



THE
JOURNAL

**Full report of
Action Research
Projects**

Foreword:

The 2006/7 academic year was another highly successful one for practitioner research in the college. Five members of staff carried out full action research projects and one teacher followed up on her dissertation thesis with a comparison group as an independent project. With two projects in art curriculum areas, one in Psychology, Music Technology, Film Studies and one cross college survey, these represent a diverse range of teaching and learning interests. I have been, as ever, amazed at the level of commitment and professionalism shown by each of the members of staff involved and the willingness to learn about the learning process from the students' perspective. Some of the students involved also reveal an astonishing amount of insight into the aims of the projects themselves and ownership of the research, showing the incidental benefits of bringing students into the heart of the research process. It has also become increasingly clear that the projects serve as an excellent vehicle for staff development through reflective practice as well as a focus for the dissemination of good practice. Pursuing formal recognition for participating staff on an MA programme will be a key target over the coming academic year. The ongoing challenge for each of these staff – and indeed for the rest of us - is to make sense of what has been learned in terms of our own teaching. While some projects lend themselves more freely to be generalised among many different classroom settings, others are, on the surface, more subject-bound. Nevertheless, the lessons learned through the process of enquiring into teaching and learning can no doubt be passed onto many teachers in their areas of practice. Full project reports are also available on the College's action research pages at: www.farnboroughsfc2.ac.uk/research/arp.aspx

David Godfrey
Senior Project Leader



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**How can I help students fulfil the assessment criteria
using higher level skills,
with specific reference to artists' research?**

Rebecca Barnes

INTRODUCTION

Aims

The aims of this project are to

1. Develop a cycle of learning for students to follow when using artist's work; to encourage analysis, synthesis and evaluation to become an integral part of the learning process.
2. Create learning aids to help students practice the required skills for a deeper learning experience of artists.
3. Explore ways in which I can help students translate the experience of research into a practical benefit.

Setting the scene

Artist research forms an integral component to AS Textiles. Research should inspire and influence changes and development within student's personal work. Artists often inspire students through technical application, ideas and concepts, their approach to developing an idea and practical selection and choice of materials. It is expected that this research will develop student's understanding of the purpose, meaning and context within which that artist works. Students are then expected to make practical or conceptual connections between their own work and their research through visual practice and written analysis.

What are the students currently doing?

After reviewing AS student's workbooks last year, I realised that there was a dip in marks when assessing AO2 and AO4. These marks specifically related to artist research:

AO2: Analyse and evaluate critically sources such as images, objects, artefacts and texts, showing an understanding of purposes, meanings and contexts.

AO4: Present a personal, coherent and informed response, realising intentions, and articulating and explaining the connections with the work of others.

In general students research tended to be superficial and was treated as a separate task to complete, rather than an exercise to fully learn from. By the end of 2006, students could select a relevant artist to inspire their work, descriptive skills were confident and they demonstrated competency when reproducing an example of this artist's work in fabric. However they lacked the ability to successfully contextualise artists and subsequently found it very difficult to synthesise how they could use this research in their own personal work.

During the practical fabric sampling that follows this research, very few students made reference to how their artists had influenced their own practical work. There was some visual connection, but little written evidence to support this. Through discussion with students towards the end of last year, it was clear that they viewed artist research as an exercise to complete because they had to. There was a lack of understanding as to the purpose of research, and what they could gain from a deeper learning experience of this.

Students are essentially on the course to develop a personal and individual approach to their fabric work, and learn the skills necessary to become practising textile artists. Therefore, to discover how other artists have developed their skills and creativity should be a motivating and inspiring experience.

Why are they working in this way?

I certainly began to question the impact I was having and started to reflect on the skills students required to fulfil the assessment criteria in relation to artist research. I identified analysis, synthesis and evaluation as the most important skills required and not surprisingly discovered that students found these the most challenging. Therefore the real change I needed to address in this research was how I was teaching these skills.

Theoretical background

Bloom's Taxonomy

Bloom established a successful model for using higher level skills representing a task of increasing difficulty. Bloom attempted to classify all learning into 3 domains: cognitive, affective and psychomotor, and within each domain into skills or abilities of different types or difficulties. In this research I am specifically interested in the intellectual skills and abilities, categorised under the cognitive domain. Within this domain, Bloom's taxonomy can be divided into mastery skills and developmental skills.

Mastery skills:

These are easy, typically involving only knowledge and comprehension and are not dependent on prior learning; they can be attained in a short time.

Developmental skills:

These are more difficult and are highly dependent on prior learning. Development is attained over a longer period of time and requires considerable effort; they involve higher order skills such as synthesis and evaluation. These skills are the key to successful achievement of assessment criteria AO2 and AO4.

After reading more into Bloom's taxonomy, it became clear that mastery tasks should prepare the student for the developmental task. When reading Geoff Petty's interpretation of Bloom, he summarised that:

- Knowledge tasks are fine as a start, but if we stay at the knowledge level, surface learning may result.
- Deep learning in contrast to surface learning requires higher order tasks than knowledge. The higher the task the more likely deep learning will result. (www.geoffpetty.com)

How does the marking scheme relate to Bloom's taxonomy?

Marking Scheme	Bloom's taxonomy	Skills used
Limited	Knowledge/ Comprehension	Mastery
Basic	Application	
Competent	Analysis	Developmental
Confident	Synthesis/ Evaluation	

What will be my criteria for success?

"Given the general behavioural basis of Bloom's taxonomy, the verbs which may be used for the specification of learning objectives are of particular importance. Since the objective states what the student will be doing as a result of the learning event." (Curzon, 2003:p.176). In order for me to effectively plan changes in my SOW and in lessons, I wanted to define Bloom's taxonomy in relation to artist research. It was helpful to identify the use of language needed to demonstrate these skills, the following represents my own personal use of Bloom's taxonomy:

Mastery skills

Knowledge

Students will be able to, (SWBAT):

- Describe subject matter, formal elements and techniques used in artist's work.
- Provide an account of the artist's key works and history.

Comprehension

SWBAT: Describe artists work in their own words, adding their own similes.

- Discuss the artist's intentions through putting information into their own words.
- Describe what the artist's inspiration was?

Application

SWBAT: Use artist's working approach, techniques, choice of subject matter in their own work.

- Start to form links between their own work and artists choice of subject matter, ideas, and/ or working approach.

Developmental skills

Analysis

SWBAT: Identify the value and relevance of artists.

- Select artists, which suit their personal aims.
- Give reasons for choice of artists.
- Compare and contrast artists work and start to form links between artists work and their own work.
- Provide written analysis in workbooks which articulates and explain the purpose, meaning, and context of artists.

Synthesis

SWBAT: State how they will use the artist's work?

- Plan and develop ideas for individual fabric samples after analysing previous outcomes.
- Combine separate elements so as to create new ideas for context of your own work, drawing from the experiences above.

Provide visual and written evidence of a working cycle in workbook, showing evidence of new ideas created through existing artist's ideas, avoiding pastiches.

Evidence of knowledge gained on a broad range of artists, both historical and contemporary.

Evaluation

SWBAT: Justify their choice of fabrics, techniques and overall look of samples referring back to ideas, concepts and artists research.

Evaluate their artistic discoveries discussing successes and identifying areas for improvement as a result of artist's research.

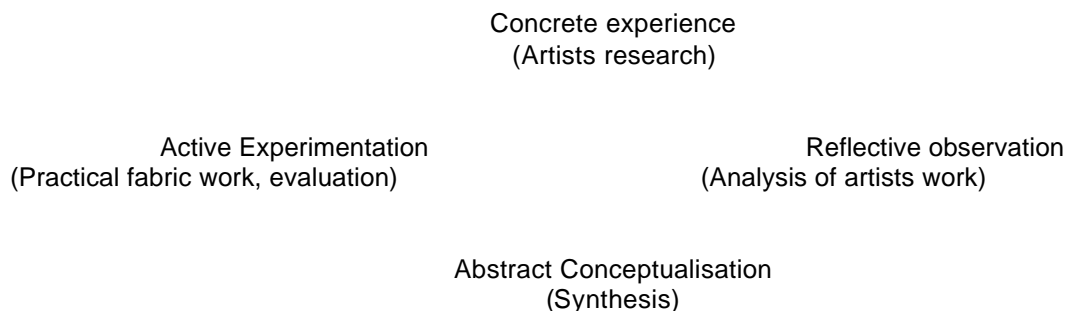
Kolb's learning cycle

"We choose our approach to a task or experience through watching others involved in the experience and reflecting on what happens, '**reflective observation**' - '**watching**' or through 'jumping straight in' and just doing it '**active experimentation**' - '**doing**'." (<http://www.businessballs.com/kolblearningstyles.htm>)

This quote describes fairly accurately the approach taken by students when researching artists. The pattern of learning seems to rely on initial research followed by a spontaneous reaction to this research through fabric work. My students are very practical and therefore tend to miss the assimilating skills required to analyse and synthesise information regarding their artist's research. They are able to generate ideas and reflect on their research, however they prefer to actively experiment; the problem with this approach is that they tend to rely on others (primarily myself) for information rather than carry out their own analysis.

In line with Kolb's theory I do not believe that the experience of making the fabric work alone is enough for students to gain a full understanding of purpose meaning and context. Kolbe suggests:

"In order to learn from experience we must reflect on our experiences: try to relate them to theory: and then plan how we might do better next time." (Reece et al 2003: p287) This summarises perfectly my wish and the criteria specified for our students experience of artists work. Kolbe's cycle of learning looks like this, I have again translated this into my subject area.



I feel that Kolbe's learning cycle could form the basis of a simple learning cycle for my students to use. I hope that by introducing a model way of working this will encourage independent learning and also help students analyse, synthesise and evaluate on a regular basis through the use of a structured learning aid.

METHODS USED

I have selected all AS textile groups to trial my action research, as I feel it unethical to provide a more informed quality of teaching to one group and not the others. These groups will allow me to fairly compare findings to last years students, they consist of 65 girls and 1 boy.

Teaching strategies implemented:

Integrating Blooms taxonomy into my SOW

I decided to plan my SOW according to Bloom's Taxonomy and gradually increase the learning skills required as the course progressed. I mapped out tasks according to how I perceived students would learn. (See appendix 1) I ensured that the hierarchy of skills and the pattern of Bloom's taxonomy was repeated in each of the following projects: Mark-making, Texture, Pattern/ print and fashion to encourage deeper learning to take place. I also recognised that in the previous year that I had not dedicated enough time to teaching students how to effectively research, describe, analyse, evaluate and synthesise. Therefore I introduced 'how to' lessons as each new skill was introduced.

