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PGCE Year 1

**Special Study – “Active based Learning”**

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On 13<sup>th</sup> March 2004 Prime Minister Tony Blair stated at Labour’s Spring Conference that all students should stay on through sixth form, or take up a modern apprenticeship or job-related training. *“In effect, we want to make irrelevant the school leaving age of 16.”* (Tony Blair cited on BBC News Website, [www.news.bbc.co.uk/1/hi/uk\\_politics/3508214.stm](http://www.news.bbc.co.uk/1/hi/uk_politics/3508214.stm) [accessed 13 March 2004]).

This idea is not based on compulsion but rather on trying to make the education system *“inspiring and engaging”* (Schools Standards Minister David Miliband, cited on BBC News Website 2004). If the Government is to succeed in its aims then the obvious question this raises is ‘how can we make education inspiring and engaging?’

As a student, why is it that some classes are inspiring and engaging, whilst others fail to engage and become tedious? Is it that people have a stronger natural ability in certain subjects? Is it that people see more value and relevance in learning some subjects rather than others? Or is it that subjects are delivered by different teachers in different ways? On reflection of my personal experiences I feel that although we may be born with a natural disposition for certain skills, we can develop all of our skills through good

teaching. Rather than simply possessing intuitive gifts, I feel that most strengths are learned as a result of environmental influences. Some students may also be more interested in particular subjects as they see more relevance in them than others. However there is much more to it than this. Many students may have a great interest in a subject, yet during education this interest all but disappears. Why is this happening? There is a large amount of evidence that shows that learners develop stronger skills in certain areas as the teachers / lecturers manage to make the subjects both interesting and relevant. Many successful, experienced teachers / lecturers appear to have discovered the secret to a successful session - students learn better when lessons are fun, stimulating and challenging. One way of making a session fun, stimulating and challenging is through "Active based Learning".

The idea that learning can be fun is not new. However in recent years it has started to become increasingly popular. In 2001 Estelle Morris, having been appointed UK Education Secretary stated, "*We want to put the fun and creativity back [into schools]*" (2001, p.9 cited in Ginnis 2002). Putting fun back into the classroom is not just a buzzword; rather it is a well-documented way in which learning can be improved. Studies by leading Psychology researchers such as N.G. Martin have found that

*“Children pay greater attention to educational programmes that are amusing... Fast paced humour also tends to attract students more” (Martin, N, G. 1998).*

The use of fun and humour to increase learning was also investigated at Stanford Medical School by Professor William Fry. His findings were that *“Having a laugh while you’re studying is a good idea as it increases the brain’s alertness”* (1997, p.24 cited in Ginnis 2002). Ginnis also goes on to add that

*“The chemical balance of the blood is altered, and this may boost the body’s production of neurotransmitters. So it’s OK to have fun”.*

Several other educational researchers provide further supporting evidence. The notion that students learn and retain more when they are having fun or are *“engaged in the learning process”* (Spectre, M and Prensky, M) is now becoming widely accepted.

*“Enjoyment and fun as part of the learning process are important when learning new tools since the learner is relaxed and motivated and therefore more willing to learn”* (Bisso and Luckner, Journal of Experimental Education cited by Spectre, M and Prensky, M).

Educationalists such as Reece and Walker also recommend that humour can be used to aid classroom control. They state that teachers should use humour as "*it builds bridges*" (Reece and Walker, 2000, p.384). In short it would seem that fun and humour, when used correctly, can be extremely beneficial. However it must also be noted that the activity must be controlled, otherwise the lecturer may experience classroom management difficulties.

At this stage it is necessary to ask the question 'how can we make learning fun?' Although it may seem a relatively simple idea to replace a lecture with a stimulating activity, the actual application of doing so can be time consuming and difficult. The session objectives must still be met and the learners' understanding and retention must also be tested. There are a variety of ways in which a session can be made fun *and* educational. These include games, group work, trips and excursions, and humour. Of interest to me is the notion of using games as an active based learning strategy.

Games or play is "*an important part of the learning experience. When we enjoy learning, we learn better*" (Rose and Nicholl, p.63. cited by Spectre, M and Prensky, M). The most successful sessions I have been involved in have included some form of play or game. It seems that when involved in a well-designed educational game you do not realise that you are learning. The process becomes almost osmotic, in that information subconsciously absorbs

into our brains. Further to this, the learners enjoy the session more, leading to increased motivation, attentiveness and improved attendance. In short games have proved to be *“a strong motivating and engaging factor”* (Spectre, M and Prensky, M).

Prior to this report I have experimented with two variations of common games. An early computer animation session presented the opportunity to introduce a competitive edge to the learning by asking the learners to work in pairs to create as many set computer based animations as possible within a given time. This activity was entitled *“The Flash Competition”*. The group then scored the animations and the team with the highest score won a prize. This was a successful experiment and encouraged team work, the recall and application of previous sessions, and synthesis of existing knowledge

I have also experimented with a *“World Wide Web Crossword”* that required that the learners use the Internet to solve clues. All of the questions involved multimedia and the objective was to get the learners experimenting with search engines and directories. Again the session was a success. The activity was fun, the learners were once again encouraged to work as a team and the competitive nature provided motivation.

As a lecturer in new media the vast majority of my sessions are computer based. This usually restricts the learners to one computer and involves a great deal of lecturer demonstration alongside the learners repeating the techniques themselves. This "show and do" process works well, however it can become repetitive and tedious – for both the learners and the lecturer. It is now becoming accepted that for many subjects the best and *"the only way to learn how to do something is by doing it"* (Ginnis 2002, p.12). However although the learners are learning by doing, the repetition of using the computers is undermining my efforts. This is due to the lack of movement within the session. Biology and neuroscience are now important elements of educational theory and Professor Susan Greenfield of Oxford states

*"there is no single movement centre in our brain. Movement and learning are in a continual and complex interplay"* (cited in Ginnis 2002, p.25).

