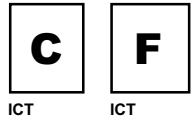


ICT ACTIVITY 23

Using ICT to research and present ideas about the design, fabric and facilities in the new City Academy.

Year Group: 7



Resources

Excel, PowerPoint, Publisher, Word, Paint, Serif Draw, Paintshop Pro, Internet.
<http://www.bbc.co.uk>

Context (Pupils' prior experience)

This project was inspired by the fact that the school is to have a new building when it reopens as a City Academy. It seemed a good idea to give students "ownership" of the new building and show them how ICT might be used to inform the design process. This was an extra curricular activity for the Year 7 ICT club which involved 15 pupils and 2 pupils from a local primary school. This age group was selected because we wanted to involve those who will still be in the school when it reopens in 2005.

Task Description

Pupils were asked to engage in a number of activities to explore what they would like to see in the new City Academy and how they would like the building to be designed. They used painting and drawing software to design the building. The Internet was used for research. Pupils created questionnaires to gauge local opinion about facilities in the building and what the building should look like. Pupils visited an architect to see how they used CAD to design buildings. In D&T lessons pupils made a scale model of the building. To present their findings to a wider audience, including the DfES architects, pupils used Powerpoint to combine pictures, text, and sound. Pupils also created a web site to show the results of their research.

Learning Intentions

ICT: Knowledge and Understanding	ICT: Skills	ICT Level		
		KS1	KS2	KS3
Know that the Internet contains a wealth of information which can be accessed if you know how to conduct a search. Know that presentation software can be used to combine pictures, text and sound.	Be able to conduct an Internet search and use keywords to narrow down a search. Amend and combine different forms of information from a variety of sources.	w/1	2/3	4/5
As above and know that it is necessary to select different information for different audiences.	As above and be able to select the information needed for different purposes and present information with an awareness of audience.	1/2	3/4	5/6
As above and know that it is necessary to present the information in different forms to meet the needs of different audiences.	As above and be able to use information from a range of sources and use complex lines of enquiry to solve problems. Present their ideas in a variety of ways and show a clear sense of audience.	2/3	4/5	6/7

ICT POS Related to Task; 1a, 1b, 1c, 3a, 3b, 3c, 4d.

Teaching Approach

Brainstorming session to find out what pupils would like to see in the new City Academy. Paired work researching the Internet. Whole class contribution to a final presentation.

Links with other curriculum areas

D&T – Making a scale model.

Subject Learning Gains (ICT)

Integrated activity providing an opportunity for a wide range of software packages to be used to solve a real problem.



City Academy Plans

This is a project we started when we were in I.C.T club after school. In this project we are trying to give ideas of what we want in our City Academy. In our group we made a model of how the city academy is going to look like with our teacher. We all designed a picture of how we wanted the city academy to look my friends and I all talked and said we would want half of the City Academy to be for the school and half of the building could be for outsiders. So we said we could build the city academy with a Swimming pool. We were asked by our teacher to make a floor plan and this is what we wanted in the city academy:

- A reception
- Big library
- Football pitch
- Sports centre
- Cafeteria
- A picnic area.

Our teacher took us on a trip in Blackheath to meet the architects at People and Places. We travelled there by a coach. We worked with the staff, and the architect told us about a child from a primary school who designed the market place in Lewisham. We then started to tear out pages of magazines of what we might want in the City Academy. After we got split in to groups and I worked with my friend. We took ideas out of different peoples design of pictures and designed the front of the City Academy.

Our teacher asked us to ask the D&T teachers to help us build a model of our idea of the School City Academy. We put all our ideas together and that is how we wanted the city academy. So this is how we had the idea of a model. We got together and gathered a range of materials around the house and brought it into school. We made the features while our D&T teachers did the cuttings with wood etc.

Pupils' Evaluation

These pupils engaged fully in a collaborative project to research analyse and present their finding on the design of the school as a City Academy. They used a wide range of software packages to complete the activity. Their final presentation was well structured, with a helpful index, and fully met the needs of the different audiences.

These pupils are working at ICT Level 5.

Teachers' Assessment

Teacher Evaluation

The project provided extension opportunities for students in year 7. It raised their ICT levels from 3+ to 5+ in the half term during which they were involved on the project. It was intended to give the students ownership of the new academy and raise attainment in ICT to facilitate early entry GCSE in Yr 9.

There were cross curricular links with Technology, Maths, English, Geography - Environmental studies, History – Arthur Legend, Art, Music, PHSE and cross phase links with a local primary school.

Pupils were also invited to visit an architect to use CAD to design buildings. Students were able to see architects' drawings, how these could be transferred to Autocad and scale models. Their designs for the academy entrance were realised in AutoCAD. Students used Paint and Serif which helped them to plan the layout of the school and to visualise the space.

Students realised that the local community should be consulted. They made questionnaires about:

What facilities should the new city academy have?

What should the building look like?

The students created questionnaires in Word (see example). These were completed by a range of potential users. Students approached – children under 11, 12-16s, 17-25s, adults, retired people and people with young families to get a range of responses.

Students discussed the best way to present their data and realised that graphs were a more accessible way of presenting their findings than tables of figures.

Overall students were motivated to engage in the project because it had a real life purpose. The range of additional opportunities to work with people outside the school added to their motivation.

Our Presentation

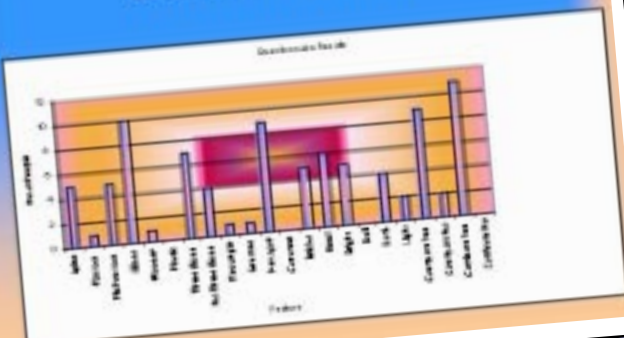
In this project of the city academy we will give our ideas of what we would like in the City Academy. We have been drawing designs of what the city academy would look like.



What Building Materials should we use?

- What kind of roof would you like?
- What kind of doors would you like?
- What kind of window shape would you like?
- Would you like the windows to be tinted?
- What kind of material would you like the building to be made from?
- What colours should we have for the building?
- Would you like...

Our Results Show



Pupils' Work