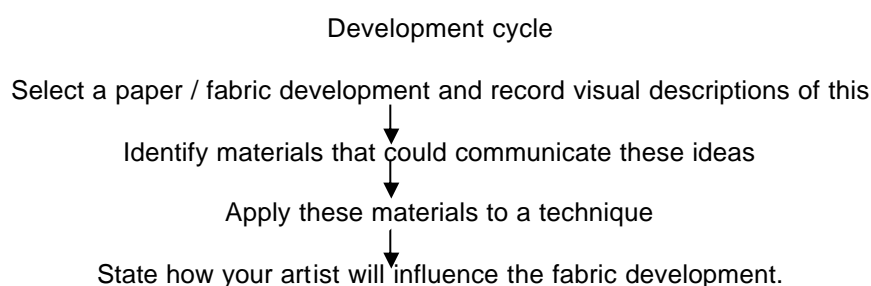
Handouts

To support the 'how to' lessons, I created three handouts, a resource list, an analysis and evaluation checklist and a researching artists guide. In order to analyse other artists work, it was essential that students were taught how to discuss their own ideas and practice. Analysis focused on What, How and Why? (See appendix 2) Students were asked to use this handout every time they had completed a practical activity and were asked to record their ideas in their workbook. The researching artist handout aimed to help students fulfil the mastery skills of knowledge comprehension and application. (See appendix 3) This handout encouraged students to research artists through a broad range of primary and other resources. The Internet although very popular is often brief when describing artist's history and ideas, whereas books, galleries and journals can be more comprehensive and 'tell the story'.

Texture: The Development cycle

After 6 weeks or so into the project students were still finding it difficult to develop ideas and create links to their artists. I decided to abandon my lesson plan and as a class we spent an hour and a half discussing how to develop ideas from their paper samples, the session was lively, students were excited, engaged and full of enthusiasm to help each other. As a result of this exercise I created a Development cycle to help students synthesise. It was very personal to Textiles and followed the pattern of discussion from the lesson. Referring to Kolbe for support the cycle essentially aims to develop student's ability to:

- (a) Plan their fabric sampling
- (b) Develop their own ideas and
- (c) Ensure that they used their artists research to influence their own work.



Pattern project: A change in approach

In January I had discovered so much about how students were learning and the pace that they were grasping these higher level skills that I decided to take a different approach to teaching them.

I revised the analysis and research checklist, in an attempt to combine the mastery and developmental skills evident within both handouts, and encourage deeper learning to take place. (See appendix 4)

I changed the SOW work and planned in time for students to discuss artist's influence in lesson time in order for me to facilitate their learning and understand first hand what they knew. I realised I had been setting this task as homework and planning quite manageable practical tasks in lesson time.

I also incorporated homework time for students to concentrate on analysis and evaluation in order for frequent assessment to be made of their progress. Most importantly I allowed students time to experiment with initiatives longer than a one off lesson, letting the deeper learning settle in by reinforcing the task

FINDINGS

SOW Bloom's Taxonomy

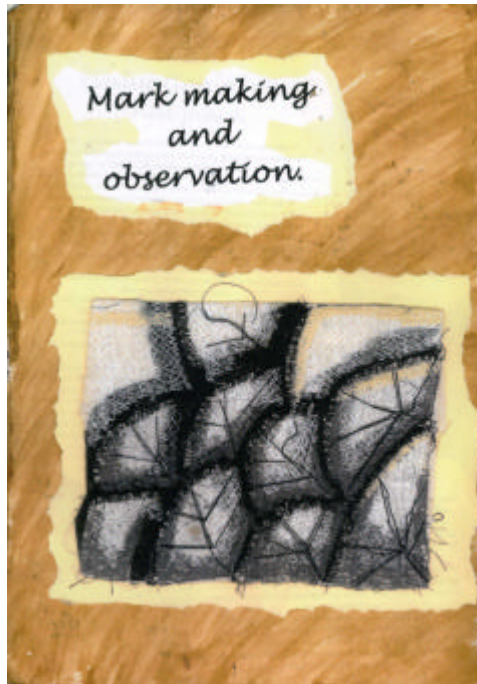
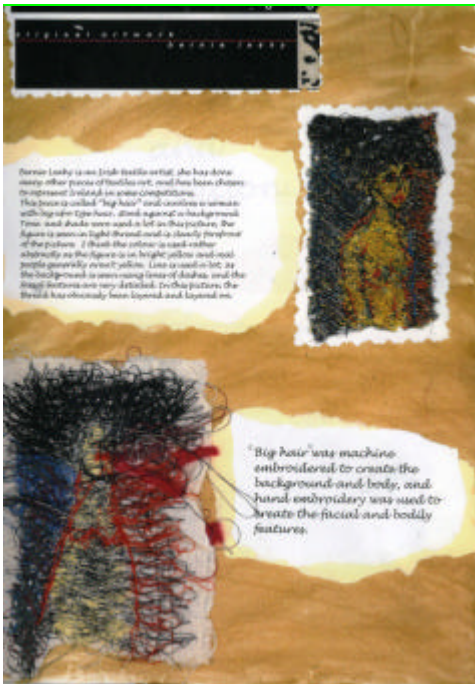
This has helped plan in activities to try and encourage students to describe artists effectively, comprehend and apply their artists' techniques to their own work.

Mark-making: Using the handouts

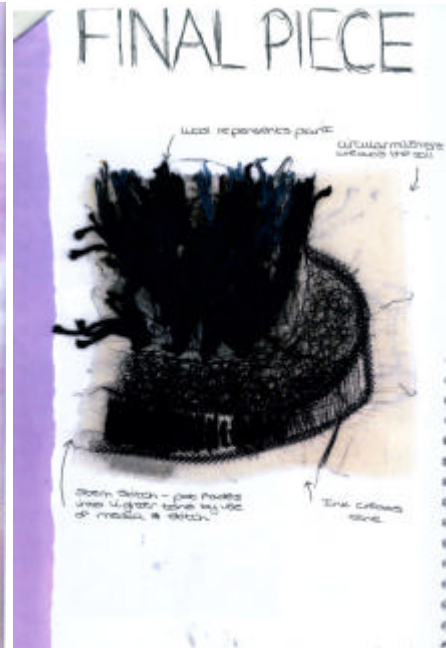
Students were asked to research a textile artist who specialised in embroidery, using the resource list as a research aid and the researching artist handout to help write up and learn about them. I was keen that this artist would influence their first final piece technically. Once they had produced their final piece they then had to evaluate their work using the evaluation checklist. Most students had effectively completed the mastery skills required for the task, What was particularly pleasing to see, was the detail applied when describing the specific pieces of work. Most students had attempted to use similes to describe the work and therefore had started to comprehend what the artist was trying to communicate along with adding their own personal interpretations:

"All of these pieces remind me of a picturesque English countryside view. The picture in the middle on the right is an aerial view of a field, and it really does resemble a view that you would see from a plane." Georgia McCann.

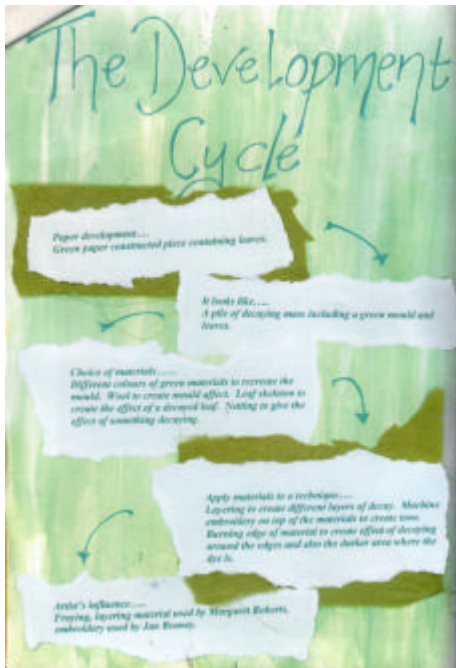
Synthesis was very basic, but students had in general thought about how they could use their artists technique: here is a typical example of the competent visual links to artists research:



An interesting point was discovered at this stage, whilst some students had very good written skills and could analyse and communicate ideas, their practical work didn't visually connect with the artist's technique. This was an eye opener for me, even though students had followed the steps of Bloom's taxonomy, the content of her work did not reflect a sense of deep learning at this stage, but one of step by step completion. This confirmed the theory that experience alone is not enough, this was a very brief exercise, however I was pleased to see evidence of mastery skills effectively taking place.



Texture project: The development cycle
 The cycle worked very well, students produced some excellent work and demonstrated for the first time a sense of understanding in relation to synthesising ideas. This confirmed the theory behind Bloom, in that it is essential for students to grasp mastery skills before higher level learning can take place. It took 7 weeks to get this result. Student planning was thoughtful and considered and ideas were original. All students had referred to artists following the cycle of instructions. I was really motivated by this response and felt confident that I was starting to teach these higher level skills effectively.



A mid project panic

Until we reached assessment time at the end of the Texture project in November. I decided to assess all students formally and provide written comments against all 4 assessment criteria. At this stage I hoped to see an improvement in AO2 and AO4. To my great disappointment, upon reading all AS students' workbooks, almost 80% of students had not articulated connections with artists, skills required for AO4. Despite student's demonstrating very good description, comprehension and initial application of artist's techniques; analysis, synthesis and evaluation of their artists was again weak. Artist research was still very much an isolated task at the start of the project and then reappeared when students evaluated their work at the end of the project, due to being prompted by an evaluation checklist.

On reflection I tried to change too much at once and confused students. At this stage in the project I had a major panic and doubted my ability to teach these skills effectively.

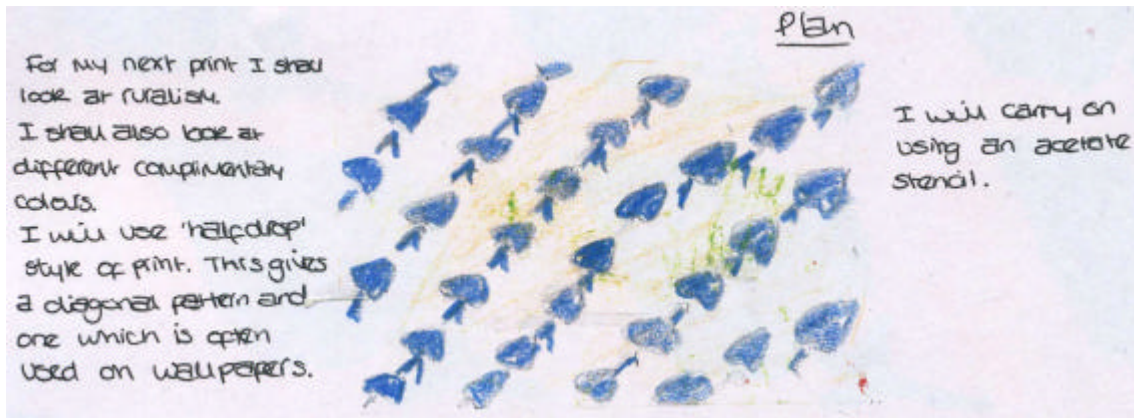
Pattern project: A change in approach

Essentially this project focused on synthesis of ideas and evaluative skills. Students were asked to research a favourite pattern era and then design patterns in the style of this era; with the intention of producing a fashion garment in this style. This specifically required students to analyse the inherent qualities of that era, and most importantly consistently plan and evaluate how effectively they were visually representing the era. The results were fantastic. Students loved this project and were fully engaged and excited at the prospect of making a fashion garment using their own pattern designs; and specifically seemed to enjoy the freedom to chose their favourite pattern era.

