

Role Plays, Videos, Games.... What Really Works?

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Abstract

In a time when educators are becoming increasingly critical of standard lecturing pedagogy, traditionally described as the ‘chalk and talk’ model of teaching, recently referred to as the transmission and linear (Cox et al, 2001) model of education or expository teaching (Biggs 2007), lecturers are confronted with the need to make the lecture more dynamic, of finding ways of motivating and engaging students. The student centred approach (Gibbs, 1995; Simmonds, 2003) or activity based (Biggs, 2007) learning are widely accepted as being effective in securing student interest in the learning process. Doing something with the learning, such as interrogating or manipulating or applying it, is active learning.

The main purpose of this research is to assess students recall ability using various methods of case study delivery. Case studies are a popular and widely acknowledge as being a successful way to integrate theory with practice. In a book of case studies Henry and McGowan (2007, p.v) state ‘*Case studies are an interactive and valuable way to learn...the business comes alive for the reader...the challenges jump off the page*’. Students are quoted as saying ‘*the cases brought out important points*’, and another student surveyed says ‘*cases are a good way of teaching soft skills such s interpersonal and management skills*’ (Harper et al, 2007, p.413). The aim is to establish if more active learning techniques are more successful than passive specifically in relation to case studies. This will be evidenced through student participation in the various approaches and from assessing student’s ability to recall information post participation in particular case study activities. These will include such techniques as in-class games, role play, quizzes and case study analysis.

Key Words:

Case study; engagement; active methods; role play; video; games

Introduction

Learning takes place through the active behaviour of the student: it is what *he* does that he learns, not what the teacher does.

Ralph W. Tyler (1949)

Traditional approaches of teaching that are linear and didactic encourage rote learning; '*...rote learning enabled students to uncritically acquire a canon of knowledge*' (Leach & Moon, 2008, p.52). Freire (2001) calls this teaching and learning concept 'banking education' and describes it as students being like empty vessels waiting to be filled. This approach does not view the learner as having an active role or a sense of responsibility for the learning. It diminishes the role of the learner and may have the effect of the learner disengaging from the learning process at worst, or engaging in surface learning at best. Dewey (1938, p.6) goes so far as to say that '*static aims and materials is opposed acquaintance with a changing world*' pointing to the use of passive teaching methods as leaving student ill equipped for a 'changing world'; probably due to the 'uncritical' acquisition of said knowledge. Dewey bases his view of education on several key concepts, one being interaction. This concept is based on the learner interacting with objective external factors to help build and interpret learning based on internal conditions – the interplay of these two conditions is referred to by Dewey as a situation. This situation we could interpret as being the learning activity.

Support for Active Methods

A prominent educationalist of the last century, Jerome Bruner, identifies four criteria for effective instruction. The first criteria is '*A theory of instruction should specify the experiences that most effectively implant in the individual a predisposition toward learning*' (1966, p.40) which could be interpreted as establishing a learning environment to suit the learning needs as being key to successful learning and the starting point when designing teaching and learning activities. A repertoire of approaches is necessary to engage and meet the different learner needs.

Rollet (2001, p.27) talks about expert lecturers drawing from a '*large repertoire of strategies and skills*' to engage students.

Gone are the days when designing a lecture or tutorial to suit the syllabus or content is the role of the lecturer. It is not about starting from '*the assumption that [their] major activity is to give a lecture*' (Biggs and Tang, 2007, p.104). The starting point must be to identify key learning outcomes and then to align these outcomes with the most suitable teaching activities and supports. It is about the lecturer having a repertoire of teaching tools, both '*symbolic and material tools and artefacts*' and recognising the '*...key and sometimes transforming roles they play in the development of learning and knowledge building*' (Leach & Moon, 2008, p.109).

