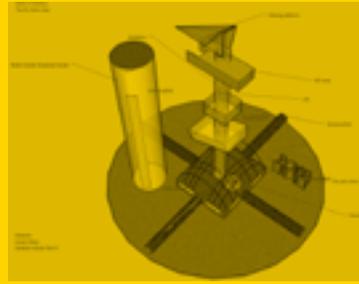
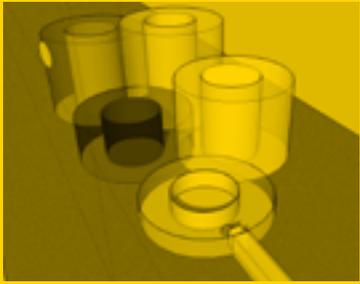
9 in 10 pupils said they had learnt something new about the area in which they live and study.

#### Curriculum theme: Geography

#### Brampton Manor pupils give the Greenway a face lift

Year 7 pupils studied and then redesigned a section of the Greenway which runs from West Ham station into the southern end of the Olympic Park, whose patchy condition is attracting the attention of the Olympic Delivery Authority (ODA) for transformation into a major pedestrian route into the Olympic Park. The pupils visited the Greenway and collected information using specially produced kits for examining the site, taking photographic evidence and interviewing pedestrians and cyclists using voice recorders. Back at school the next day they produced a detailed map of the Greenway using the information collected before being briefed by a representative from the ODA on their next challenge – to produce a 3D model of a redesigned Greenway. The result was a six metre version of the Greenway which has now been presented to school peers, teachers and Newham and Olympic officials.





**Curriculum theme: Art and Design**  
**Stratford School design the London Games Visitor Centre, using SketchUp**

Being in the elevated viewing gallery on the roof of Holden Point was the ideal place to set the pupils of Stratford School a special challenge – to design a London Games Visitor Centre, working to a simplified version of a real life architectural brief. The class was given a rapid introduction to the 3D design software SketchUp which they used to produce their own concept models of visitor centres. The resulting models were really quite astonishing. The children presented them to their peers and teachers and since then they have been presented to officials engaged in 2012 Olympic policy and development.

SketchUp models of Visitor Centre

“It’s given them more awareness of their local area. And I think they probably associate the Olympics more with their local area as well, because normally it’s something on the TV and it’s removed. I hope it gives them more incentive to think about how they can make a difference, do something about their environment, because they are part of it.” Teacher

## Modelling the Olympics

The afternoon began with a slide show of artists’ impressions of what the Olympic Park and stadiums may look like. The class was then introduced to the huge task of 3D modelling nine key Olympic stadiums on to a larger scale jigsaw base of the Olympic Park itself. The class was split into design teams and each team was given a mini design brief for a different stadium: the main stadium, the aquatics centre, the velodrome, the bmx track, the Olympic village and the basketball, handball, hockey stadium, and retail area, Stratford City. Each design team first sketched their ideas and were encouraged to share their thoughts with their members and evolve a common approach. They had to break down the tasks involved in building a detailed 3D model of their design and work together to produce and mount a model and surrounding landscape on to the Olympic Park jigsaw base.

8 in 10 pupils said they had learnt how to make a 3D model of a building or a place.

## Celebration and presentation

The pupils were encouraged to present their work to the whole class and various visitors including the headmaster and Newham’s Design and Technology curriculum advisor.

6 in 10 pupils said they had learnt something new about how buildings are planned or made.



# Primary schools

All six primary schools that took part followed a similar programme with some variation to take account of the school's location and any timetabling requirements.

## Introducing the area with Google Earth

Using Google Earth to zoom in on the school and its surroundings from outer space, encouraged the children to introduce their neighbourhood to the visiting Bridging the Gap team and proved to be a great catalyst for wider discussion.

## Film shows

Next, the team introduced 'the Olympics coming to Newham in 2012' as an overriding theme for the roadshow by viewing *Masterplan*, the London 2012 Olympic bid video to set the scene. The children were also invited to travel back in time to glimpse the history of their own area and view the film *Neighbourhood 15*, recorded in 1946 at the start of the massive post war regeneration of East London.

4 in 10 pupils said they now felt better about living in Newham.