Essentially the key successes in this project were:

- Personal freedom to chose their artist
- Planning adequate time for students to repeat the task of planning designs and evaluating outcomes.
- Planning discussion activities regarding how to relate their research to practice in lesson time rather than homework.. and
- The newly revised handout

This is an example of a preliminary sketch for their pattern design, which were produced without prompt, demonstrating confident synthesise skills



These images illustrate the journey seen amongst most students demonstrating confidence in synthesise and evaluation.

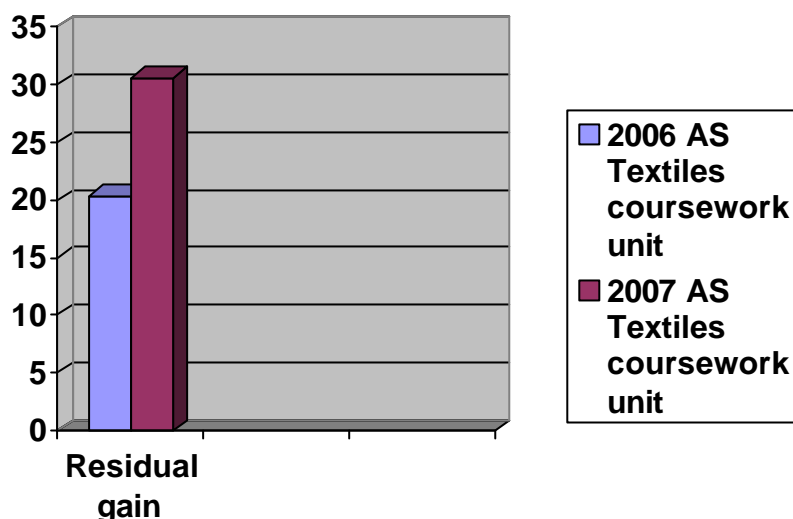


See appendix 5 for an example of competent written language used to synthesise and evaluate throughout the pattern project.

Results analysis

The key aim of the project was to help students achieve the assessment criteria through an enhanced use and understanding of analysis, synthesis and evaluation. Therefore it seemed essential to analyse the results of the coursework unit and compare these to 2006 results to see if they had improved their ability level as a result of changes made to delivering AO2 and AO4 skills.

When analysing the marks awarded for each of the assessment criteria, I found that there was very little difference between the raw marks allocated in 2006 compared to 2007. On closer examination I believe this to be a result of the difference between students average GCSE scores. In 2006 the average GCSE score was 6.06 compared to 2007 cohort of students achieving 5.73. Therefore the key measure used to measure the impact of my change was the residual gain achieved over the year. This seemed the fairest indication of student improvement. As you can see the results were really exciting. In 2006 the residual gain for AS students was + 0.39, and the gain in 2007 was +0.65.



Student feedback

At the close of the project I asked for direct student feedback through a questionnaire. (See appendix 6)

When asked to assess their current ability to link artists work to their own work, 55% of students felt they were competent, and a further 25% felt confident. This was an excellent result to gain.

When asked during which of the following textile projects have you learned the most through artist's research, 60% of student agreed that the pattern era project was the most successful. In their words this is why:

"Because I was interested in pop the research was more enjoyable"

"Because I felt we had more focus and time researching these artists and also used the artists to influence our work more than others"

The most rewarding feedback for myself came with the response to this question: In your experience as an artist, how have artists influenced your work so far? These were some of the most popular answers again in their own words:

"Their styles and techniques have influenced me the most"

"They provide inspiration and ideas that I haven't thought of previously"

"To develop ideas and help write work, knowing ideas are possible and using many ideas, creating range and putting different aspects together"

"Artists have influenced my work in the way that they use different techniques but then change them in their own way"

"More often in techniques and forms, by seeing other examples it helps inspire me where I am struggling most"

DISCUSSION

What factors influenced the success of this project?

Students definitely worked more independently as a result of the handouts available, they demonstrated real competence when explaining the purpose, meaning and context behind artists work, due to the structured format. Both the resource handout and the researching artists handout seemed to provide clear starting points for students. I recognised that analysis skills were not initially strong because they genuinely didn't know where to look for the information when researching artists and they didn't know how to analyse in depth. Therefore the 'how to ' lessons delivered throughout the SOW proved invaluable. Opportunity for group discussion and practice of these skills in a safe environment increased their confidence to independently work.

Analysis was specifically strong in the pattern project when students were given the freedom to chose their own artist for inspiration. I was keen at the start of the project to make artists research more relevant to the student's personal experience. This was a real challenge, gallery visits and videos definitely evoked a connection; however tapping into students interests seemed to be the key to realising the experience. The pattern eras introduced styles within textiles but also ways of living and social influences on design i.e. pop culture, fashion and social division. Students could really identify with the reality of living designers and their written analysis confidently discussed the purpose, meaning and context behind artists work and links between designers approach and their own work.

I realised that in order for students to synthesise, the teaching needs to reinforce the task set and allow deeper learning to take place through repetition, and practice. Therefore planning adequate time for students to repeat the task of planning and evaluating outcomes was essentially the winning component for improving their ability to synthesise. This seems so obvious, however I realised how involved I had become in the process of delivering the curriculum content, that I had

forgotten to evaluate myself, how effectively they would learn. When I slowed down and reflected, essentially my students did.

The development cycle proved to be a real help when starting to integrate a sense of deeper learning through synthesis. I decided to help students achieve this developmental skill, by breaking the task down into smaller mastery skills. This step by step process was highly successful, particularly when encouraging students to explain how their artist had influenced their work; within the planning process this became a single discussion step within the cycle of other mastery skills culminating in synthesis. The development of this cycle was also greatly influenced by Kolb and my initial reflection on students resistance to assimilate through abstract conceptualisation. To gain the most from this skill I ensured that it formed the basis of a larger cycle of learning involving reflection and practical experimentation. Bloom also insisted that for effective synthesis to take place, an understanding and successful implementation of the mastery skills must have taken place.

In order to enhance both synthesis and reflective skills I used class discussion with success. In the pattern project these group 'mind maps' became a regular activity in the process of sharing ideas to generate a variety of possible creative options to explore. As a result student's competently combined separate elements in their textile work so as to create new ideas, drawing from previous experimentation. Alongside group mind maps, the decision to swap difficult homework activities to lesson time work also provided an excellent opportunity for me to support students in the difficult process of synthesis.

Evaluative skills were the easiest to reinforce, as student's prior learning had addressed this skill in some detail. The key for success in this project was to ensure relevant evaluation and thoughtful reflection was taking place, with specific reference to artists and their own work. Once again I found that the 'how to' lesson combined with the use of an evaluation checklist proved an excellent starting point. Students commented that the most useful aspect of this handout was the use of example excerpts of written evaluation. This was initially the only handout that I had included examples in, and interestingly this was the first skill to show real improvement. It is clear then that students need to see understand the required standard; as the year developed I started to share with student examples of poor, good and excellent written evaluation and encouraged them to self assess their ability. This was a real success. In line with Kolb and Bloom I ensured that throughout the SOW evaluation was a regular activity throughout all projects, to encourage maximum reflection and practice of this skill to take place.

Did anything hinder the progress?

Surprisingly teaching the adapted SOW using Bloom's Taxonomy did not provide the results I had hoped for. When reflecting on early literature research I recalled the following discussion in Geoff Petty's Teaching Today:

"The use of a taxonomy may assist in labelling objectives in terms of properties, however, does the taxonomy result in stultifying the thinking and planning in matters concerning the content of the curriculum?" (Petty 1998: P172) I did feel that the use of Bloom's taxonomy had almost hindered my thought process. I thought that if I knew when to teach the skills, the students would automatically learn them. I had become too involved in planning the teaching and logistics of the taxonomy, and had forgotten to consider how the students were going learn these skills.

I was despondent at the slow rate of coherence in the class and questioned my own skills of delivery; however the process is as much about what I am learning. I realised that these developmental skills are just that, skills which require time to develop. At this stage of the research I realised that this was a long term project and that results would be slow in emerging. Students learn at different rates; if I reflect on my own learning, implementation of these skills happened later in my education.

CONCLUSION

Principal findings

- The project confirmed that providing structured learning aids in the form of 'how to' handouts were very valuable, students found handouts user friendly and appreciated the guidance.
- Structuring the SOW using Bloom's taxonomy definitely raised awareness of the learning process students need to take, although care should be taken to always consider the time required for learning to take place in conjunction with planning teaching activities.
- Creating a subject specific development cycle was extremely enjoyable and rewarding, students loved sharing ideas and definitely gained a deeper understanding of how artists could inform their work through this process.
- Finally planning time for constant reflection and repetition of these higher level skills is essential for deep learning to take place.
- Students' understanding of the purpose of the artist research is essential; followed by constant reinforcement of that goal.
- Personal freedom to chose their artist enhances the reality of
- Planning activities relating to analysis, synthesis and evaluation in lesson time rather than for homework seems obvious however a key realisation for me.

Future implications

In January I realised that the nature of the analysis checklist and researching textile artists handout separated the way in which students should discuss their own work and artists work. Rather than encouraging the developmental skills: analysis and synthesis to take place between artists and personal work, they were only addressing mastery skills. A key change therefore in January was to amalgamate the two checklists and encourage the working ethos that artists research and personal practical work are integrated and should feed each other. This revised handout will be used in future. In addition, as a response to students requests, all handouts will now provide examples of good written analysis and evaluation.

The theory behind Bloom and Kolb really helped to reinforce the real belief I have in learning cycles and I am pleased to have had the opportunity to really explore and reflect on their value. The development cycle is most definitely here to stay and I would like to use this more extensively next year.

I have found this research extremely rewarding and have learned a great deal not only about how students learn but also how I teach. I am keen that students continue this very personal journey of discovery through the influence of other artists in order to develop their personal artistic success.

