

## Thinking Skills and Personal Capabilities - A Case Study

**Flying High Together** - Year 1 children create a new airport and motorway for Belfast.

The following play sessions demonstrate how to promote and incorporate Thinking Skills and Personal Capabilities into the everyday activities of a Year 1 class.

This case study summarises a week of play activities which were stimulated by the interest of a particular child to a television programme about the building of a new airport and roadway. In the case study below, the teacher describes the direction in which she and the children took their learning when building the airport and roadway.

### **Background**

"One of my Year 1 children, Jamie, loves cars and aeroplanes. One morning he came to school very excited because he had watched a television programme the previous evening about the building of a new airport and road way.

Using an everyday opportunity to develop children's *Working with Others* skills and encouraging Jamie to work together and share.

Setting up a challenge to engage and focus the children in their play.

Jamie particularly enjoys building during play activities so he and Ian (his friend) went to the brick area. Jamie wanted to make what he had seen in the programme and began to direct Ian. I suggested that he might get some more friends to help him and in total five children became involved with this activity.

Jamie demonstrates creativity traits. He is keen to express and test his ideas.

### **The challenge**

How could we work together to make the airport and roadway?

I posed this question to the group and the children talked about the bricks they would use. Jamie insisted they would use only the big bricks [large wooden Community Playthings bricks] and told the others, "It's my airport." Melissa said, "I think we need a plan, I will draw it." We had been learning about making maps and plans through a recent geography topic and drawing plans would be a feature of some of the play activities of the children.

Melissa suggests a logical approach to the task. She applies her previous learning and recognises a strategy to help with the task, ie. plan or map. (Metacognition)

### **Planning the airport and roadway**

Having selected a pencil, paper and clipboard, Melissa proceeded to draw her idea of a road and airport. The other children looked on and began to give her ideas. They all discussed what should and shouldn't be included in the plan. Some of the children's comments were:

Melissa's outline plan serves as a stimulus for new ideas.

"Make the road long," "The airport has a big tower," "It has a fence so the people don't walk near the planes," "Planes go on the runway," "When I was at the airport I got my dinner," "The cars can park," "We need two roads to go in and out."

Through their observations the children demonstrate 'systems thinking' – recognising that the airport is made up of a series of parts that are needed for it to work.

Seeing a timely opportunity to intervene and sustain the creative flow of ideas.

It was obvious that most of the children were drawing on their personal experiences of being at an airport; however, I was aware that not everyone in the group had been to one so I brought a selection of 'finding out' books from the story corner to the group. They came up with further ideas as to what should be included such as, hangars, wind socks and roundabouts. I encouraged the children to keep sharing their thoughts and ideas. We used the internet to look at some pictures of famous

Children explore new stimuli to help generate, build and combine ideas.

airports and roads and printed them to act as an aide memoir. At a shared writing session I wrote a list of all their observations, mainly because Melissa's map had become crowded with pictures. Melissa then decided to get a larger piece of paper in order to revise the ideas of the group and she and Mark began to draw another plan. Mark started with the road and told her to draw the airport. Melissa stuck the original plan on the board and I stuck the list on the wall where I could read any parts of it that the children couldn't read. The pictures of famous airports and roads were also stuck on the wall for reference, if needed.

Melissa redrafts her plan to take new ideas into account.

### Building begins

Jamie was pleased with all the information we had gathered but was keen to start building. He again took the lead and told Ian to get all the big bricks out. Mark suggested using small bricks and Jamie questioned him about his choice. Mark replied that they were easy to carry but that they didn't have enough of them to make the road and airport. The children further discussed which bricks to use. I listened to their conversation, making no contribution and allowing the children to work through the problems for themselves. Mark put some small bricks on the ground and Ian put the bigger bricks on top. However, Melissa made the observation that they weren't a good fit. The group reflected on her comment and tried it the other way round. They then made the decision that big bricks should be used first. The children had been considering, talking about, finding out, making decisions and concentrating on the task for almost an hour. (The rest of the class had been engaged in

Mark suggests a possible option with the size of brick. Jamie seeks reasons and this encourages Mark to think aloud. He offers a pro and a con for his idea.

