

Celebrating Success in Norfolk Schools Architects in Schools 2006

The Architects in Schools 2006 initiative, supported by CITB, the Norfolk Association of Architects and The Exchange, and led by Norfolk County Council Children's Services, provided a unique opportunity for Norfolk young people to work with professional architects to improve their learning. The programme makes a very positive contribution to the five Every Child Matters outcomes. The impact of having professional architects working with our pupils and their teachers allows issues of being healthy and keeping safe to be considered as they enjoy and achieve their learning. Many of the individual projects undertaken enable the pupils to take part in decision making and support their local community and environment and make a really positive contribution at their school.

The successful outcomes are celebrated in this publication for all schools in the Local Authority to enjoy.

Advisers involved in this programme were Mike Hodkinson and Chris Hemmings. They can be contacted on 01603 433276.

The architects involved in the projects were:

Keith Day
Fornsett St Peter VA Primary School

Chloe Kitchener and Michael Obadu
Magdalen Gates First School

Mark Camidge
Sheringham Woodfields School

Rachel Moulton
Toftwood Infant School

Gillian McArthur
Wicklewood Primary School

Gabi Feingold
Tunstead Primary School

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communication for all



Wicklewood Primary School

Forncett St Peter VA Primary

Outline of Project

The aim of the project was to design a multi-sensory 'quiet' area within the main playground of the school. This would, hopefully, provide a shaded, calm zone within the grounds where children could play quiet games, read, eat and chat, away from the bustle of the playground.

Children from all classes would have an input into the project but the bulk of the work would be undertaken within Beech Class (Year 3/4)

Outcomes

The main outcome of the project was the vast range of ideas and practical solutions to problems that the children developed. The final design which incorporated natural shapes (hexagons, circles) and which provided shade from climbing plants and trellis, was an amalgam of ideas developed during the sessions both with and without the architect.

Curricular Links

- Literacy: labelling, describing, reporting
- Numeracy: measuring, scale, 2D and 3D shape, area, using non-standard measures
- Geography: changing our surroundings, local materials, impact of designs on locations, gathering survey data, renewable energy
- History: development of buildings
- Science: natural shapes, materials, growing plants, sustainable energy
- ICT: CAD, computer modelling, analysing data, digital photography
- Art and D&T: colour, shape, materials, 3D structures, strong structures, stable structures
- PSHE: considering the needs of others, feelings
- PE: how much space do we need to play games?

Raising Standards

All children had a chance to use and develop skills learned in all of the curriculum areas in a focussed practical task. There was sufficient time to develop designs and prototypes and the presence of an 'expert' gave the children access to a whole new way of thinking. Thinking 'outside the box' and not being afraid to try an idea, playing with 'what if' rather than sticking to what is known. Developing an idea from initial sketch to final design and seeing it presented in The Forum gave the children a great feeling of satisfaction and excitement.

Benefits to Pupils, Staff and School

The children all enjoyed the cross-curricular nature of the project which fitted well into the innovative curriculum development within the school. The staff enjoyed the challenge of working outside normal areas of experience and with outside experts. It was also beneficial having the chance to see children completely engaged in their own projects, either solo or in small groups, and to hear the quality of some of the discussions which took place, often involving those children that you can't normally get to talk. The school benefited from the project through classes working together closely, and through having the chance to work on a project which was lead by the children's ideas and designs.

Sustainable and Environmental Issues Covered

The designs in the project were encouraged to include, where appropriate, renewable energy and recycled/reusable materials - fountains would be solar powered or wind powered. Building materials should be available locally and should ultimately be recyclable or compostable.



The architect points out important details



Children concentrate on developing their plans



Cutting carefully and accurately



The teaching team help with precise measuring

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Outline of Project

To design a garden that looked at various aspects of water and incorporate features to reflect these. The garden itself is to consist of three distinct phases:

- i) generation of power using gravity
- ii) irrigation and water purification
- iii) use of alternative methods of energy to raise water back to a header tank.

Outcomes

The project has made the whole school aware of the importance of water in our daily lives. Construction of an actual garden can begin, having had the opportunity to see how it might look in the model stage. This experience has undoubtedly been enjoyed by the pupils of class 2.

Curricular links

- Literacy: writing information texts
- Numeracy: calculating of area measurements of capacity and distance
- Geography: water, our environment, identifying deserts and areas of high/low rainfall
- ICT: internet search
- D&T: 3D construction, planning, making and evaluating models
- Art: landscape painting
- PSHE: cooperation and team work

Raising Standards

Children were actively involved in their own learning. Their design skills have benefited, thinking things through thoroughly.