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Bloom's taxonomy - learning domains

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Bloom's Taxonomy

www.geoffpetty.com)

ART AND DESIGN

Scheme of Work: UNIT 1

CURRICULUM AREA: AS TEXTILES

ART AND DESIGN COURSEWORK

Time Scale/ Date	Area of Syllabus/ Specification to be covered.	Teaching/learning activities	Homework	Assessment method	Resources
WEEK 1 11th Sept	MARK-MAKING/ OBSERVATION Intro to course Introduce theme/ formal elements Mark-making and observational drawing Practice handling a range of art media	THEME: NATURAL STRUCTURES/ FORMS? <ul style="list-style-type: none"> Intro to course Group discussion – understanding formal elements. Exercise - Exploring media - Mark making: ink/tools How to: Understanding composition Compositional studies – division of page 	Research Artist's use of Composition		
WEEK 2 18th Sept	Visual development Interpretation of observation studies Practise handling a range of art media	<ul style="list-style-type: none"> Observation/still life – Line, Tone, Form and Structure How to: Analyse and evaluate ideas Resist observation/ still life Compare and evaluate own and peers work Discuss development methods/ introduce enlargement task 	Exercise – explore resist materials – ink/bleach 3 x enlargements		
WEEK 3 25th Sept	Mark making with the sewing machine Development of an idea & outcome Research EMBROIDERED TEXTILES (Knowledge/ comprehension)	<ul style="list-style-type: none"> Demonstrate setting up sewing machine Exercise on sewing machine produce 4 x mark making samples Fabric samples continued How to: describe and analyse/ research textile artists. Alice Kettle (Knowledge/ comprehension) 	Fabric samples x 2 focus on tone Artists research – embroidered textiles		
WEEK 4 2nd Oct	Practice artist's techniques (Application)	<ul style="list-style-type: none"> Group critique, discuss artists techniques Demonstrate detailing – hand stitch, dissolvable fabric Fabric samples practice artist's techniques x 2 	Continue fabric work		

	Realising ideas Evaluation	(application) <ul style="list-style-type: none"> Produce a final fabric sample Critical evaluation of own work MONTHLY REVIEWS 	Analysis and evaluation		
WEEK 5 9th Oct	TEXTURE/ SURFACE QUALITIES Use appropriate Art language Handling of mix media Observation of surface qualities, linked to theme Introduce Jan Beaney/ Jean Littlejohn. (Knowledge/ comprehension) Approach texture as a topic using Jan Beaney and Jean Littlejohn's working approach. (Application)	<ul style="list-style-type: none"> Exploration of theme Natural Structures. Present Texture, a formal element. (word exercise) Artists research –working approach: Jan Beaney, Jean Littlejohn (constructed textiles) (Application) Practical Exercise – Textured grounds, layering mix media Practical work – 2 pages - mix media observational studies, (neutral colour palette), rubbings, cloth prints etc. Group work - analysis Demonstrate constructed paper developments – weave, twisting, folding, layering 	Mind map – written proposal of theme (Statement of intent) H/W Descriptive words. Analyse how you used artists working approach. Analysis Start/ continue 3 x paper constructions		
WEEK 6 16th Oct	Paper Development & techniques Practice handling materials CONSTRUCTED TEXTILES Select artists, which suit personal aims. Identify value and relevance of artists (Analysis)	<ul style="list-style-type: none"> Complete paper constructions Demonstration - Making hand made paper Practical work - Making paper Practical work – paper and fabric samples x 2 Introduce constructed textile artists H/W give reasons for choice of artists. (analysis) 	Evaluate outcomes Constructed textile artists research Identify value and relevance of artist (analysis)		
23 rd oct		READING WEEK			
WEEK 7 30th Oct	Identifying links between own work & others, plan how to use artists techniques (Synthesis) Interpretation of paper work, utilising fabric techniques	<ul style="list-style-type: none"> How to: Develop ideas/ theme, The development cycle. group discussion. Demonstrate Techniques - knotting, appliqué, trapping, couching, wrapping and binding. Fabric samples x 3 Discuss, plan how you will use your artist's techniques (synthesis) Combine techniques 	Produce a double page present development cycle for the first fabric sample.		

	Fabric Samples	<ul style="list-style-type: none"> • H/W: Fabric samples x 3 • Individual discussion on practical work 			
WEEK 8 6 th Nov	Realising ideas Evaluate effectiveness of artists techniques (Evaluation)	<ul style="list-style-type: none"> • Group critique – explain choice • Felt making demo • Demonstrate weaving • Fabric samples continued • Final piece designs x 2 • Evaluate effectiveness of artists techniques • Individual discussion • MONTHLY REVIEWS 	Complete Final piece designs x 2		
WEEK 9 13 th Nov	Realising ideas Critical evaluation of final piece	<ul style="list-style-type: none"> • Produce final piece/ fine art textiles solution • FIRST DEADLINE DUE 	Evaluate final piece		
WEEK 10 20 th Nov	COLOUR AND DYE	<ul style="list-style-type: none"> • Introduce Colour - Colour Theory – Primary, Complementary, Tertiary. • Group activity – Describing colour • H/wk – write up theory & Complete mixing Exercise • Practical Exercise – Collage – Moods harmony, complementary, neutral - replicate in acrylic • A1 observation: use one colour palette and observe a selection of photos. Use mixed media acrylic paint (opaque), dyes (translucent). 			
WEEK 11 27 th Nov	Research cultural traditions of Batik and Tie Dye Knowledge/ comprehension Practice Batik and Tie Dye Application Identify an approach to interpreting thumbnails into fabric using research: Synthesis Practically apply techniques to own work Analysis	<ul style="list-style-type: none"> • Produce thumbnail developments from A1 observation – re-observe areas simplifying colour and shape only x 9 • Present Cultural traditions of batik & tie dye • Demonstration – Cold water dyeing, batik & tie dye • H/wk – Research cultures & record methods • Group discussion - approach to translating own work into batik, tie-dye & Scrunch dyeing, Salt resist. • Practical work – produce samples to interpret thumbnails • Record methods, analyse and evaluate samples – Quality of colour & marks 			

WEEK 12 4 th Dec	Produce a technical record of dye methods Evaluate outcomes Evaluation	<ul style="list-style-type: none"> • Produce a colour reference dye book, with methods and recipes recorded • Evaluate methods and outcomes • Present fashion eras • MONTHLY REVIEW 			
WEEK 13 11 th Dec	FASHION/ CLOTHESHOW Knowledge/ comprehension	<ul style="list-style-type: none"> • Visit the Clotheshow • Clotheshow task - select 2 x fashion designers from show and produce studies of their working approach 			
WEEK 18 th Dec	Introduce Zhandra Rhodes working approach Knowledge/ comprehension	<ul style="list-style-type: none"> • LINK FASHION TO PRINT AND PATTERN • Intro Zhandra Rhodes working approach to print design • H/W: produce 2 x A3 colour observations, 1 = harmonious/ 1 = complimentary. Produce a super imposed enlargement of the observations. 			
20 th Dec		CHRISTMAS			
WEEK 14 8 th Jan	PRINT AND PATTERN Introduction to C20th pattern design Knowledge/ comprehension	<ul style="list-style-type: none"> • Group presentation • Introduce C20th pattern eras • H/wk comparison of styles of pattern from C20th / Influence on own approach • Discuss practical approach to selecting a motif, recap on repeated patterns • Demonstration making a stencil • Practical work A3 design using 2 stencil of different scale on collaged ground 			
WEEK 15 15 th Jan	Practice print methods: Application	<ul style="list-style-type: none"> • Repeat exercise • Discuss Combining images • Demonstrate Cutting Lino blocks, mouse mat & Mono printing • Practical work – Produce paper designs, Combining methods & images • MONTHLY REVIEW 			

WEEK 16 22 nd Jan	COMPUTER AIDED DESIGN Practice print methods Application Analyse each method making specific reference to artists Analysis	<ul style="list-style-type: none"> • Fabric prints: block print on batik/ dye fabrics • Silk screen • Practical work 			
WEEK 17 29 th Jan	Produce computer aided designs for final fabric, considering artists approach Synthesis	<ul style="list-style-type: none"> • Practical demonstration – scanning & printing an image using photo-shop • Practical activity - scan own pattern design • Produce 3 x computer aided designs • Present and analyse board to illustrate which fashion item the cloth will produce 			
WEEK 18 5 th Feb	CONCLUDING FINAL PIECE	<ul style="list-style-type: none"> • Use computer aided sewing machine • Produce final fashion piece using the design. 			
WEEK 19 12 th Feb	Realise ideas Evaluate outcomes and artists influence Evaluation	<ul style="list-style-type: none"> • Produce final fashion piece using the design. • Evaluate outcome/ artists influence • Complete presentation of work 			
DEADLINE/ HAND IN WORK Friday 16 th February					

AS TEXTILES

ANALYSIS CHECKLIST

AO2: Analyse and critically evaluate textiles, demonstrating an understanding of purpose, meaning and context.

Analysis = What, How and Why?

What?

- State what your task/ aim was, e.g.
(These compositional studies aim to show portrait halves/ landscape thirds).
- Describe what you have produced:
 - Your description should explain what the subject matter is, and how it relates to your theme.
 - Your description should discuss the use of the formal elements:

Colour, Shape, Line, Tone, Texture, Pattern, Form and Structure.

How?

- Explain how you created your work.
- Describe the techniques and materials used in detail: e.g.
(Dip dyed calico, used cotton to hand stitch.)

Why?

- Purpose, meaning, and context:

- Why did you use these materials?
- Explain how the materials help to communicate your ideas relating to your theme.

UNIT 1

TEXTILES coursework

RESEARCHING TEXTILE ARTISTS

Assessment objective:

AO2: Analyse and evaluate critically sources such as images, objects, artefacts and texts, showing understanding of purpose, meaning and contexts

Description

A factual record of the details that make up the piece of work:

Who is the textile artist?
When was the piece made?
What is the subject matter?
Describe using formal elements
What does it remind you of?

?

Analysis

How was it produced?
What techniques were used?
What was the process of making it?

Why was it produced?
What is the purpose, meaning and context of the piece?

Appendix 4

AS TEXTILES

ANALYSIS CHECKLIST

Analyse = What, How and Why?

What?

- What are you focusing on in this sample/ development?
Colour, Shape, Line, Tone, Texture, Pattern, Form and Structure.
- Explain how this relates to your theme.

How?

- Explain how you created your work. Describe the techniques and materials used in detail: e.g. (Dip dyed calico, used thick yarn to hand stitch.)

Why?

Theme

- Explain how the materials help to communicate your ideas relating to your theme.

Artist's influence

- State which artist/ designer inspired your work
- How did your artist influence, change or enhance your fabric work?
Technique, working approach, ideas behind work.

Evaluate:

Critically evaluate:

- Describe what was successful in your practical work; explain why you believe this.
- Describe what was not successful in your practical work; explain why you believe this.
- How effectively did you communicate your theme?

Compare and contrast:

- Compare and contrast techniques used.

Plan your next sample:

- What will you aim to improve in your next piece of work?
- What will you continue to explore in your next piece of work?

AO2: Analyse and critically evaluate textiles, demonstrating an understanding of purpose, meaning and context.