Symbolic tools are tools of the mind, for example imagery and conceptual approaches and heuristic problem solving tools. Bruner (1996) emphasises the extent to which the minds working is dependent upon the tools (both symbolic and material) the mind has at its disposal. For example the learners mind will interpret or digest the information depending on the stories, images, videos, games and props being used to help the learner construe the learning. In supporting students learning using case studies it is necessary then, to employ tools that support the mind recalling and learning the information in the case studies. Tulving (1985) in Biggs et al (2007, p.96) propose a model of '*memory systems*'. '*Procedural memory*' is where actions are what support the learning; '*episodic memory*' when images develop the learning; declarative knowledge is learned in the '*semantic memory*'. Actions (procedural) are easiest learned whereas what was actually said or read (semantics) are hardest. Images (episodic) can often support declarative knowledge recall. So in order to support recall students need to interact (actions, procedural memory) such as role play, de Bono hats or game activities. In the absence of action learning images (episodic memory) such as the video case study can aid the recall of information which may otherwise be challenging using semantic memory alone.

Reece & Walker (2007, p.61) recommend that teachers use a '*variety of signals*' such as audio or visual aids e.g. setting the scene, to stimulate learning signals or stimuli. Stimulating signals ('*known as perception*') help the learners give '*particular attention*' to various learning scenarios. Reading case studies alone is not offering students a '*variety of signals*' thereby

reducing the potential for students to pay ‘particular attention’ to the case study. Petty (2004, p.259) reminds us that ‘*learning requires arousal and involvement*’ and says that ‘*intellectual and physical skills are [also] best retained by reuse rather than more passive methods*’ emphasising the already laboured point of the need for students to do something more than read the case study in order for the learning to be most effective i.e. ‘reuse’ the reading from the case study using some other activity such as role play, video, games etc.

Research Context

The case study teaching method is one of the most widely applied teaching activities. Horgan (1999, p.83) say '*cases increase the likelihood of student participation in class discussion*'. It provides a wealth of practical, real life examples that can be used to contextualise the theoretical concepts covered in the classroom. It also has many benefits in terms of encouraging interactivity and student to student discussion, shifting the emphasis from a teacher-centred to a more student-centred approach. According to Davis and Wilcock (2003) there are many advantages of using case studies. They have found that they can be used to:

- Allow the application of theoretical concepts to be demonstrated, thus bridging the gap between theory and practice.
- Encourage active learning.
- Provide an opportunity for the development of key skills such as communication, group working and problem solving.
- Increase the students' enjoyment of the topic and hence their desire to learn.

Given the wide use of the case study method, it is no surprise that there are also a diverse range of methods for delivering case studies. Our research interests lie in trying to establish which of the various methods used to deliver the case study is most effective. In particular, we are interested in assessing which case study method students most prefer and also which method is most effective in terms of student recall.

Research Methodology

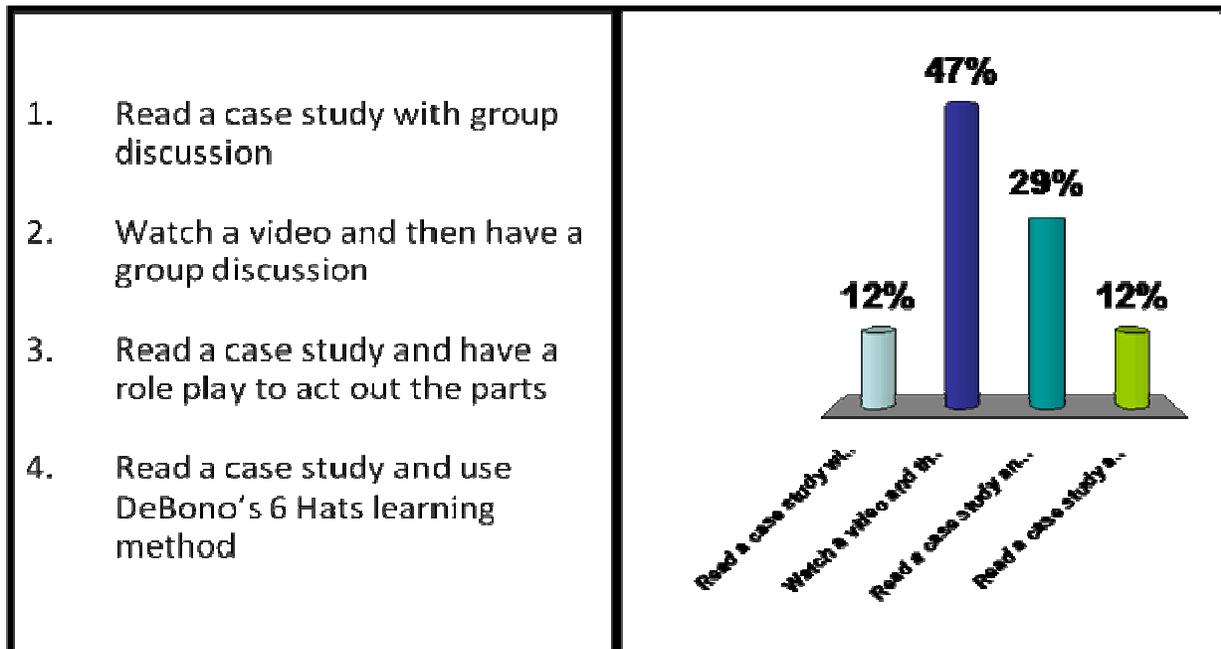
The research sample consisted of Postgraduate students studying Marketing in Griffith College Graduate Business School. The cohort of twenty five students was in stage two of an MBA programme. They were culturally diverse with an average age of twenty four.