Benefits to Pupils, Staff and School

- Great opportunity to take part in a cross-curricular event
- Raising the profile of the school
- Helping to give focus for future developments around the school

Sustainable and Environmental Issues Covered

- Conservation of water
- Collection and use of rain water
- Use of renewable energy

Additional Comments

Class two thoroughly enjoyed the experience of working with Keith Day. They were able to see how their learning could be linked to the real world. Keith's expertise and enthusiasm really motivated the children.

Additional Comments

We enjoyed the chance to work with Gabi, our architect, but feel that this is just the beginning. We have yet to calculate costs and timescale for the project, but it will happen. The project is a key element in the school's development plans which are far-reaching and ambitious for a small, rural school, but, we enjoy a challenge, and the school will continue its positive growth if we continue to challenge and stretch ourselves through such projects. We already have developments on site which would be the envy of much larger schools, and demonstrate that, as a school community, we have the will and commitment to achieve our aims.



The architect take the children through the planning stage



Drawing their designs onto a long paper strip gives the children a better sense of how it will work in the landscape



The model of the water feature takes shape



The water feature grows!

Tunstead Primary School

Outline of Project

The school is working hard to improve the environment as an outdoor classroom. An area around the original school pond has become overgrown and it was decided to revamp it as a sensory garden where the senses of sight, sound, smell and touch could be stimulated. All of the children were involved in the project through their ideas, although a small working group formed the core of model makers.

Outcomes

What evolved from the project was a journey through a maze, the participants being tracked on their journey by water. The water would flow under and over, crossing the path at various points, disappear and reappear and work a variety of devices. The maze itself would have textured paths and be planted for colour and scent. Along the way the wind would 'play' music and at the heart of the maze would be a wall of sound where the participants could make sounds for themselves, using a range of un-tuned percussion 'instruments'.

The next stage of the project will be to produce accurate blueprints, cost the development and raise the necessary funds and manpower. We intend to make it happen. Our architect, Gabi, has expressed an interest in maintaining our link.

Curricular Links

The project drew from a wide range of curriculum areas including English, Maths, Science, ICT, D&T, Art, Music, History and Geography. It fitted in well with the school's green ethos and is seen as a part of the environmental development process rather than a separate stand-alone topic. The school has an organic garden and greenhouse and has the capability to grow many of the plants itself.

Raising Standards

The project was part of a much larger school development programme. From our Mission Statement for Environmental Development: 'To create a sustainable environment with a variety of habitats where children can interact with the natural world and enjoy learning from it first hand.' We feel sure that by being involved in the development process and then being encouraged to fully using the resources in a wide, cross-curricular way, our children will be stimulated, motivated and standards will rise.

Benefits to Pupils, Staff and School

The key benefit is being involved in a rewarding project such as this and to be able to use an exciting and stimulating resource. We hope to offer its use to other groups beyond the school community.

Sustainable and Environmental Issues Covered

Plants - their importance to the environment.

Recycling - many of the materials to be used in the project will be natural and/or recycled materials.

Sustainable energy - we are hoping to supplement the power for water pumps from energy produced by windpower and/or solar power.

Sympathetic planning - the sensory garden will need to blend into the natural environment of the dipping pond and care will be needed not to disturb the wildlife there.



The project involves the children thinking about a design for a sensory maze with a water feature



Developing the design together



2D becomes 3D



Making important decisions about the final plan

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Magdalen Gates First School

Outline of Project

To design a new foyer to the school in preparation for the school becoming a Primary in 2007. To turn the designs, with help of the architects, into models.

Outcomes

What a fantastic project! The children learnt so much from Chloe and Michael. They showed them examples of different foyers and talked them through the architect's design process. The children worked really well in their groups and created four very different but equally valid, practical models.

Curricular Links

Literacy: speaking and listening, lists, labelling

Numeracy: measuring, estimating

ICT: using a digital camera, word processing

D&T: planning, designing and making models, evaluating, safe working skills

PSHE: cooperation, teamwork self evaluation

Raising Standards

The children's self esteem, self confidence and motivation was raised. Their planning and designing has been greatly improved.

Benefits to Pupils, Staff and School

Being involved in a design project from start to finish and finding out what the architect would do next. The achievement felt by the pupils when their work was displayed at The Forum.