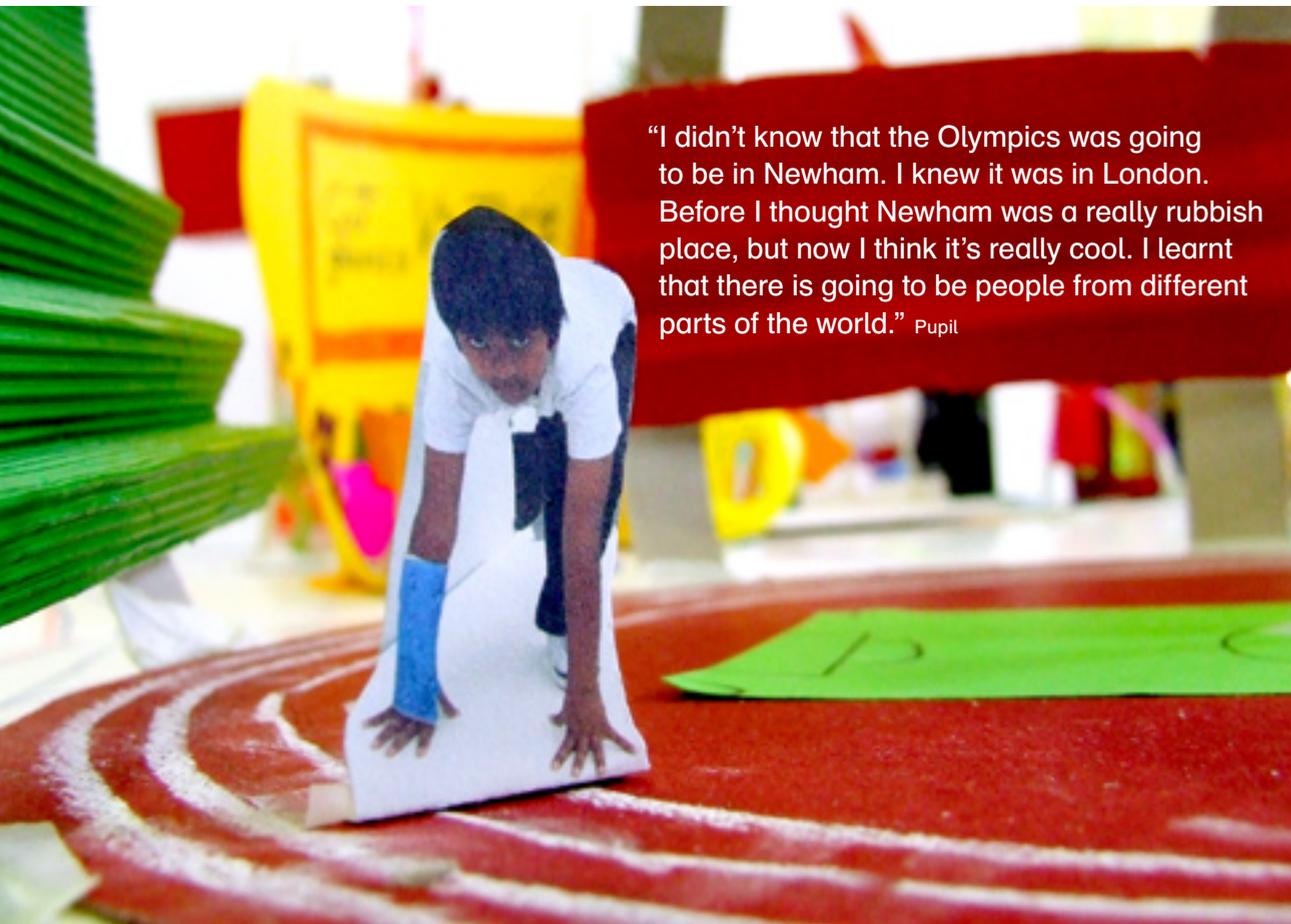


"The big map made me understand Newham as a borough... When you are making the map by yourself, you understand where the places are." Pupil

## Elmhurst Primary School Intergenerational gathering at Holden Point

Elmhurst Primary School followed the same Key Stage 2 programme but also squeezed in a visit to Holden Point, the official viewing gallery of the Olympics site where they met with elderly residents who live in the building's sheltered housing scheme. Through a warm sharing, the children heard residents' stories about the area and looked through photographs of Old Stratford before going with them to view collectively the vision of the future Olympic site and Masterplan.





“I didn’t know that the Olympics was going to be in Newham. I knew it was in London. Before I thought Newham was a really rubbish place, but now I think it’s really cool. I learnt that there is going to be people from different parts of the world.” Pupil



## Discussion

Through class discussion the team was able to shed some light on why the 2012 Olympics and other major regeneration projects are happening all around Newham, and to further gauge the children’s understanding of and aspirations for the Olympics coming to Newham.