AO4: Identify and interpret relationships with the work of others

Artist's Research feedback

- 1) **How would you assess your ability to research artists work?**
Limited, Basic, Competent, Confident
- 2) **How would you assess your knowledge of artists?**
Limited, Basic, Competent, Confident
- 3) **How would you assess your current ability to link artists work to your own work?**
Limited, Basic, Competent, Confident
- 4) **During which of the following textile projects have you learned the most through artist's research: (please tick)**
 Mark-making – composition research
 Embroidered artist research
 Constructed artist research
 Texture - Jan Beaney and Jean Littlejohn research
 Pattern era research

Briefly explain reasons

- 5) **Do you use the researching artists handout as a guide when researching?**
Yes/No
What is useful in the handout?

What is not useful in the handout?

- 6) **In your experience as an artist; how have artists influenced your work so far?**

To rearrange studio working space to encourage students to focus more fully and improve achievement in Art & Design?

Marilyn Cudmore

INTRODUCTION

Aim: To rearrange studio working space to encourage students to focus more fully and improve achievement in Art & Design

Setting the scene

Students joining the Applied Art and Design course embark on a learning programme which is artistically diverse and varied, combining both 2 dimensional works, that is to say work carried out on a flat surface, and 3 dimensional works, which encompasses Sculpture and Spatial Design. There is also a Graphics unit which is focussed on the engagement with technology to produce a final outcome. In my view it is this variety of units that appeals to prospective Applied Art and Design students.

At the end of their potential two year course they will be equipped to go on to Higher education in the form of Art College and will have developed a good sense of their own artistic style and ability. Confidence is vital to artistic development and part of that development to the confidence- building process at Sixth Form College must be the graduation from working on the desktop, as generally prescribed at GCSE, to working from the easel. Up until now students working in the art room have worked on tables in a group setting. They obviously work individually in response to a given brief but my concerns for this arrangement were based upon the fact that in that setting conversation tends to develop and, naturally enough, is not always about the work that they are engaged with. This obviously detracts from their artistic focus, and attendant research. There is also a disinclination to get up from the table to complete research or find alternative materials to experiment with if engaged in animated conversation about, perhaps, some impending social activity.

The working ambience of a creative area is important to artistic production. It is helpful for students to see and discuss each others work as it progresses and to exchange views and opinions about their own and others work, in development.

At Higher Education level, Art College, students are required to work from easels, or even from canvas or paper hung directly on the wall, but either way the student has an 'upright' view of their production – a clear aid to perspective and proportion. The emphasis is also very much on self managed study and the justification of artistic choices made. Although this would seem to be a little advanced for Sixth Form students I am keen for them to learn to begin this process, at the level that they are achieving now, and by 'segregating' them I felt that they would have a clearer focus as to what was actually happening within their work. This would naturally lead to increased engagement with materials and techniques as part of their development process. Within this working scenario I also encouraged them to regularly walk around the room to view and comment upon others work, and to discuss their own work with their peer group. This was therefore instrumental in their own self appraisal and development.

Students who newly arrive at College in September, necessarily take quite a 'step up' in their artistic production at AS level, and whilst I believe a very 'hands-on' style to be beneficial - encouraging all forms of artistic production, using all sorts of implements - they are usually reticent to 'leap into the void'. The aim of using easels was to encourage them to take 'ownership' of the space created for them to use, rather than being part of an orthodox classroom environment, and to allow them to change the way that they work, by very virtue of the fact of working in a new way. As with other subjects, time is a constraint in the development of the student's achievement to meet the demands of the course and to complete all units to the required standard. Applied Art and Design students also have a time constraint on each unit within the course structure and additionally have to meet the demands of two externally set examination units in the first year.

The way that the table and easel would be positioned, however, would mean that each student would face away from their immediate neighbour to make the most effective use of the room space available, and to create an illusion of personal space within it. At Art College studio space is often a huge area, subdivided to provide smaller, personal spaces, this isn't the case in a College situation, but I attempted to achieve a similar effect within the designated art room.

The AS Applied Art and Design course (Double Award) completes six units of art work for their qualification, and my aim was to use the easels for one unit only in the first instance and then to observe if students readily used the easels for subsequent units, where possible, after the initial experiment.

Theoretical Background

This action research project aimed to create a better learning environment for Art and Design students by changing the layout of the Art room and thus changing their artistic output.

Educational theory states that learning is not something done to students but something that they do themselves. Theory has also, historically, divided students into two 'camps' when describing methods of learning; Passive learners and Active learners.

As outlined in *Teaching Today* by Geoff Petty some students, who are classed as passive learners, believe that if they attend class and carry out prescribed activities, learning will automatically follow.

'If, in their view, this doesn't happen then often they see the fault as lying with something or someone other than themselves: the teacher is at fault, the resources are at fault - or the student is just not capable of the task required.'

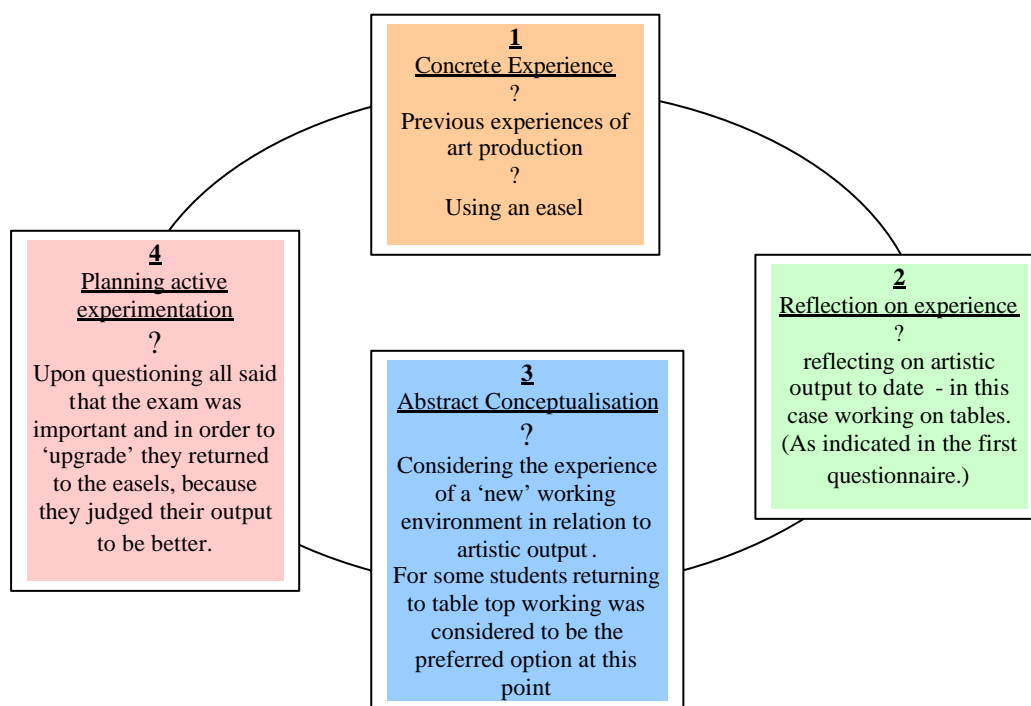
Ideally therefore students should all be active learners, but taking steps to achieve this first requires individual assessment of the group.

The primary questionnaire at the beginning of this project gave a good overview of which students had had experience of working on an easel before. Furthermore, it gave an insight into how the individual student approached the idea of the change of working environment and therefore was an appraisal of whether they were active or passive when it came to learning. By asking the question 'What do you think are the advantages and disadvantages' (of using an easel)? most students answered in a positive way irrespective of whether they had worked on an easel before or not, but a few, who had stated that they hadn't used easels before, didn't put anything in the answer box. This would indicate that they felt that they had no opinion as they had had no practical experience. By not answering at all, the student conformed to the model of the passive learner who, just by turning up and carrying out instruction, assumes that they will automatically learn what is required.

We must also consider the effect of Maslow's Hierarchy of needs (Appendix 2). Maslow suggested that there are instinct-like needs which every human being strives to satisfy, he then put the identified needs in a hierarchical order, the needs at the bottom of the table being the most significant. The higher needs only become relevant if the lower needs have been met.

If we accept that the lower levels of Physiological needs and Safety needs are being met for the students, we can then begin to address the higher needs indicated. In the diagram (Appendix 2), (Petty, 1997 p54), failure to meet the needs of the students at the higher levels has significant impact on their learning. Changing the learning environment specifically in the way that was utilised for this project, addressed the 'belonging' needs of learners by creating an atmosphere that was individualistic, although uniform, being still part of a group. Encouraging students to look at each others work, which was easier and less pressured to achieve in the way the room was ordered, built on their self esteem and ultimately began to develop progression towards the need of self-actualisation encouraging personal growth, self expression and identity.

The students also followed an *experiential learning cycle* as described by David Kolb (Petty 1997, p319). Kolb, in research, suggested that a learner can begin the cycle at any point but then the sequence should be followed. Whether consciously or not, all significant learning from experience follows this cycle, and the research students followed this format by returning to the easels when they felt that the importance of the unit – the Exam – warranted it. Peter Jarvis (Peter Jarvis on Learning 1987, 1995) identified that there are several ways of using Kolb's research. He adapted the standard 'Learning Cycle' to specifically relate to different groups of his learners. In the diagram below, I have applied Kolb's Cycle to this research group.



METHOD USED

I chose a small group of AS students for the research. There were 10 students in the group. They were given a short initial questionnaire prior to the 'focus unit' regarding the extent of their previous use of easels, if any, and asked to comment on their thoughts regarding the potential use of such equipment.(Appendix 1) From this I was able to gauge who was more 'experienced' in the use of easels, and get a general feeling about how they felt about the proposed change in their working methods and environment. I was keen to evaluate this especially as I am aware that artistic people are sensitive to their working environment, and generally speaking all students resist change. This could potentially have caused a difficulty on the basis that they hadn't been at College very long and that progression in itself constituted a major change in their lives. Having got used to the Art Department and the Art and Design room in particular I was now about to instigate another change in their environment.

My plan was that each student would have a personal working space accommodating an easel and an adjacent table as demarcation creating a small individual studio area. I acknowledged, by adding a table that not all art work can be carried out on an easel. Collage for instance is not best suited to an upright picture plane, and general workbook development, which is an individual unit requirement, is obviously best achieved sitting at the table. It would also give students a flat surface on which to put paint, water and research material.

The Unit I chose for the primary use of easels was called 'Fine Art' and as the title suggests was focussed primarily on a 2 dimensional response to the brief. Fine Art can also include Printmaking of course and such techniques as collage, drawing and even computer manipulation as a means for development, which obviously could not be carried out on the easel. That's why a table was provided as an additional working area. Ultimately though, the student response would be a 2 dimensional one with at least some painting involved, which would involve the use of the easel.

