Developing a practical approach to creativity and collaborative groupwork

Karen Farquhar
Wardie Primary School, Edinburgh

Many theorists espouse the need for creativity to be taught within the school environment but few exemplars exist as to how this can be achieved. Indeed, this is not a development that can happen overnight; it requires a great deal of focused thought and revision, and classroom-based leaders who are willing to take risks and create a new vision of learning and teaching.

The project described is not the only way to achieve a creative learning and teaching environment for children. However, the benefits of the programmes where children take responsibility, work collaboratively and try out their creative ideas have outcomes which foster a more holistic approach to teaching and learning.

The project to develop creativity had originally been instigated by the former headteacher. She had had the vision to recognize the need to adopt a more interactive style of teaching where children had a role to play in directing their learning experience. I took on the leadership of the project and developed my own vision of what needed to be achieved.

We established a programme in Collaborative Groupwork and then developed the project further into the area of Afterschool Creative Problem Solving, Creativity and Assessment. In undertaking the project it was important to:

- understand the history behind developments towards creativity;
- understand current educational thinking;
- establish the definition of creativity; and
- recognize the importance of creativity in education.

Since the introduction of the national 5–14 target-setting initiative in 1998, Scottish education has been dominated by an emphasis on accountability for test results in the areas of reading, writing and mathematics. Such a strong focus on attainment in this

Improving Schools *© SAGE Publications*
Volume 7 Number 3 November 2004 287–295
ISSN 1365-4802 DOI: 10.1177/1365480204049337

narrow range of curricular areas has endangered the creative element of teaching and learning and it would appear that only what can be tested is valued. Recently there has been a national move towards recognizing Creativity, Problem Solving and Collaboration. The publication of a recent Scottish education discussion paper (Learning and Teaching Scotland, 2001) recognized and showcased those schools that continued to foster creativity in education and was written in response to the inclusion of 'creativity and ambition' in the national priorities for education in Scottish schools.

We were one of the schools showcased. With this affirmation of the work we had undertaken we needed to establish how the school could further accommodate the demands from both local and national initiatives in the area of Creativity.

The City of Edinburgh Education Service Improvement Plan 2001–2005
Aim 1: '*to develop quality education that promotes high levels of creativity, achievement and attainment for all.*'
The Scottish Executive National Priority 5: Learning for Life
'to equip pupils with the foundation skills, attitudes and expectations necessary to prosper in a changing society and to encourage creativity and ambition.'

Creativity is an important feature of the provision that teachers and schools make for young people's education. All areas of the curriculum and every aspect of school life have the potential to contribute to learning for creativity.

Creativity is not just valued in schools. Companies, who are trying to compete in a rapidly changing world, need people who are creative, innovative and flexible, but too often employers cannot find them.

> Our society needs creative people who can find creative solutions to problems and who are able to identify new problems, rather than depend on others to define them. (Seltzer and Bentley, 1999)

The pace of change is so fast that we do not know what challenges will exist when today's children join the workforce. The task for education is to prepare children to respond to any challenge. Ken Robinson in 1997–8 took it upon himself to argue with the government (National Advisory Committee Creativity Advisory), stating that:

> Top of educational priorities should be creativity in order to prepare people for a world of life in work. In the type of world which is evolving it is essential to be creative and adapt to a rapidly changing world.

As Guy Claxton stated at the Creativity in Education Conference (2003):

> We need to throw away some of the curriculum and concentrate on developing creativity.

Robert Fisher, at the same conference, mirrors this sentiment (Fisher, 2003):

> It is time to cut down on the core National Curriculum and give more time to a creative curriculum devised by schools themselves.

But what is meant by creativity?

Modern definitions of creativity have moved on: creativity is now recognized in areas outside the expressive arts, for example in science, technology, business management and sport. Creativity has been linked to intelligence and thinking.

Ken Robinson, at the Creative Thinking Conference (Robinson, 2003) defined creativity as 'the capacity to develop ideas which are original and of value'.

> Creativity in children can be defined as a form of learning involving skills such as curiosity, inventiveness, exploration, wonder and enthusiasm. (Beetlestone, 1998)

Duffy (1998) suggests that teachers can 'develop children's creativity and imagination through their interactions with them'. They need to be

> ... facilitators enabling children to use their own abilities to the full; to acquire new skills; to find their own voice and style, not simply imitate others; to discriminate and be critical of their own and others' work.

I believe that each child has the right to be educated and valued as a whole person. We have recognized children for their academic achievements, but there are many children who bring with them to learning situations emotional intelligence, well developed social skills and great creativity. It is therefore necessary to change our values to recognize the social skills and creativity children possess and help develop these skills in all children.