An experimental design was adopted to test the effectiveness of four case study learning techniques: Case study group discussion, role play, a video case study and group discussion using DeBono’s 6 Hats method. We devised two hypotheses that we wished to test:

H1: Students prefer case study activities that have a high degree of student participation, actively engaging them in the learning process.

H2: The greater the level of student participation with the case study, the higher the levels of student learning and recall.

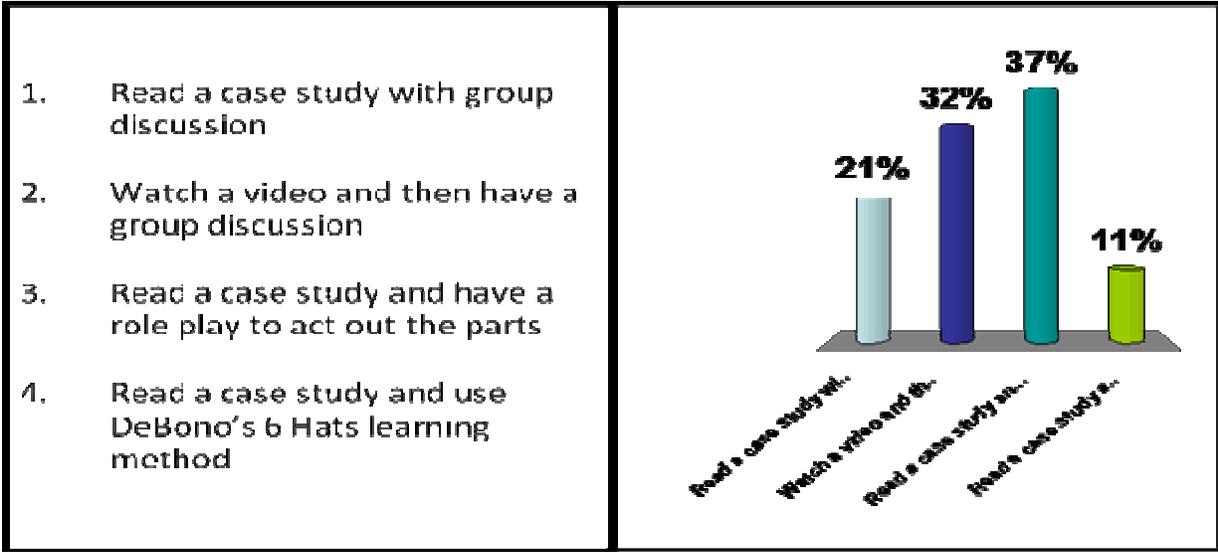
To test our first hypothesis, *Students prefer activities that have a high degree of student participation with the case study* we simply asked students to indicate their preference out of four learning methods. We asked this at the onset of the research and thus prior to them experiencing any of the individual exercises. We were conscious that some of the students may not have had previous experience with all of the methods (e.g. role play and DeBono’s) and therefore determined that we should also ask the students to indicate their preference at the conclusion of the research and after they had completed all four activities. Table 1.1 shows the student’s initial preference.