At the beginning of the project student group discussion focussed on possible responses to the brief, artist references for visual research relating to their individual focus and the fact that using easels for their unit submission would enable them to use a variety of paper sizes or other surfaces for their work, both experimental and developmental. For the final piece they could also use a large canvas or primed sheets of MDF or Mount board which they felt would work more effectively on an easel than using the table top. Generally, once the room was organised in an individual way students became very pro-active, in theory, about the experiment.

FINDINGS

- The initial questionnaire showed that only 3 students out of 10 had any experience whatsoever of using an easel, the remaining 7 students had no experience at all. Of the 3 who had used them before they had only used them in a 'one-off' situation – on a 'workshop' day or similar, never in a continuous working capacity.
- The second question on the questionnaire asked how students felt about the experience of using an easel. Obviously feedback was limited to the 3 students who had previously used them, but response was positive with all three.
- The third question addressed the student's perception of the advantages and disadvantages of using easels. Advantages ranged from *'more Space and more movement'* to overwhelmingly *'being able to see your work better'*. Disadvantages were listed as *'Standing up would make your legs ache'* and *'the paint could run'!*
- The fourth and final question asked the students if they felt the impending use of an easel for their work would alter their artistic production. All of the students said that they felt it would, in a positive way, citing the fact that they would be able to stand back from the work and declaring that working in this way was, they felt, bound to improve the quality of the work.
- The fact that none of the students had any great experience using easels was not unexpected. It also appeared to be positive one in terms of assessment - it meant that no student would just be returning to a working method that was familiar and therefore would not be at the level of discovery that the other students were.

Extracts from the Diary: (A week after the project began)

My comments.

Students seem to have adapted well to the changes in the room layout and subsequently their way of working. Although the common space in the room has been diminished because of the easels and tables the students have accepted this totally and are careful when moving around the room bearing in mind that it is a practical area.

The work continues. Some students still seem reticent to use the easels despite my encouragement, and are happy to sit and paint at the tables – using any excuse to justify it. They also seem happy to prop a work book up at the easel and work from there – sitting down - which is both unstable and lazy. They are disinclined to secure a piece of paper to a drawing board and work from that. They are still predisposed to chatting if I leave the room, although I'm not sure that that

is a problem in itself. By altering the room and suggesting that they 'take ownership' of the resultant workspace I assumed that there would be less chat, which generally I think there is. Some talking is acceptable. The room needs to be an ambient place to work, and discussion seems to be more focussed on the obviously visible work.

10 days later

The students seem to have got used to using the easels, a little more. They are still reticent however, about using different sizes of paper and a number of them still insist on sitting down! This was something I hadn't bargained on, as it's not my style at all, and goes a little against my perceived ethos of the experiment. I have jokingly suggested that I take the chairs away – all to no avail! I have decided at the moment that it isn't important, after all continually giving them rigid instructions about the use of the equipment seems counter-productive. The students do seem to have adopted their spaces however, although some are not using them as fully as I anticipated. I have spoken generally about this so we will see if anything changes.

The students have all participated without specific resistance, although some did have some reticence, in practice, to actually standing at the easel, whether through a practical problem – 'It makes my legs ache' – or because of a social inhibition – 'I've never done this before'. Despite this all of the students did participate in the experiment .

At the conclusion of the Fine Art unit chosen for the research, the students completed another questionnaire about how they felt about their experience with the easel work (Appendix 3).

Generally the students felt that it was a positive experience, although the minority of students who were negative at the beginning of the project still had a negative bias in their comments. However, all students, except one, felt that it improved the working atmosphere and thus their own individual output. They all cited improved concentration linked to the structure of the working environment, as responsible for this.

Although it is difficult with a visual/ interpretive subject such as this to assess with concrete statistics whether the students improved their *grade* by working in this way, as opposed to working on a table, it is clear to see that they have experimented with materials more fully and worked on more experimental surfaces for their final solutions, thus developing their learning. Most used canvas or large boards for their final pieces, which they said was a departure from previous work.



At the end of the Fine Art unit I did not specify that students should continue with the use of the easels during the next unit, but waited to see what they would choose to do. The room remained in the same format. The result was mixed. Some students continued to use the easels, but a significant number returned – at least primarily – to working on the table. This, I felt, was a disappointment. However, I accepted their choice in the matter, which they individually justified in a variety of ways but which actually came down to the revisiting of an environment that they knew well, and obviously felt 'cosy' with. At the end of this project some returned to the easel for the final solution, which was a very positive sign.

The subsequent project was an externally set project – an Examination unit. Interestingly the students – without any prompting – returned to working on the easels. In casual questioning they were generally positive about the merits of working in this way, and linked this choice in their method of artistic production to the significance of the unit.

DISCUSSION

What factors had an impact on this research project?

Student reaction:

- The students primarily engaged well with the idea of using an easel, although there was a period when the 'newness' of it waned and some returned to working on the tables. Subsequently, however, they all returned, to some degree, to working on the easel and using the table for work book studies.

Group dynamic

- This was a small group of students – 10 in all; 3 boys and 7 girls. They generally interacted well but the benefits of this research may have been greater if the group had been larger, allowing greater interaction and sharing of ideas. Wider group discussion may have been easier to develop, although spontaneous discussion did take place frequently within the research group, but on a small scale.

Working space

- Space was a major constraint for this research. It is clearly more economic in the use of a relatively small working space to construct banks or 'islands' of tables for students to work on. However, although every inch of floor space was used in the rearrangement of the room the students worked well within their own designated spaces and were respectful of others spaces within the room.

Future implications

The future implications of this research will be to further implement the use of easels in the art room. The group of students who were used in this particular research project had in this instance already begun the course by working on tables. Given their immediate mixed reactions to the proposed use of the easels, through the questionnaire, I generally feel that it is wise to give new students a short time to settle into the new College environment and the structure of the course before rearranging their working conditions. Referring back to Maslow's Hierarchy I feel it would be more conducive to achieving 'Self Esteem Needs' and beyond, if the students were used to their new surroundings before progressing further. However the success of the research proves the benefit of encouraging the students to take a new approach to their artistic output.

CONCLUSION

As an Art teacher/Artist I am very committed to developing Art students from being mere students to actually being Artists. I also accept a responsibility for educating the student not only in the prescribed literal way as dictated by the course structure, but also in a way that has a more far reaching effect in the way they produce work. My only concern has been that I, almost subconsciously, had expectations that the students would be as enthusiastic about the new method of working as I was, and that their work would improve immeasurably. This did not prove to be the case, universally. I am, however, convinced that the restructuring of the art room to accommodate easels and tables was an unqualified success.

In the 'broad' sense those students who intend to progress to Art College will be expected to work in a similar environment, which they will now have had experience of, and all students involved produced work that was more experimental in the use of materials and techniques. I will continue to experiment with the arrangement of the room in order to possibly improve the working environment further. I would like to create an environment in which each student had 'ownership' of their designated space but was also more able to interact with the others in the group, on an artistic level.

References:

Petty, G (2004) Teaching Today. Cheltenham: Nelson Thornes Ltd

WWW. Infed.org/biblio/b-explrn.htm

Peter Jarvis (1987,1995)

Appendix 1
Research Project
Initial Questionnaire

Name: _____

Question	Response
Have you ever used an easel before in your artwork? Please give details of when and where	
How did you feel about the experience?	
What do you think are, or could be, the advantages and disadvantages?	
Do you think that using an easel would alter your artistic production in some way?	

<u>If the need is not met the students feels....</u>	<u>Needs</u>	<u>If the needs are met the student feels...</u>
<ul style="list-style-type: none"> • Restless and bored with a lack of zest for life. • Life in meaningless, boring and without purpose. • A tendency to avoid growth and development • Listless. 	<p><u>The Self Actualisation Needs:</u> To make actual what one is potentially. Personal growth and development by following ones own passions and interests. Self expression, creative action, need to search for identity and meaning in life</p>	<ul style="list-style-type: none"> • A desire to grow and develop in the direction of their higher values • Creative Positive, energetic • Unselfish desire to make a contribution • Curious, open to new experiences. • A desire to think for themselves • A growing sense of identity
<ul style="list-style-type: none"> • Fearful of criticism • Fearful of failure and risks (e.g. fear of new situations or learning activities) • Fearful, frustrated or angry toward those who withhold respect e.g. teacher or College. • Envy and bitterness. 	<p>?</p> <p><u>The Esteem Needs</u> Self esteem: Desire for achievement, strength and confidence; adequacy, to be able to cope by oneself. Respect: desire for recognition, reputation, prestige, status and dignity.</p>	<ul style="list-style-type: none"> • Self confident, content. • Self belief and self respect. • Prepared to take risks and try something new e.g. learning. • Cooperative generous and kindly. • Esteem needs lessen and higher needs take their place
<ul style="list-style-type: none"> • Lonely, rejected and rootless • Strong conformity to group norms • Dislike or hostility to 'out groups' 	<p>?</p> <p><u>The Belongingness and Love Needs.</u> The need to give love and affection. To 'belong' to have roots.</p>	<ul style="list-style-type: none"> • They can love themselves and others • They can trust friends and loved ones and give them freedom • These needs lessen and higher needs take their place.
<ul style="list-style-type: none"> • Anxiety, dread. • Fight- and- flight behaviour 	<p>?</p> <p><u>The Safety Needs</u> Freedom from pain and injury, security, stability etc.</p>	<ul style="list-style-type: none"> • Physical security • Safety needs lessen and higher needs take their place
<ul style="list-style-type: none"> • Craving for food, water, etc. 	<p>?</p> <p><u>The Physiological needs.</u> Food, water, air etc.</p>	<ul style="list-style-type: none"> • No physiological craving • These needs die away and higher needs take their place.

Appendix 3
Research Project
Unit completion Questionnaire

Name: _____

Question	Response
Now you have completed one unit using the easel do you feel it has affected your artistic production?	
How did you feel about the experience generally?	
Please write down at least one advantage to using the easel, in your view.	
Please write down one constraint with using the easel, in your view	
Do you feel that it has altered the working environment of the room? How?	

‘Feeling Groovy’: The possible benefits of using music in classroom learning activities

Aidan Hamilton

INTRODUCTION

This project was sparked by an interest that has developed over the past couple of years. It certainly seems evident from my own observation that, perhaps due to the ready availability of music via new technologies such as the MP3 player, many students use music to accompany large parts of their lives, including during learning activities.

As an initial fact finding exercise I carried out a brief observation of student activity in The Dell, the main study area where students can work individually at computer stations on coursework and other study tasks. As a snapshot, it was interesting to note that 30% of students were using MP3 devices and similar as an accompaniment to work.

This prompted me to consider the extent to which music is increasingly viewed as a positive aid to learning by students rather than as a distraction. I was also prompted by the realisation that, almost subconsciously, over the past two years I have been using music as a background for certain activities in the classroom myself for the purpose of establishing a more relaxed and less formal environment. During this time anecdotal responses from students suggested that they found its use helpful in teaching and learning activities.