It was with these values in mind that four years ago we embarked on a programme which would foster creativity and collaboration, develop children socially, teach skills to develop problem-solving strategies, and empower children to develop their own learning styles.

Where teachers are successful in fostering creativity it is possible to detect four key elements:

1. the creative climate;
2. adults are encouraging rather than inhibiting;
3. creative thinking skills are taught in an explicit and systematic way; and
4. teachers develop strategies to help young people through the creative process.

Taken from *Creativity in Education*, IDES Network (Learning and Teaching Scotland, 2001).

It was important for teachers to realize that teaching collaborative groupwork skills was not in addition to the already crammed curriculum; once taught, the initial skills could be incorporated into any area of the curriculum.

The initial programme focused on teaching the skills of collaborative groupwork. These were broken down into three stages: Basic Skills (Primary 1–3); Functioning Skills (Primary 3–5); and Higher Order Skills (Primary 5–7).

Each of these skills has a suggested lesson plan that can be adapted and revisited

Basic Skills
- Getting into your group quickly and quietly
- Bringing necessary materials with you
- Staying with the group until the task is done
- Talking in quiet voices
- Listening to your partner(s)
- Calling your partner(s) by name

Functioning Skills
- Taking turns
- Contributing ideas
- Encouraging others to contribute
- Knowing your task
- Asking for help when you need it
- Complimenting each other's contributions
- Supporting your point with evidence
- Checking for understanding
- Keeping the group focused

Higher Order Skills
- Asking for and providing clarification
- Building on another person's ideas
- Paraphrasing to show you understand
- Analysing your group's process
- Coming to consensus and synthesizing several ideas
- Evaluating the group's work
- Criticising the idea, not the person

Source: *Creative Problems in Collaborative Groups – Handbook for Teachers*.

within any curriculum context. The lesson plans all have the same format and are supported by additional suggestions and resources.

Many of the basic skills are particularly obvious, but children are helped to see the need for each skill and how it could be used to enhance group work. The use of a T-chart is particularly useful and provides a visual reminder for children who are practising a particular skill.

With the focus on creativity from both local and national bodies, we decided there was a need to evaluate and revise the initial programme in Collaborative Groupwork, further develop the Afterschool Creative Problem Solving Programme and focus on Creativity and Assessment.

A new Afterschool Creative Problem Solving Handbook was developed. This included guidance for coaches whom we recruited from our parent body, thus fostering good home–school links.

The programme is designed to develop skills such as creative thinking, decision making, problem solving and presentation. The emphasis is on taking on new challenges,

Collaborative Groupwork – Suggestions from children
Skill: *Getting into groups quickly and quietly*

What will it sound like?

- Quiet footsteps.
- Only whispers can be heard.
- Quiet movement of equipment and tables.

What will it look like?

- Children moving with a purpose.
- Everyone working together.
- Everyone taking turns and being polite when collecting equipment and moving tables.

having fun, developing team spirit and striving to produce the most creative and original outcome possible. Under the guidance of a coach, groups of students work in teams of about six to devise solutions to the problems they are given.

While working on such problems, students are encouraged to think creatively and independently and to develop skills such as team working, time management, evaluation of ideas, risk taking and communication.

When the time is up the solution arrived at by the team has to be presented. The programme runs for approximately 15 weeks and is open to children in Primary 6 and 7. The meetings run after school and last for approximately 1 hour. The culmination of the programme is a yearly presentation to parents at a local show, where the emphasis is on the process rather than the finished product. Before the presentation children are asked to explain how they tackled the five components of the problem they have selected (see textbox Fantastic Art).

With the emphasis now on Creativity, the handbook for teachers was revised to include other ideas and strategies such as Brainstorming, Divergent and Convergent Thinking, Mind Mapping and Envoying.

A new video was also developed to further enhance the ideas we were trying to promote within the school. We felt it was important to focus on the aspect of Creativity within the video, demonstrating the creative environment within the classroom and how to nurture and develop the characteristics of creativity.

As a result of our work we began to receive a great deal of attention. The City of Edinburgh Council wished to disseminate the materials and a video package to all interested teaching staff via inservice courses. Learning and Teaching Scotland, TACL (taking a closer look), and HMIE were also eager to become involved in disseminating information and developing assessment in Creativity.

Fantastic Art

In this problem the team will create and present a performance that includes works of art that come alive when no one can see them and return to their original state when others are around. The team will make two works of art from known artists and one original piece of art created by the team. The performance will include at least one scene where the works of art come to life and interact with each other. The performance will also include a character who is not part of the works of art.