## Giant jigsaw map of Newham

To help the pupils to explore their borough as a geographical and a civic space, Fundamental has prototyped a giant jigsaw mapping resource based on the OS map. The pupils are split into ‘developer’ teams and each team is given a piece of the giant jigsaw map to work on. Each developer team identifies, marks and then models any key features located on their part of the map, for example railways, roads, waterways, green spaces, Olympic site and a variety of civic and social landmarks and buildings. The pieces are reassembled with the Thames and then more work is done around major transport routes, particularly highlighting their significance to the Olympic Park. The end results were vibrant textured 3D maps giving a glimpse of the borough as a whole.

7 in 10 pupils said they learnt to make a map and put a real place on it.

## Modelling the Olympics

The pupils viewed a slide show of artists’ impressions of what the Olympic Park and stadiums may look like. The class was then introduced to the huge task of 3D modelling nine key Olympic stadiums on to a larger scale jigsaw base of the Olympic Park itself. The class was split into design teams and each team was given a mini design brief for a different stadium: the main stadium, the aquatics centre, the velodrome, bmx stadium, the Olympic village and the basketball, handball, hockey stadium and retail area, Stratford City. Each design team first sketched their ideas and were encouraged to share their ideas with their members and evolve a common approach. They had to break down the tasks involved in building a detailed 3D model of their design and work together to produce and mount a model and surrounding landscape on to the Olympic Park jigsaw base.

9 in 10 pupils said that they had learnt something new about the Olympics.

## Celebration

At the end of the day, all the stadium models were assembled to produce a fantastic vision of the whole Olympic Park. The teams were encouraged to present their work to the whole class, and other teaching staff and pupils came to visit and view the maps and models as well.

# Evaluation

## The evaluation of the pilot programme collected the following information:

- 325 questionnaires filled in by pupils after participating in a roadshow
- 30 face to face, semi structured interviews with pupils during roadshows
- Focus groups with nine teachers attending training sessions
- Eight individual interviews with teachers who participated in roadshows
- Participation and observation at six roadshows
- Telephone interviews with Bridging the Gap team of architectural educators

## Key points

The main vehicle for regeneration awareness is the Bridging the Gap roadshow, a unique combination of activities, which challenges pupils to tackle difficult and often unfamiliar tasks in a way that is fun, creative, supportive and produces results that they can display and feel proud of.

## Taken as a whole, Bridging the Gap delivers the following learning outcomes:

- Learning facts about 2012 and local regeneration
- Making sense of the impact of 2012 and local regeneration
- Learning and practising specific curriculum linked skills including mapping
- Learning and practising intellectual skills including planning work
- Learning and practising communication skills including working in teams
- Self reported impact on confidence and feelings about self and others

## Delivered by an Architecture Centre

The Bridging the Gap roadshow was devised and delivered by architectural educators based in and supported by a local architecture centre, Fundamental Architectural Inclusion. The light hearted and fun approach to regeneration awareness is underpinned by the professionalism and expertise of an organisation which has the knowledge and resources to deliver high quality built environment education.

## Outside

The Bridging the Gap programme is ideally experienced off timetable and outside the classroom with a cross curricular approach to learning objectives. However, where a school does not wish or is not able to take part unless the programme is tailored around the timetable and curriculum, this can be done. The pilot has found that it is highly beneficial for children to work outside the classroom, ideally leaving school premises at least once during the roadshow to explore the local built environment for themselves.

## Local

The skilled architectural educators who devised and delivered the programme, used the pupil's knowledge of their own local area as a way to capture their interest before deepening their understanding of wider built environment issues, such as the planned 2012 Olympic Park. Studying the local environment presented an opportunity for co-learning with pupils and teachers discovering new places and information together, guided by the architectural educators. The evaluation found that Bridging the Gap can foster a real sense of belonging; many students experience a sudden moment of realisation during the roadshow as they make sense of the borough they live in for the very first time.

## Inclusive

The roadshow is an inclusive programme that removes curriculum labels and fear of failure for pupils whose confidence or enthusiasm can be dented by these. Pupils can engage with the programme in a variety of ways drawing on their own strengths and preferences, an approach which is also thought to maximise learning<sup>1</sup>.

1. See *Learning outside the classroom, Manifesto*, Department for Education and Skills, 2006.

“Team work is a skill that can go into all lessons: PE, working together physically, or in the classroom, discussing ideas, art, drama, music, technology.” Teacher



## Learning

The roadshow is an opportunity to learn and practise many intellectual and communication skills. Being asked to work to an architect's brief was a particularly effective approach and the pupils derived a clear enjoyment and benefit in terms of creativity, ownership and confidence from being allowed to work freely from a basic brief, where there were no rights and wrongs, only better or more interesting solutions. Teachers noted overcoming initial fears of allowing so much freedom rather than setting rigid tasks, and a new confidence that children can stay on task and produce the results even when given such an open hand to produce what they like.