There have been a range of news reports and educational papers published over that time exploring the positive part that music may have to play in behaviour and learning. For example:

- The Guardian 28/2/07 (Appendix A) reports on the use of background music to moderate the behaviour of school children
- Press Association 29/9/06 (Appendix B) reports on the use of music in the classroom as a behaviour modifier
- Brin, Best. Accelerated Learning Pocketbook 2003 (Appendix C) sets out types of music and their possible uses and effects on students while learning
- R. Coff/Suzuki Music Academy 11/4/2005 summarises some key research into the use of music in learning and is also a useful link to a range of other relevant sites
- Cockerton, T., Moore, S., & Norman, D. (1997) (see references) also explores possible benefits of background music during cognitive test performance.

(See appendix for reproduction of some of these texts)

They seem to suggest that music can act as a behaviour modifier in a range of ways and may also have a positive part to play in creating a classroom environment that is conducive to learning

I therefore decided to formalise the use of music a little more by undertaking the Action Research Project with the aim of trying to establish whether or not there are any tangible benefits to using music during teaching and learning and to try and judge what kind of activities might benefit most from its use.

Theoretical Background

[The psychological study of arousal suggests that the human brain and, therefore, subsequent performance is affected by a range of extrinsic as well as intrinsic factors such as motivation.](#)

[While we are all aware that a student's individual performance can be affected by factors well beyond our control, such as home circumstances, peer pressure and physical and emotional well-being to name just a few, it is interesting to explore how it might be possible to manipulate other extrinsic factors within our control, such as the learning environment.](#)

The concept of arousal has been a major aspect of many learning theories and is closely related to other important concepts such as anxiety, attention and motivation.

“One of the most important findings with respect to arousal is the so-called Yerkes-Dodson law which predicts a U-shaped function between arousal (motivation) and performance.”

(Ref: <http://tip.psychology.org/index.html>)

This source assesses a broad range of research and experimental settings and it appears: *“that minimum performance is associated with both high and low levels of stimulation, suggesting that individuals either ignore or are unaffected by this type of stimulus.”* (Ibid) |

Moderate levels of stimulus, however, seem to increase performance and, reflecting on the use of music in the classroom, might suggest ways in which it could be used most productively. In other words the research indicates that the presence of moderate levels of music in the classroom would seem to offer the optimum benefit to performance.

Other theorists have tried to explore this stimulus/response idea further. There is a range of research work exploring the connection between stimulus and responses and some of these shed some light on the theoretical explanations for the benefits of music:

“Berlyne (1960), for example, attempted to explain the relationship between arousal and curiosity based upon [Hull's drive reduction theory](#).

One of the most important concepts in Hull's theory was the habit strength hierarchy: for a given stimulus, an organism can respond in a number of ways. The likelihood of a specific response has a probability which can be changed by reward and *is affected by various other variables e.g. inhibition”* (my italics).

The use of music in minimizing inhibition in classroom activities is the relevant issue here.

“In some respects, habit strength hierarchies resemble components of cognitive theories such as [schema](#) and [production systems](#).

Scope/Application:

Hull's theory is meant to be a general theory of learning. Most of the research underlying the theory was done with animals, except for Hull et al. (1940) which focused on verbal learning. Miller & Dollard (1941) represents an attempt to apply the theory to a broader range of learning phenomena. As an interesting aside, Hull began his career researching hypnosis – an area that landed him in some controversy at Yale (Hull, 1933).” (Op. Cit.)

Other theorists in the same field support Hull's findings about the role played by arousal in performance. The key point of interest to me here is the relationship between arousal and performance. Too little arousal is associated with lack of concentration and performance, whereas too much can cause similar effects. This research offered potential explanations for the benefits of mid-level arousal that music might bring to a classroom situation. For example:

“According to Berlyne, there is an optimal level of arousal for an individual at a given time. If the level of arousal drops below the optimal level, the organism will seek stimulation (i.e., exploratory behavior). Berlyne argued that curiosity was a consequence of "conceptual conflict" that could be caused by: doubt, perplexity, contradiction, incongruity, or irrelevance.

(Op.Cit. <http://tip.psychology.org/index.html>)

Cockerton et al (1997) assessed how music as a background accompaniment to learning tasks may be beneficial. This particular study was of great interest as it reflected the key areas that I was keen to explore i.e. the use of background music as a concentration aid rather than music as a means of developing higher order brain function.

“Summary: Many students have background music present while they study and many believe that this is beneficial. This idea was examined in a study of 30 undergraduate students who performed two cognitive tests, one in silence, and the other with background music. Music was found to enhance performance, as indexed by more questions answered and more correct answers given. There were no differences in heart rate, so the effects were probably not due to different levels of arousal. The authors suggest that the type of music used by an individual may determine its effectiveness.”

Neuro-psychologist, Dr R. Paget (2006) explored these ideas with additional interesting conclusions on the best type of music for learning, based on marrying up the pace of music to the body's pulse response and measuring physiological responses to a range of sounds. His report was also an additional useful account of the 'Mozart Effect' research.

These reports and studies, therefore, raise interesting questions about manipulation of learning environments in order to manipulate, in turn, the arousal levels and hence performance levels of students.

It should be noted at this point that little, if any, of the research related directly to the 16-19 sector and the Sixth Form College context. It is of course possible that studies carried out with younger children may not be applicable to older students but it seemed possible to carry out some small scale research of my own which might give some indications that music does indeed have a part to play in aiding the learning process. This led me to a plan of action designed to explore further. I used a range of methods (detailed below) to gather relevant information in order to reach some conclusions.

METHODS USED

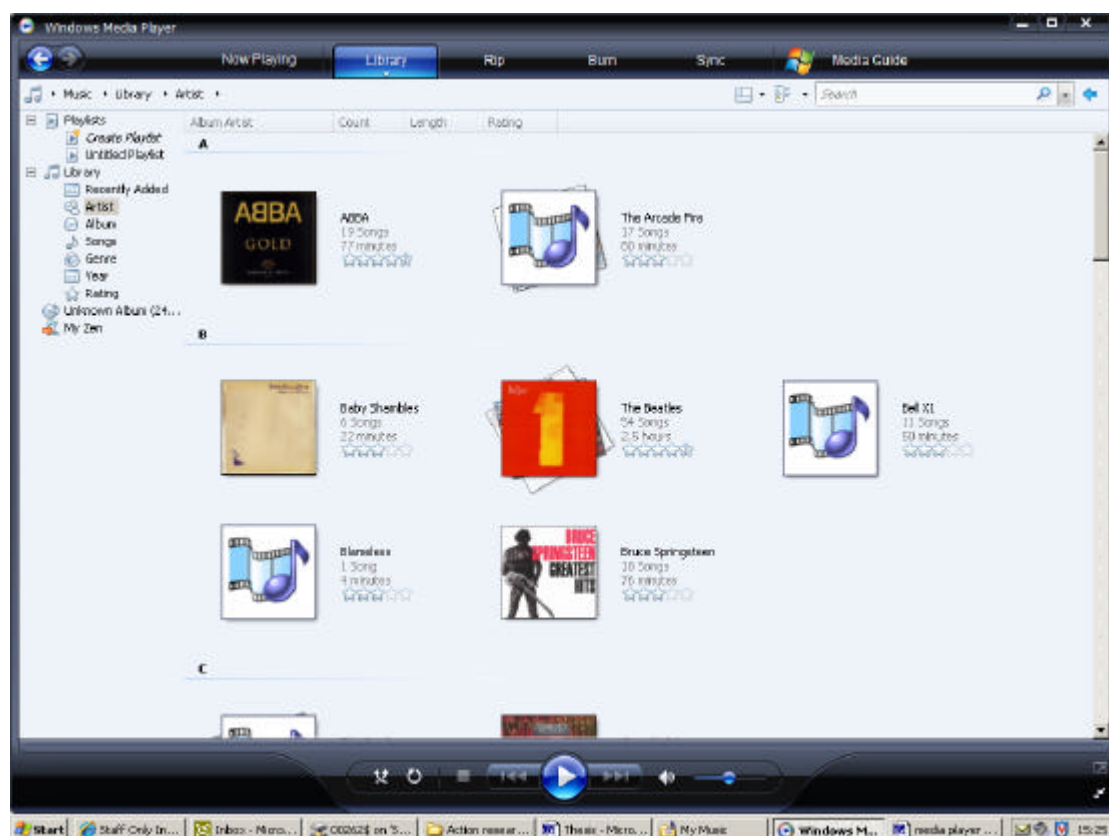
1. Survey of existing practice.

My aim here was to ascertain the extent of music use in the College by colleagues and to find out if this provided any initial evidence of its positive benefits. I drew up a questionnaire (Appendix D – results in Appendix E) and distributed this to all teaching staff in the College.

I also carried out a brief survey of personal stereo use by students in supervised study areas (The Dell)

2. Selection and compilation of music files

I collected a range of music tracks to use and created a folder that could be easily accessed during classroom activities and played through the sound systems installed in all classrooms via Windows Media Player.



I initially intended to use quite a wide range of types of music but as the research progressed I realised that it would lead to difficulty in measuring variables if the range was too large. So I consequently settled for a small selection of artists and musical types. (See Appendix H for music used)

This was influenced to an extent by the reaction of students also who made it clear if they disliked my choices. It also seemed to echo some of the theoretical points made earlier about optimum levels of arousal in that music that was, to a certain extent, almost subliminal, or at least which did not require concentrated 'active' listening, seemed to work better in creating a focused working environment.

3. Student questionnaires

I developed a questionnaire for students designed to ascertain a range of responses to the use of music in the classroom. This went through a process of revision from an early model (see Appendix F) to a more refined version (Appendix G) which enabled me to get a greater range of quantitative rather than qualitative data.

4. Teacher Observation

During sessions where students were engaged in group activities, I observed their behaviour to assess levels of concentration on task and the amount of time spent by students 'off task'.

