Starting Points

For creative learning and teaching

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Preamble

Creative learners need creative teachers – teachers who understand the importance of a classroom where there is a collaborative 'can do, will do' atmosphere – where the learners love to be and are engaged. There are many different approaches to achieving this goal and it is useful to look at these in terms of four broad and overlapping areas:

Those that strengthen the learning dispositions of the learners

Those that develop a community of enquiry,

Those that use thinking tools,

Those methods that look at cognitive acceleration.

The following paper aims to begin your exploration of creative approaches by giving some of the background to each of them. This information will provide you with starting points for your own investigations and experiments in the classroom.

The importance of disposition

Building Learning Power, devised by Guy Claxton and colleagues from the University of Bristol, challenges teachers and learners to look at learning in terms of the dispositions of Resilience, Resourcefulness, Reflectiveness and Reciprocity and how these can be actively developed to enhance learning. Each of these dispositions is made up of a series of learning behaviours, 'capacities' as they are called by the authors and the underlying belief is that each of these can be developed by learners given the right opportunity. This is a school wide strategic approach that impacts not only on what happens in the classroom, but what the whole school says about learning and the vision for the preparation of learners for an

uncertain future. (Claxton, G. 2011, p2)

ELLI

'A central concern of Building Learning Power is with enabling students to become more self-aware as learners, to develop the habits of a successful learner, and to appreciate that they can continually improve those habits.' (Gornell et al, 2005, p5) . This work was built upon and developed in the **ELLI** (Effective Lifelong Learning Index) project. Both BLP and ELLI emphasize the need to create a language that can be used to articulate the importance of learning itself which learners and teachers can share in order to be successful. The authors of the ELLI project echo Harrington's notion of the creative ecosystem when they talk about the ecology of learning and the need to balance the broad elements of value, attitude and disposition in the classroom in order to promote the development of the whole person. (Deakin Crick, 2006, p.2-3)

Habits of Mind

An example of a similar approach is **'Habits of Mind'** devised by Art Costa & Bena Kallick. 'A "Habit of Mind" means having a disposition toward behaving intelligently when confronted with problems, the answers to which are not immediately known.' The proponents of HoM stress the importance of using pedagogic approaches that strike a balance between learners' achievement of the necessary cognitive skills and their acquisition of life skills such as persistence, risk taking and metacognition.

Over the last ten years the Royal Society of Arts' Opening Minds curriculum has attracted over two hundred schools in the UK to a vision of a competence based model of learning and teaching. By focusing the learning around the five 'key competences' of Citizenship, Learning, Managing Information, Relating to people and Managing Situations (CLIPS) they aim to be 'reclaiming ownership of learning' and making a coherent whole of the National Curriculum which they say is composed of a jigsaw of fragments that don't really fit together.

These five competences and their component subsections provide an unarguable and

comprehensive list of the skills and attributes that are needed by learners who are going to be making their way in the 21st century world. The vision is of a school wide learning strategy expressly geared to providing a curriculum promoting of the development of the five competences above thus providing a solid foundation of skills that will be needed in key stage 4 and beyond. This model is seen to promote improved motivation and a confident approach to independent learning.

Creating a community of enquiry

Philosophy for Children

(P4C) and Mantle of the Expert (MoE) are approaches built on the idea of creating a community of enquiry. Devised by Matthew Lipman, Philosophy for Children '.. aims to encourage children and adults to think critically, caringly, creatively and collaboratively'. This method builds a 'community of enquiry' where participants create and enquire into their own questions, and 'learn how to learn' in the process (Sapere, 2010). Learners move, in a spirit of enquiry, beyond information to seek understanding thence to transforming reflection. If enquiry is placed centre stage the classroom becomes the community of enquiry. Friendship and cooperation are welcomed as positive contributions to the learning atmosphere and replace the 'semi-adversarial and competitive conditions' that frequently exist (Lipman, 2003, p94). When these conditions are achieved the aim of P4C is realised: to improve the critical, the creative and the caring thinking of learners.

Rather than lessons, the proponents of P4C prefer to talk about 'enquiries' which follow a set procedure allowing the community of enquiry to be formed and operate effectively. The use of the word enquiry is important - it takes the focus from the teacher and the dispensing of knowledge and places it with the words and thoughts of the participants and the cooperative processes of making meaning and understanding. The merits of questions generated by the learners in response to a chosen stimulus are discussed before the key question is democratically decided upon. The process of deciding which question to address

is an important part of the enquiry as it encourages active participation and allows learners to understand how decisions can be made and how to listen to and take into account other points of view.

Mantle of the Expert

Mantle of the Expert (MoE) was developed by Dorothy Heathcote and is 'a drama-inquiry approach to teaching and learning' (Mantle of the Expert.com). Another technique using the community of enquiry principle MoE can be powerful in many areas of the curriculum. Groups of learners take on the role of experts - explorers, archaeologists, escaping refugees, as they find solutions to problems and answers to questions. Learners are able to take ownership of what is called the 'enterprise' as they take on 'the mantle of the expert' and benefit from being able to see issues through the eyes of others.

Thinking tools

The third type of methodology, which is very wide in scope, consists of a range of powerful techniques usually called thinking tools. Starting from the premise that creative thinking is a complex of skills that must be actively developed these widely available tactical classroom techniques involve the use of specific props and procedures to create problem solving opportunities for groups of learners across the age and ability range. As with any set of tools specific techniques have specific uses and the creative teacher will use the tool that is appropriate for a particular task bearing in mind the needs and aptitudes of the learners.