“I enjoyed best going on a trip to Stratford, because we gained information and could use it later to teach. You could use it in maths, for example, about scale and the Greenway.” Teacher

## Teaching the teachers

At the start of the Bridging the Gap programme, delivery of architecture and built environment education appeared to be patchy and uneven, with poor understanding of what is meant by built environment education and little idea of how to access information or support. There is an identified lack of local resources which needs to be addressed but there is also a lack of knowledge about how to access those national resources that do exist.

After taking part in Bridging the Gap, teachers were more enthusiastic about the benefits of built environment education and more confident about handling classroom based activities about the issues. However, most reported not feeling sufficiently confident to facilitate the kinds of creative exercises and learning offered by the Bridging the Gap roadshow by themselves.



# Thank you

To all the pupils and teachers in the 9 schools that took part:

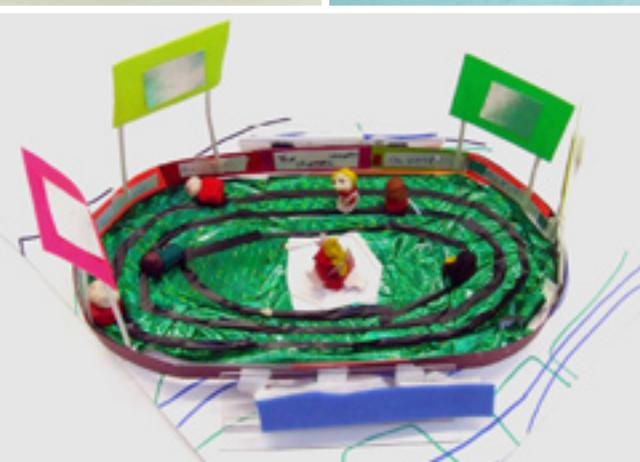
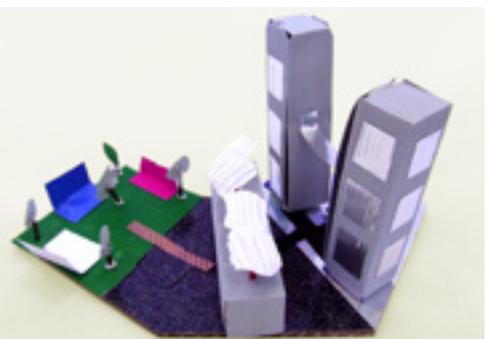
Brampton Manor Secondary School  
Britannia Village Primary School  
Drew Primary School  
Elmhurst Primary School  
New City Primary School  
Roman Road Primary School  
Royal Docks Community School  
Shaftesbury Primary School  
Stratford Secondary School

To members of the Bridging the Gap steering group:

Pippa Gueterbock, EDAW  
Louis Moreno, DCMS Engaging Places  
Rosie Murdoch, Olympic Delivery Authority  
Andrew Mutter, LB Newham Arts Adviser  
Nick Williams, LB Newham 2012 Unit



"We made stadiums with our own imagination. Without anyone hinting ideas for us." Pupil



# Information

Bridging the Gap was funded by the London Borough of Newham's 2012 Unit as part of their programme to 'Establish a Legacy of Opportunities for Newham's Young People'.

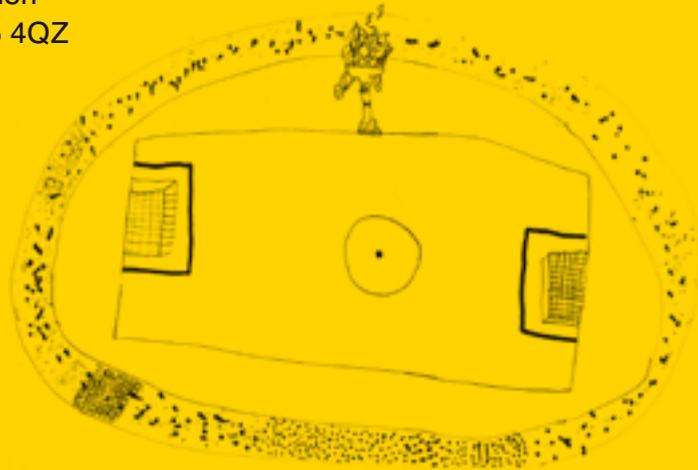
Fundamental Architectural Inclusion is an architecture centre based in Newham that seeks new ways for communities to participate in the transformation of their neighbourhoods.

Bridging the Gap was devised and delivered by the centre's team of architectural educators led by Nick Edwards.

The evaluation was managed by Leila Baker Fundamental's policy and research associate and carried out by Emma Neale project researcher.

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