The Tasks

1. Research two suitable works of art from known artists (pictures, sculptures) and make replicas to use in your performance
2. Create an original work of art
3. Create a presentation which involves the pieces of art coming to life and interacting with each other
4. The performance must include two side trips
5. The team must create a character who is not part of the works of art

PERFORMANCE TIME LIMIT: 8 MINUTES

RESTRICTION: **NO SCENERY BUT PROPS ARE ENCOURAGED**

Side Trips- Choose Two

Interpersonal: ***Working in groups - socializing, cooperating, showing concern or care***
Demonstration of teamwork, group harmony, teamwork in the manipulation of props, group communication system, collaboration, cooperation etc.

Intrapersonal: ***Exploring their feelings, knowing or understanding themselves and why they do the things they do, self-awareness***
Developing one or more characters who explore their feelings/thinking/moods/emotions or assess themselves

Logic & Mathematical: ***Analysing, comparing and contrasting, identifying patterns, deciphering codes, reasoning, collecting data etc.***
Use of patterns, codes, mazes, puzzles, use of surveys, graphs and mathematical principles such as fractions or multiplication. Creation of moving parts.

Musical: ***Singing, playing instruments, listening to music, music appreciation***
Composing original music, singing and/or harmonizing, creating instruments, playing instruments, use of rhythm and/or percussion, creating vocal sounds or tones etc.

Nature & Environment: ***Understanding and learning about the natural environment, categories, rocks, plants, animals etc. ecology or wildlife studies, learning about the atmosphere, weather etc.***
Use of ecological issues in performance, depiction of authentic natural environment, animals, insects, plants, natural habitats, use of natural resources

Physical Movement: ***Dancing, physical exercise, acting, working with their hands, martial arts, sports, games involving physical ability on learning, manipulating puppets etc.***
An original dance, physical or gymnastic demonstration, acting out roles, pantomime, use of dramatic bodily movements, construction and or manipulation of props etc.

Visual & Spatial: ***Creating visual art, designing, creating pictures, illustrations, drawings, maps, inventing, sculpting, building models, working with colour schemes, construction, creating gadgets***
Sculptures, paintings, posters, mosaics or other physical works of art, costume design, creating unique and innovative uses for ordinary materials, design, construction. etc.

Words & Language: ***Working with words both written and spoken, creative writing, poetry, dramatic readings, debating, telling jokes and stories, playing word games and solving word puzzles, plays etc.***
Use of puns, rhymes, poems. Use of imaginary and colourful words, creating unique and memorable characters, writing and reporting news stories, broadcasts, use of accents, storytelling , presenting a debate on an issue, use of humour, script writing etc.

Assessment and creativity

In order to give Creativity recognition the political climate demands measurable, quantifiable outcomes. This is a difficult task as creativity takes many forms. We recognized the need to assess the competencies within the programmes we had developed and to set levels of achievement when assessing creativity. Pupils need to plan and set targets in this area, as well as academic areas, to produce the more rounded education now recognized nationally.

The word ‘creativity’ is not used in Scotland’s school self-evaulation document ‘How Good Is Our School’ HGIOS, perhaps because it is so difficult to isolate and measure such a permeating concept. If we could measure creativity it could lead to a better understanding of what to look for, encourage and value. Cropley (2001: 146) recommends that we:

- measure the person’s predisposition to being creative;
- measure the products of creativity;
- measure the process that leads to creative behaviour; and
- measure the environment which supports creative activity.

Some characteristics of highly creative people

1. They develop a strong expertise and a large base of knowledge in whatever field they are working in.

2. They have highly developed imaginative thinking skills: the ability to see things in new ways, to recognize patterns and make connections.

3. They are remarkably resilient and have a 'venturesome personality'. They tolerate ambiguity and risk. They do not suppress a problem but engage in 'creative worrying'. They persevere in overcoming obstacles and seek new experiences rather than following the pack.

4. They are fully engaged in, and passionate about, their work. They exhibit a strong desire to do something new and have a strong sense of their purpose and ultimate goals.

5. They are motivated primarily by interest, engagement, satisfaction and challenge of the work itself rather than by external pressures such as deadlines, impressing people or making money.

6. They work hard and practise hard. They revise endlessly closing in on their ideal.

7. They are extremely reflective about their activities, their use of time and the quality of their products.

8. They live in a creative environment that nurtures and supports creative ideas. Most eminent creators are not lone geniuses; they were mentored, challenged and supported by other people. A creative environment also frees people from concern about social approval and too much external judgement and evaluation especially at the start of the process.

Gruber, Pinker, Myers, Howe, Cropley
Taken from *Creativity in Education*, IDES Network (Learning and Teaching Scotland, 2001)

This should be in an integrated approach to measure the degree to which creativity exists in educational settings.