Thinking Hats

Edward de Bono's Thinking Hats is one such technique (de Bono, 2000). Familiar to many are the liberating effects of this technique which has migrated over the years from business training into schools where it frequently takes its place in a teacher's repertoire of creative methodologies. Learners take on problems and discuss solutions using the different

characteristics and viewpoints represented by each different coloured hat. The key to the success of this method is the separation of the individual from the opinion, each hat representing a different way of looking at the issue in question giving an empowering effect that allows learners to think for themselves as big problems are broken down in to more manageable chunks. Associated with this is the CoRT (Cognitive Research Trust) material. The six sections of the CoRT Thinking Programme (CoRT for Schools) provide a detailed and structured approach to the explicit teaching of thinking skills emphasising de Bono's assertion that learners' capacities for 'constructive thinking' in real life need to be increased.

Thinking Actively in a Social Context

TASC is a 'thinking-skills framework' devised by Belle Wallace, is an example of a methodology that looks at the process of developing learners' thinking in a collaborative eight stage process (TASC, 2010). It begins with gathering knowledge that learners already possess as they identify the problem and the questions that it poses. Ideas generated are selected, then implemented. The processes of evaluating, communicating the ideas to someone else and reflecting on the experience complete the cycle. The core feature of this method is the staged process, the breaking down of a problem into manageable chunks by using the interrelated stages of the process which allows learners to move together from what they already know to the understanding of something new which is shown by their ability to articulate the new learning to others.

LogoVisual Thinking

There are parallels between this method and another technique that takes learners through a staged thinking process. In using the LogoVisual Thinking **(LVT)** tools small groups of learners move through a cyclical core process that begins with focusing upon the problem, the task, expressed in an open 'key question'. Then by gathering what is already known and putting responses to the key question in short sentences on repositionable shapes, thoughts can be arranged, grouped and rearranged as the discussion develops (Best, Blake and Varney, 2005). This technique has the ability to show new and sometimes unexpected and original relationships between thoughts and ideas as they are juxtaposed on the board in the organising phase of the process. This is followed by the final stage, that of the

application of the new understandings in the response to the original challenge. The process allows the development of learners' deeply valuable talk which facilitates the decision making process. The benefits of this method are several and include:

- The tactile and visual aspects of this tool are appreciated by many learners as is the physical flexibility that allows changes of mind to be seen and discussed as the shapes are arranged and rearranged based on the new thinking that emerges actively from the discussion. The thoughts can be permanent or they can be temporary.
- Learners can understand the importance of their own contributions as they see their thoughts in relation to those of others, they begin to appreciate the democracy of the process, the synergy of the whole and their part in that process.
- The board provides the medium to integrate thinking, bringing together into new patterns the diverse thoughts of the members of the group.
- The use of large boards means that groups can easily show, discuss and share their ideas with others within and beyond the working group.
- The visibility of the board allows teachers and other learners to see not only what the group is thinking, but how the group is thinking.

LVT is a powerful tool that has the capacity to promote the development of the skills of information processing, reasoning, enquiry, creative thinking and critical thinking. Figure 7.1 shows an array of ideas that came from a recent examination of the effects of crime and criminality on young people. The cluster has been given a title to articulate the dynamic of that gathering of thoughts. There are articles on the practical applications of LVT across a range of settings available for download at http://www.steveslearning.com

Accelerating the learning

Mind Maps
Devised by Tony Buzan (ThinkBuzan.com), MindMaps is a technique that dates from the

mid-1970s. It was the first of the 'brain-based learning' techniques which were informed by rapid developments in neuroscience and the understanding of how we learn. It continues to be a very influential and distinctively graphical technique used in schools to boost memory and accelerate learning. This technique enables learners to generate and organise ideas on paper the better to recall them and their relationships later; Mind mapping is beneficial for individual work but it is also effective when carried out by a group.

Cognitive Acceleration through Science Education

Philip Adey and Michael Shayer (1994) in their exploration of cognitive acceleration (Cognitive Acceleration through Science Education **– CASE)** sought to demonstrate a method of promoting learners' thinking from concrete to abstract by means of a specific lesson structure. This was done by building on the constructivist idea that learners need to create meaning for themselves and do this best in the context of a working group.

The lesson consists of five parts:

- An introduction which sets the scene (concrete preparation)
- A puzzle or challenge which needs to be solved (cognitive conflict)
- Group-work and discussion where pupils share ideas for solutions (social construction)
- Explaining the thinking which gave the answer (metacognition)
- Making links to everyday applications of the ideas discussed (bridging)

(ibid)

One of the key findings of this work was that the effect on the learners was that their performance improved not only in the science lessons, but also in English and maths, thus demonstrating the successful improvement of generic learning skills.

Methods based on an understanding of Howard Gardner's multiple intelligences theory (1983) and the findings of cognitive science are also seen as accelerating learning. The term 'Accelerated Learning' was coined in 1985 by Colin Rose in his book of that title where he articulated the principles, values and advantages that underpin what was called 'brain-based learning'. Other methods followed with **Mapwise,** (Oliver Caviglioli and Ian Harris),

and Accelerated Learning (Alistair Smith). Both of these approaches have been influential in the way that learning is managed in many schools. In each of these approaches the understanding is that critical thinking processes are intertwined with factual knowledge, that 'factual knowledge must precede skill', (Willingham, 2009 p30) underlining the importance of infusing the two in the design and delivery of learning.

The emphasis in Accelerated Learning techniques is upon the physical readiness of the learners, their psychological readiness and the use of teaching techniques that will appeal to all preferred learning styles in the context of a highly structured four part sequence of challenging and engaging learning activities (Smith, 1998). Between these 10-15 minute lesson chunks are breaks of 1-2 minutes designed to allow learners to process what has just been taught. This structure with the use of selected music as a background is designed to be conducive to learning and deliver the optimum learning conditions.