As can be seen, “watching a video” received the highest ratings. We would consider watching a video as the most passive of the four activities and while disenchanted with the student’s selection, we were not overly surprised with the results. The video is not an interactive method and thus does not challenge or engage the students significantly thereby contributing to students disengaging from the learning or engaging in surface learning. Shuell (1986) in Biggs et al (2007) state that it is what the student actually does that determines the learning. This is supported by Dewey (1938) and Freire (2001) who criticise the transmission (passive) model of teaching, and Tulving (1985) who promotes the procedural memory where actions help embed the learning. In addition Petty (2004) discusses how learning requires ‘arousal and involvement’. Bruner (1966) and Tyler (1949) point towards deeper learning experiences being the result of activity and the students actually doing something with the learning (e.g. role play, games) as opposed to passively learning (e.g. watching a video).

However, we were also keen to assess if attitudes and preferences changed once students had experienced different methods of enacting case studies.

We were encouraged to find that at the end of the research students most preferred case study method had changed to that of the role play. This activity involves far more participation effort on the part of the students and we were encouraged to see a more active method being chosen over the previous more passive approach. It was also interesting to see the gap close between video and reading/discussing a case study. Again, we were encouraged by this finding as again we would also regard reading and discussion as a more interactive method. Overall we also felt that this second rating represented a more accurate measure of students’ actual preferences.



But while student preference is important, from a practitioner's point of view, it is also vital to know which method is most effective. Our second hypothesis proposed that: *The greater the level of student participation, the higher the levels of student learning and recall.* To test the validity of this claim, as noted above, we exposed the students to four different weekly activities.

Week 1: Group discussion of a case study: In class we read a case study that discussed Allied Irish Bank's expansion strategy into Poland.

Week 2: Role play of a case study: Students read a Harvard Business Review case study about a fictional company L'Espoir Cosmetics and their global advertising strategy. Students then were assigned individual parts in a role play.

Week 3: Watch a video case study: We watched a 40 minute in-class video about Saatchi and Saatchi the international advertising company.

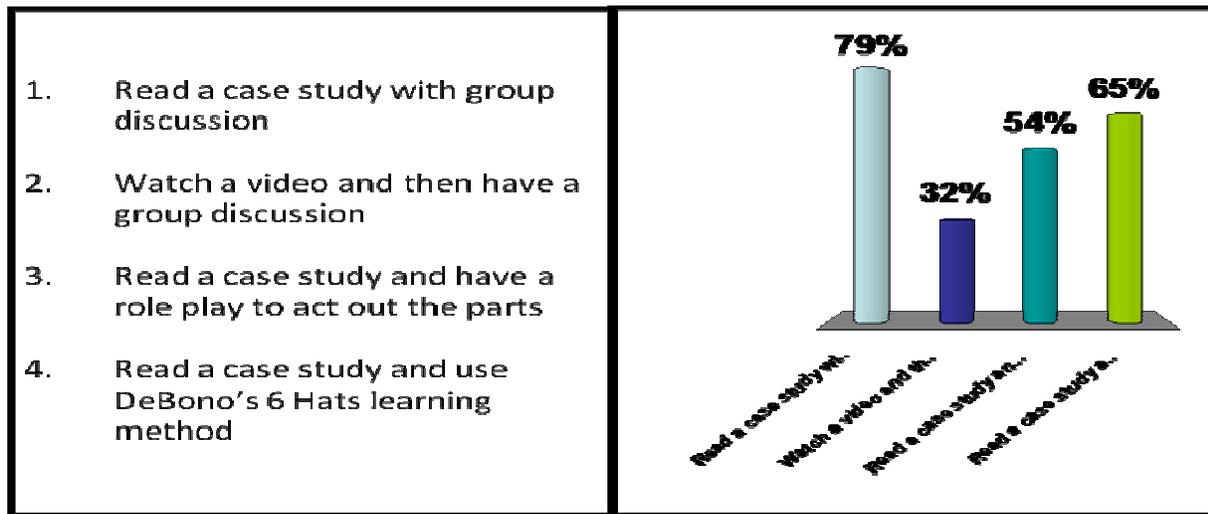
Week 4: Group discussion of a case study using De Bono's 6 Hats: For the last case study exercise students again read a case study. This time the students were then handed a coloured ribbon that corresponds to De Bono's 6 Hats (black, yellow, white, red, blue and green).