Sustainable and Environmental Issues Covered

Re-using packaging and other resources that the children had saved at home and brought into school.

Additional Comments

We really enjoyed working on this project and would like to send a big 'Thank you' to Chloe and Michael for coming in and working with us. The rest of the school praised the class for their efforts and enjoyed going to see the displayed work at The Forum.



One of the first designs for a colourful foyer for the new primary school



They explored colour, shape and form



Discussions with the children about their work



This model has a large clear window at the back



The children are proud of their work



Additional Comments

A million thanks to Gillian McArthur, our wonderful architect.

If you are going to have a go next time, don't be afraid to explore even the most extreme ideas. Think well away from the box, in fact, step outside the box, close the lid firmly and don't even think about going back there until it's all over!

Sheringham Woodfields School

Outline of Project

To redesign the secondary outdoor area as a multi-sensory leisure area, which will provide stimulation and enjoyment for all students, within a safe environment. To provide an environment which will allow students to develop independence skills by making choices between a range of safe and appropriate activities.

Outcomes

We learnt so much. We had to learn to share ideas and then to translate our ideas into something feasible and workable. Produced plans and model of area, with ideas to provide wheelchair access to an area to be quiet in, an area for activity, safe area for cyclists, a shelter, a tactile and sensory section, a walkway, while also keeping some of the present facilities.

Curricular Links

Literacy: explaining ideas to others, annotation, discussion, creating surveys

Numeracy: measuring, shape, awareness of space, scale

Science: looking at properties of materials, suitable plants, environmental impact, conservation

ICT: word processing, digital camera, Powerpoint presentation, internet research

D&T: designing, planning, refining model making skills, evaluating and modifying, links with high school D&T department to use plastics, selecting appropriate tools and techniques

PSHE: canvassing ideas and opinions, valuing others ideas and opinions, making choices, taking decisions, working cooperatively

Art: creativity, colour

Raising Standards

- Working together and cooperation
- An awareness of the consideration of the needs of others
- Awareness of Health and Safety issues
- Understand properties of materials, designing, evaluating and modifying
- Learning to work to a schedule

Benefits to Pupils, Staff and School

- Learnt that they can contribute worthwhile ideas and that their ideas are respected and valued
- Working together, communicating ideas
- Working with other professionals and being aware of the work of others
- Now have ideas and plans for an area, some of which we hope will be used to change the existing area

Sustainable and Environmental Issues Covered

- Recyclable materials
- Respecting the environment and environmental impact of designs and materials/colours
- Aesthetically pleasing designs

Additional Comments

The project was very hard work, but very enjoyable; a learning process for pupils and staff alike! Gradually it started to invade all areas of our curriculum. Thank you to Mark Camidge for allowing pupils the freedom to express their ideas, and then helping to develop those ideas into a workable project. The pupils were proud to have their work displayed at The Forum.



Children who find learning difficult enjoy the challenges of designing



The children receive extra help to model their ideas

Some of the finished models



This exciting design has soft foam legs to protect children if they bump into them!

Toftwood Infant School

Outline of Project

To design an outdoor role play area for the playground. This was part of a real project. We are currently in the process of developing the outdoor area. As funding is made available, the children will see their ideas turned into reality in the near future.

Outcomes

The children enjoyed being involved in designing and then making models for the outdoor role play area. Rachel Moulton was great at encouraging the children to develop their models further and rework their initial designs. The School Council have also been involved with selecting the final design.

Curricular Links

Literacy: speaking and listening about ideas and decisions

Numeracy: measuring and estimating

Geography: viewing plans and location

ICT: digital camera work

D&T: planning, designing and making models. Evaluating and modifying models. Using a range of tools and techniques

Art: creativity and imagination

PSHE: cooperation and valuing opinions

Raising Standards

The project raised the children's awareness of the planning stages when developing an area of the playground. They have been actively involved in their own learning, and keen to review and improve their work.

Benefits to Pupils, Staff and School

The children looked forward to the sessions with Rachel, and were enthusiastic about the project. The status of D&T in school has been raised as a consequence.

Sustainable and Environmental Issues Covered

We talked about the type of materials we might use and the colours which would suit the existing area.

Additional Comments

Many thanks to Rachel Moulton for bringing her knowledge and enthusiasm to the school. We look forward to playing in our new role play area soon.



With help, the children's first ideas take shape



Taking great care



The final shop fronts