Ginnis goes on to add that

*"The implication is clear: make sure that there is sufficient physical movement, even within an "academic" learning situation"* (Ginnis 2002, p.25).

The importance of movement creates a difficult conundrum. How can I teach the learners to create animations, web sites or digital images on a computer whilst at the same time encouraging movement? In addition to this I also want to make the sessions fun, whilst meeting the session outcomes, assessing retention and maintaining control.

Paul Ginnis' excellent book entitled "The Teacher's Toolkit" provides an excellent source of ideas. Unfortunately the majority of the games covered are focused on teaching theory or knowledge based subjects at secondary school level. In subjects that are ICT based, and predominantly require specialist software, they are sometimes difficult to apply. Therefore rather than being able to simply adapt Paul Ginnis' games they have been used as the inspiration in the development of ICT focused activities. These activities are designed to inject some fun into ICT based sessions, whilst also encouraging learning and retention.

The first activity developed is entitled "Swap and change". "Swap and change" is a simple activity that can be used when the learners are carrying out tasks or working on interim assignments. The activity requires that the learners swap places and work on another learner's image, animation or web page. The benefits of this activity are that it will ensure that the learners have to swap places – this encourages movement. The activity will break up the

monotony of the session. The unexpectedness of the activity will surprise the learners and hopefully seem fun. The stronger learners will have an opportunity to receive input into their work. Even detrimental changes to their work will produce benefits. The process of fixing the changes will aid their learning. They will also be faced with the challenge of fixing or changing an element of the other learner's work. Whilst the weaker learners will also benefit as they will be able to examine other's work and investigate the techniques used. They may also benefit from the input of a stronger learner's opinion as well as their help in improving their work. The activity will also create a situation in which all of the learners will find that they have suddenly been removed from their comfort zone and they are faced with a set of new challenges. After 20 minutes the learners will then be encouraged to discuss the changes they made and any problems they encountered. This encourages interaction and the sharing of ideas. It will also provide a break from the computers.

In practice the session was a success and created a fun, active learning experience. The learners responded well and were enthusiastic and cooperative. Some problems were encountered with students using the opportunity to make inappropriate alterations, however the lecturer dealt this with.

Another ICT focused activity can be created as a variation of Paul Ginnis's game of "Quick on the Draw" (Ginnis 2002, p.145). The "Quick on the Draw" game is a race between groups to complete a set of questions. Rather than answering questions, the learners can be asked to complete a series of ICT based tasks. The benefits of this type of activity are *"The activity encourages team work. Groups learn that dividing labour is more productive than duplicating labour."* (Ginnis 2002 p.146). It also provides the learners with experience of having to scan information and adapt past tutorials. The activity actively encourages the learners to use the Internet and other resources to find information and tutorials. Whilst it also *"Suits learners with a kinaesthetic disposition who cant sit still for more than two minutes"* (Ginnis 2002 p.146).  
Furthermore

*"The questions can be graded. The first ones deal with essential information (must), the next few embellish or deepen understanding (should), and the final ones extend understanding (could)"* (Ginnis 2002 p.146).

As an adaptation this could be created by making the tasks sequentially more difficult and requiring the learners to use *"synthesis"* and *"application"* rather than simple knowledge (Bloom's Taxonomy 1956). This adaptation encourages movement and interaction whilst the introduction of a time limit

and element of competition puts pressure on the learners to work quickly and accurately. Finally the activity provides a break from the norm and is fun!

Once again the practical application of the activity proved successful. The learners responded well to the movement aspect of the game, whilst the cooperation and competition provided motivation to create some excellent images. Some problems were experienced due to the room layout but this will be addressed for future sessions.

## Conclusion

There is a large amount of data and research to support the benefits of active based learning, and many would agree that it can be a very effective way in which to teach. However playing “games” every session is not viable, due to the time needed to prepare and the suitability for some topics. Education is presently going through many changes and teachers and lecturers are starting to reassess the way in which they deliver sessions. My personal experience is very positive. Not only can it make sessions more stimulating for the learners, but it also greatly improved the teaching experience. However one thing is clear. Whether or not activity based learning is the future of education, the days of standing in front of a group and reading a passage from a text book should be confined to the annals of history.

**Bibliography**

Ginnis, P. 2002, *The Teacher's Toolkit*. 3<sup>rd</sup> edn. Crown House, Carmarthen.

Martin, N.G. 1998 *Comedy Lecture* (online) 1998.

<http://www.mdx.ac.uk/www/psychology/staff/nmartin/comedy/comedy.html>

[accessed 8 March 2004].

Reece, I. Walker, S. 2000, *Teaching Training and Learning*. 4<sup>th</sup> edn. Business Education, Sunderland.

Spectre, M and Prensky, M. *Engagement: The motivating learning environment*

(online). <http://www.games2train.com/site/html/theory.html> [accessed 7

March 2004]

Rose, C and Nicholl, M, J. 1999 *Accelerated Learning for the 21st Century*, 1997

Dell Publishing (<http://www.Accelerated-learning.net>)

Bisso, C and Luckner, J. *Fun in Learning: The Pedagogical Role of Fun in*

*Adventure Education*. The Journal of Experiential Education 1996, p. 108-112.

Young, P. 2001. <http://www.swap.ac.uk/learning/interactive1.asp> [accessed on

8 March 2004]

BBC News Website, [www.news.bbc.co.uk/1/hi/uk\\_politics/3508214.stm](http://www.news.bbc.co.uk/1/hi/uk_politics/3508214.stm)

[accessed 13 March 2004]).