After each activity the students were asked to answer a set of multiple choice questions about the case study. Students entered their responses using interactive "clickers" provided by the lecturer.

On completion of the four exercises the researcher then analysed the results to determine the average percentage of right answers per exercises. The results are shown in Table 3 below.

The highest accurate level of recall was achieved through the first activity, case study and group discussion. The lowest level of recall was achieved through the third activity; video case study.

Measure of students' accurate recall of information

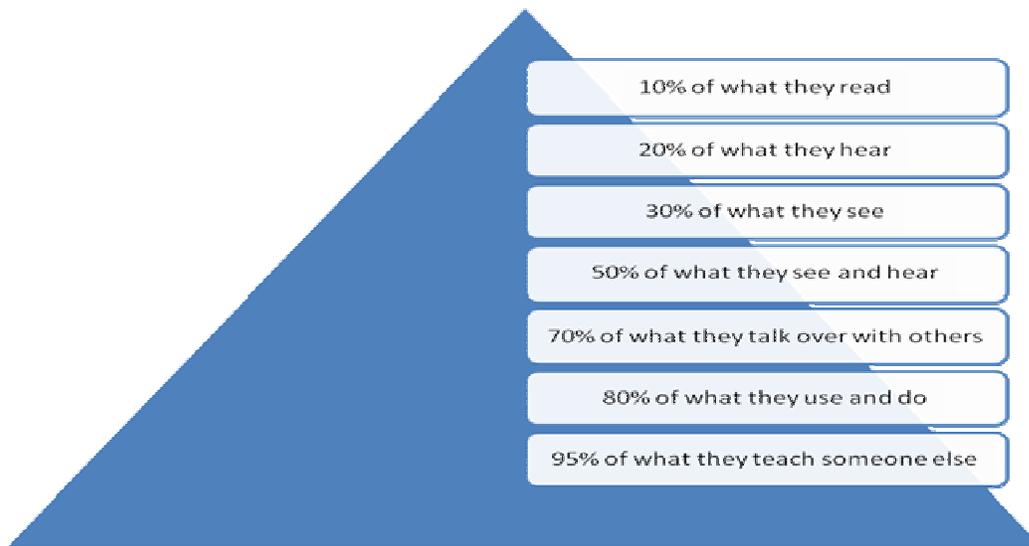


Results:

The research findings support our first hypothesis. Students did demonstrate a preference for methods that required a high degree of student participation by selected “role play” as their most preferred deliver method. Findings for hypothesis 2 however, were more mixed.

To a large extent, our results concur with work by other researchers on student recall. According to Glasser (see figure below), the greater the level of participation on the part of the student, the greater the level of recall.

Most people learn.....



Adapted from Biggs et al, 2007 (p.96); attributed to Glasser, 1988

Our findings support this as the method requiring the least amount of participation, watching a video, showed the lowest level of recall. Also in line with his predictions, students recalled approximately 70% of the material when they had to discuss it with others. This was the case with activity 1: group discussion of a case study (79% accurate recall) and activity 4: group discussion using DeBono's 6 Hats (65% accurate recall).

We were most surprised however, that the level of recall after the role play exercise was not higher. On average only just over half the class accurately recalled the correct information from the case study where Glasser's research suggests that recall should have been closer to 80%.