The children try out other options and evaluate the outcomes.

Holding back from intervening at this stage enables the children to work through problems themselves and engage in **exploratory talk** - where the children offer opinions, give reasons, reflect and work together to create a shared understanding.

other play activities with my classroom assistant.)

### **Working together**

Jamie looked at the plans on the board and began by putting some bricks in a line to form the side of a rectangle. The others worked together to complete the shape, adjusting the bricks where necessary. It was fascinating to watch the children look at the plan before placing a brick and talk through what they were doing with each other. They were working collaboratively and making decisions.

Jamie has become part of the team and works from the collaborative plan, while others work on different parts of the shape.

### **End of day one**

By the end of the daily play session the group had completed the outline of the structure which was left for them to continue the next day. Melissa wrote, with a little help, a 'do not move' notice. All five children spoke about their morning's work at 'Show and Tell,' describing in detail the steps they had taken and a photograph was taken as a record of their work. Throughout the day I heard snatches of chat about the airport and offers from other children in the class to help in its construction the following day. Jamie's idea had really caught the imagination both of the children in his working group and other children in the class!

### **Day two... building recommences**

Building began enthusiastically the next morning with much discussion of the plans and consideration of what should be done first. Melissa took on the role of briefing the others asking, "What do you think of using the soft bricks in our airport too because they are different shapes and colours and it will make

Melissa demonstrates leadership skills-framing an idea as a question for the whole group to think about.

Precise intervention to identify the problem, promote further ideas and keep children on-task

By intervening thoughtfully, the teacher avoids dominating the discussion and shows that s/he is a learner too.

our airport look real?" She had obviously been thinking about the project but decided to consult with the others in the group. The children decided to use the soft bricks; however a problem soon emerged when the bricks fell down as a child brushed past them. This caused some annoyance to the group so I asked them if there was another way they could use the soft bricks. The answers ranged from not using them to sellotaping them to the wooden bricks. Both suggestions were rejected and after some discussion the children thought it would be better to use the soft bricks to represent the main airport building but not the outer wall or the part of the roadway leading from the airport.

Other options are discussed until a solution is agreed.

### **The finished road and airport**

Work progressed with all the children taking part in building. Their enthusiasm for the task remained constant and eventually the airport and road were finished. The children then chose toy cars, planes and people and set about using their construction during imaginative play. They got such enjoyment and satisfaction from using their building and were very reluctant to leave it to take part in 'Show and Tell'.

Time given for reflection on product.

Opportunity here also for children to reflect on their thinking and learning, e.g. What helped you most? (e.g. Melissa's plan)

What did we

### **The children's reflection on their work**

During the session I challenged the rest of the class to make suggestions for improving the construction. After a few minutes thinking time, a lively and useful discussion took place with a lot of interesting suggestions being made. These were noted by my classroom assistant and the airport and road were modified as a result (with the permission of the original builders). The class felt it was now the

Children think about their model and suggest changes.

best it could be and ensured their work was recorded by having more photographs taken and by doing extra drawings. Most of the children used the construction during play over the next few days; in fact the road and airport were part of our classroom for over a week until their imagination was captured by something else. Very soon the children were on to the next project!

### **My Reflection**

I felt privileged to watch such well-motivated, co-operative children work together to overcome difficulties and differences in order to complete the project. The children had made decisions, problem solved, worked in collaboration, been creative and managed information. The children showed pride in the finished construction both personally and collectively and as a result of my observations I realised how capable they were of solving issues without adult help. I was also pleased to observe how collaboratively they worked with each other and how well they were beginning to use thinking skills naturally in the course of their daily activities. I definitely plan to encourage the children to continue using these skills. I also intend to work on ensuring I ask more open-ended questions and provoke the children to continue to make connections with their previous learning. As a result of this play activity, Belfast potentially had a new road and airport and I had a great team of budding imaginative, thinking builders!"