With this in mind we embarked on our mission to find a method for assessing creativity. This took a great deal of exploration, experimentation and revision. Several ideas were tried, including observing groups of children defining creative characteristics and making judgements about creativity. Through a process of brainstorming and evaluative discussion we eventually came up with an assessment format which accompanied our work on collaborative groupwork and linked with the six components of creativity as defined by Cropley (2001) in *Creativity in Education and Learning* (a manual for teachers).

Each of the skills identified in the collaborative groupwork is linked to one of the six components of creativity.

e.g. **Component 4 – Focusing on Task Commitment**

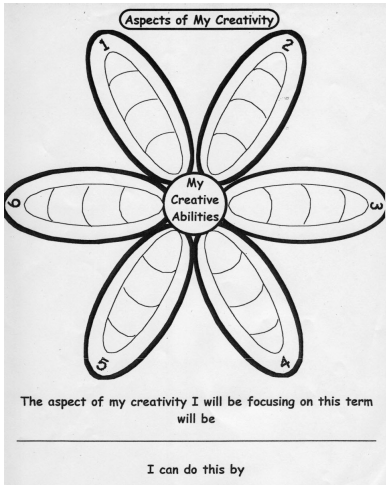
- Knowing your task
- Staying with your group until the task is done
- Keeping focused on the task
- Asking for clarification
- Providing clarification
- Coming to consensus
- Coming to consensus

The children are asked to self-assess their performance against each component, rating themselves as a level 1–4. In order to help them with this process, various statements are provided so that children can establish what level they are at.

e.g. **Component 4 – Focusing on Task Commitment**

Level 4
When I am faced with a new challenge, I never give up until I have found a solution. I am always thinking about ways to improve on my ideas.

Level 2
Some challenges I find really difficult. I always give them a go but I sometimes lose interest and give up.



Children are then asked to record their levels in the six components on a Creativity Flower. Children will then have a clear understanding of which aspects of creativity they perform well in and which areas they need to improve. Children will then decide which component they will focus on that term and this is related back to the collaborative groupwork skills. Thus whenever children are performing a collaborative groupwork task they will focus on any skills or elements in which they need to become proficient.

This part of the project is still in its infancy and we recognize the need to develop materials further in order to implement assessments in the early stages. However, the work we have completed so far has been well received and has been recognized by Learning and Teaching Scotland.

As a staff team who have been implementing this programme for a number of years, we are beginning to reap the benefits of our work. This focus on school improvement necessitates a steep learning curve for some staff and a review of the Learning and

Benefits for Children	**Benefits for Teachers**
Social skills	Class management
Communication	Raising attainment
Being creative	Ethos of classroom/school
Taking risks in a secure environment	Behaviour management
Teamwork	Systematic programme of skills progression
Learning to problem solve	Transferable skills
Taking responsibility for own learning	Learning skills
Self-evaluation	Motivation
Cross curricular	Less demand on the teacher as central knowledge source
Mixed ability	
Confidence	
Raises self-esteem	
Making decisions	

Teaching policy. Other schools who are not as far ahead in their thinking would find some of these concepts difficult. However, it is worth schools persisting in their efforts to establish creative environments and to nourish creative characteristics within their pupils. While further research is obviously needed, it has been my experience that both teachers and pupils have benefited from the programmes which have been developed.

Karen Farquhar can be contacted by email at: karen.farquhar@wardie.edin.sch.uk

Note

A video from this project *Creative Problem Solving in Collaborative Groups* and two handbooks (for teachers and for coaches) can be purchased from City of Edinburgh Council (Education Department).

References

Beetlestone, F. (1998) *Creative Children, Imaginative Teaching*. Buckingham: Open University Press.

Claxton, G. (2003) Building learning power. Creative Thinking Conference 2003, National Exhibition Centre, 18 October.

Cropley, A, J. (2001) *Creativity in Education and Learning*. London: Kogan Page.

Duffy, B. (1998) *Supporting Creativity and Imagination in the Early Years*. Buckingham: Open University Press.

Fisher, R. (2003) A 'Thinking Piece', commissioned by the National College for School Leadership, *Times Educational Supplement*, 7 March, p. 30.

Learning and Teaching Scotland (2001) *Creativity in Education*. Dundee: LTS.

Robinson, K. (2001) *Out of our Minds: Learning to be Creative*. Oxford: Capstone.

Robinson, K. (2003) Out of our minds. Creative Thinking Conference, National Exhibition Centre, 18 October.

Seltzer, K. & Bently, T. (1999) *The Creative Age: Knowledge and Skills for the New Economy.* London: Demos.