Discussion

On reflection, one of the challenges with a role play to try to fairly distribute the student parts and engage as many class participants as possible. In our example, five core "role players" were selected to play the parts of L'Espoir company executives. These chosen actors were identified before the class was instructed to read the case study. And while every attempt was made to

engage all class members the majority was assigned to lesser “company consultant” roles. It is possible that these students may have become more complacent after learning of the more passive part they had been assigned. Indeed, watching the role play unfold before them could almost be likened to the experience of watching a video case study where in both cases students could choose to sit back and watch the proceedings unfold before them.

One way to determine if this in fact was happening might have been to measure the recall among those playing a leading role versus those playing supporting parts. In summary, while both activities were highly rated by students perhaps more needed to be done to ensure that they were actively engaging in the process.

Another shortcoming of the research was that by employing a multiple choice quiz format it focused primarily on the recall of key facts – measuring more so the degree of surface learning taking place as opposed to deep learning. According to Biggs (2007) a deep approach to learning emphasis depth as opposed to breadth of coverage and tries to elicit an active response rather than teaching students to expound information. It may well have been that the role play and DeBono’s 6 Hats activities were far more effective in truly engaging the students on a deep level with the material, but the assessment measure would not have been appropriate for determining this.

A further limitation identified by the researchers was the extent to which the different case studies were more or less engaging in their own right. In future research it would be worthy of note to seek students views on the degree to which they may find some case studies more interesting, more difficult etc. To reduce this bias a longitudinal follow up study will consider using one case study with different samples experiencing different delivery methods.

The research supports the researcher’s view that students learn more and engage more with the learning using more active methods and activities. Further research is necessary to validate these findings and to explore the level of deeper learning that can be experienced using active teaching and learning methods.

Bibliography

- Biggs, J., & Tang, C. (2007). *Teaching for Quality Learning at University*. Berkshire: Open University Press.
- Bruner, J. (1966). *Toward a Theory of Instruction*. Cambridge, MA: Harvard University Press.
- Cox, R., & Light, G. (2001). *Learning and Teaching in Higher Education*. London: Sage Publications.
- Davis, C., & Wilcock, E. (2003). *Teaching Material Using Case Studies*. Retrieved July 13, 2009, from Higher Education Authority: [hppt:www.materials.ac.uk/guides/casestudies.asp](http://www.materials.ac.uk/guides/casestudies.asp)
- Dewey, J. (1938). *Experience and Education*. New York: Macmillan.
- Freire, P. (2001). *Pedagogy of Freedom*. Maryland: Rowman and Littlefield.
- Gibbs, G. (1995). *Improving Student Learning through Assessment and Evaluation*. Oxford: Oxford Centre for Staff Development.
- Harper, J.S., Lamb, S.W., Buffington, J.R. (2007). 'Effective Use of Case Studies in the MIS Capstone Course through Semi-Formal Collaborative Teaching'. *Journal of Information Systems, Vol. 19(4)*
- Henry, C. & McGowan, P. (2007). *Irish Cases in Entrepreneurship*. Dublin: Blackhall Publishing.
- Horgan, J. (1999). 'Lecturing for Learning' In Fry, H., Ketteridge, S. & Marshall, S (eds). *A Handbook for Teaching and Learning in Higher Education: Enhancing Academic Practice*. London: Kogan Page.
- Leach, J., & Moon, B. (2008). *The Power of Pedagogy*. London: SAGE Publications.
- Petty, G. (2004). *Teaching Today*. Cheltenham: Nelson Thornes.
- Reece, I., & Walker, S. (2007). *Teaching, Training and Learning*. Tyne and Wear: Business Education Publishers.
- Rollet, B. (2001). How do expert teachers view themselves? In F. Banks, & A. (. & Shelton Mayes, *Early Professional Development for Teachers*. London: David Fulton Publishers.
- Simmonds, D. (2003). *Designing and Delivering Training*. London: CIPD.
- Tyler, R. (1949). *Basic Principles of Curriculum and Instruction* . Chicago: University of Chicago.

http://www.edwdebono.com/. Retrieved July 10, 2009, from Edward DeBonos Authorised Website