5. Exit Questionnaire

This was a simple series of questions designed to give the students who had participated in the research to give some reflective overall responses at the end of the process (Appendix I)

6. Focus Group

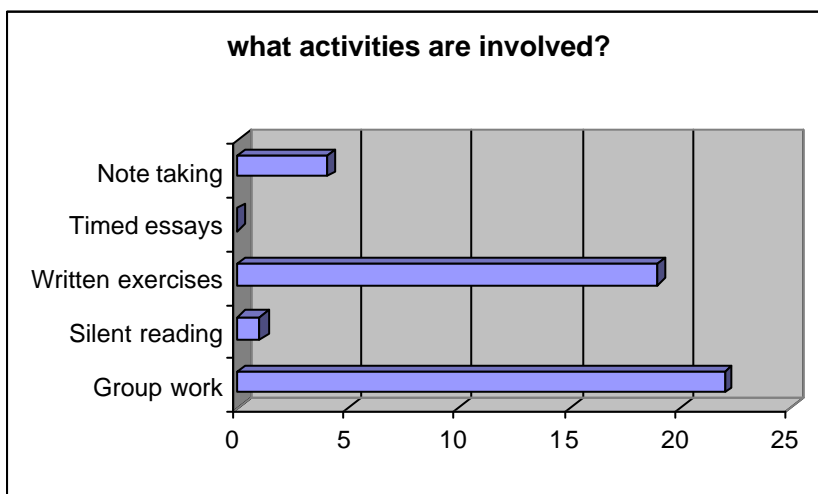
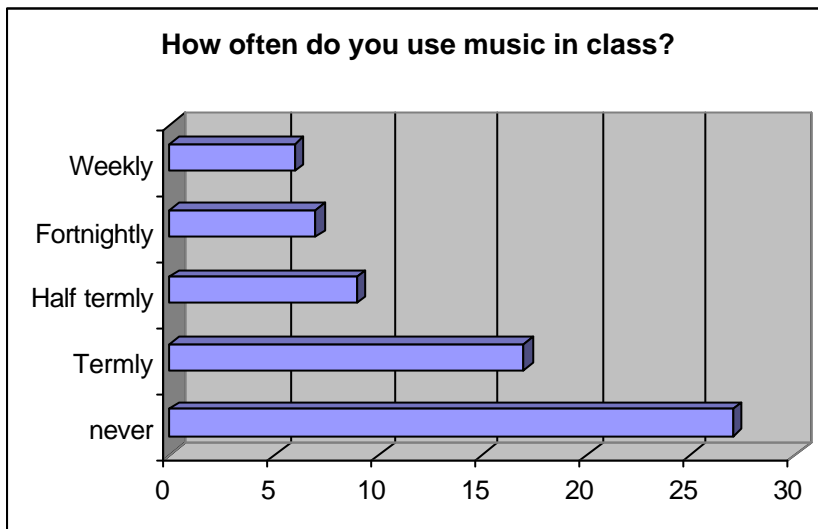
This was intended to supplement and act as a method of triangulation against other methods and the exit questionnaire in particular. It was also intended to give students the opportunity to give me a little more qualitative data which could hopefully give some deeper insights into their thoughts and feelings about the use of music. It was a simple 15 minute discussion which, although led by me, was designed to allow the students to contribute their own responses freely. I noted down comments made as the discussion developed.

FINDINGS

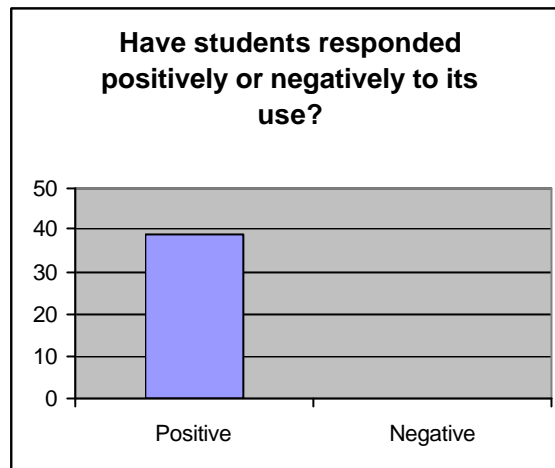
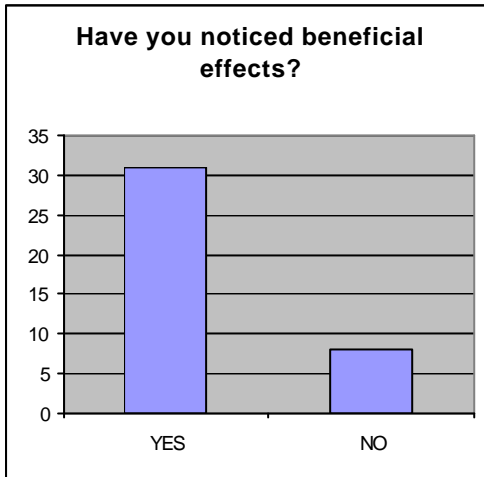
1/ Survey of existing practice

Music use by students was common in the study centre (30% of students listening to personal stereo devices in a snapshot survey of the Dell study area)

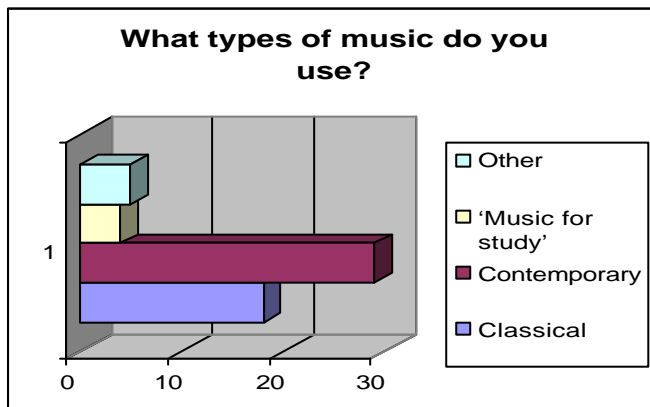
I was also slightly surprised to find that, when I carried out a teacher survey, music was used quite extensively across the curriculum by a range of teachers. (see tables below). In this survey I asked teachers to give details of their music use and to judge whether or not they thought it was beneficial as well as reporting on student response to its use.



- **66** teachers responded across the curriculum
- **39** of these used music at least termly
- The majority of teachers used music to accompany group work or written exercises with 4 using it during note-taking. I would be interested in exploring further whether or not this could create teacher distraction
- 1 teacher in Psychology also reported using music during silent reading



- 31 of the 39 who used music reported a positive beneficial effect.
- Additional comments showed that a significant number of teachers felt that music aided student concentration and minimised chatting during activities
- There was not a single response that indicated negative student response to the use of music. All 39 teachers reported that students were positive about it



- The majority of teachers (29/39) used contemporary music although not always exclusively
- Classical was used by 18 but also not on a consistent and/or exclusive basis
- Many teachers reported allowing students to use personal listening devices during individual work, commonly when working on computers or when engaged in creative tasks in Arts subjects, for example
- This was often used as an addition to, rather than a replacement for, music in the classroom
- One teacher in Performing Arts carefully selected style and tempo of music to correspond to the types of activity involved. For example: slow music for a longer written task; more up-tempo for quiz or Q&A sessions
- Another teacher had collaborated with Music Technology in creating specific 'learning' CDs called 'Mellow' and 'Upbeat'. These were used in identical ways to the Teacher above
- In History a teacher reported using a self compiled African/Blues CD to accompany work on a USA African/American module
- 1 teacher also used a printed 'jukebox' menu where students could tick their preferences

2/ Student questionnaires

I carried out a formal survey of student responses following eight separate lessons where music was used extensively to accompany teaching and learning activities (although music was used in more than these sessions). The first survey gave a limited amount of detail (see Appendix F) and I altered the questionnaire to enable me to gather more quantitative than qualitative data (see Appendix G).

The questions on this survey asked students to rate their concentration and productivity, to rate how helpful to work the music had been, as well as rating awareness and enjoyment levels.

The teaching and learning activities accompanied by music were fairly consistent in length (averaging 35/40 minutes) and involved students working in small groups on a range of tasks such as:

- preparing a movie pitch based on the synopsis of the film '*The Bicycle Thief*' (Session number 1)
- preparing a verbal and visual presentation of a distribution campaign for a chosen film (Session number 5)
- identifying key themes, messages and values in the film '*The Crying Game*' (Session number 6)

Full results can be found in Appendix H and the table helps reach some initial conclusions about the way in which students feel that music may help their concentration and productivity. It also makes it possible to see if there is a connection between actual enjoyment of the music played and its helpfulness in carrying out learning tasks.

Included are some key statistics such as the range of student ratings to questions asked as well as the mean and mode. All ratings are on a scale of 1 to 10.

This enables some deeper analysis of student feedback that goes beyond simply ascertaining whether students enjoyed the music played and whether or not they felt that it aided their concentration and productivity.

However, there are some key points that are worth identifying from the data.

- Contemporary music scored significantly higher in enjoyment terms over classical music
- No student rated classical music higher than 8 for enjoyment whereas for all other music used the range extended up to 10
- Students often appeared more aware of classical music during activities
- The highest score for awareness came from *Babyshambles* (perhaps unsurprisingly); this was an 'experiment within an experiment' to see how students would respond to very high tempo music. But it was also music that had a high score for helping concentration
- However, concentration and productivity levels reported by students differed only marginally across the different types of music
- Concentration mean scores out of 10 ranged from a low score of 7.39 (for a classical piece) to 8.22 (for soft rock)
- Productivity ratings were slightly lower across the board and ratings for helpfulness a little lower still.
- All ratings for concentration, productivity and helpfulness were significantly positive apart from the sessions where classical music was used. In these responses students rated the music for helpfulness at 4.94 and 5.44

3/ Teacher Observation

This proved to be a rather unscientific process where I noted down when students deviated from task but without a formal control group or rigorous method of recording results, I felt that this part of the research yielded little concrete evidence. I do feel that it has some merit as a research finding but researcher bias can not be discounted in my reporting.

4/ Exit Questionnaire

This questionnaire was completed by 20 students in the group with which I had carried out the bulk of my research (for full table and results see Appendix I). One question asked them to rate the overall helpfulness of music in classroom activities on the same 1 to 10 scale as with the earlier questionnaire and yielded the following results:

- Range 5-10
- Mean 7.45
- Mode 8

The results are fairly clear cut and show that all students found music helpful to some degree. It is interesting to see that the lowest range score was 5, which is the midway point, while the mean and the mode are both near the top of the scale.

The following statements were also listed (based on early questionnaire responses) and students were asked to circle those with which they agreed, with the following results

- Music helps relax me when working 90%

- Music makes a class feel more comfortable 90%
- Music makes tasks seem less like work 75%
- Music distracts me when I am trying to concentrate 5%
- Music needs to be played at a low level or it becomes distracting 85%
- I don't like music playing in group work 5%

This again shows a clear appreciation of music and its use. The high responses came to those statements that posited the advantages of music use while only 1 student of the 20 surveyed reported that music had any negative effects.

5/ Focus Group

I used the same group to try and gain some qualitative responses to the research period, using some responses to the exit survey as a prompt for discussion. The students required little prompting to engage in discussion and were keen to put forward their points of view. The overwhelming majority of comments were positive with students making statements such as:

“Music makes work feel less like work”

“ ...it makes the classroom warmer and less formal”

“It makes it feel more like home and I find it easier to relax and concentrate”

“I don't like it when the music is too loud or else it becomes distracting”

“ I really enjoy it; it chills me out and doesn't make me nervous about saying stuff”

DISCUSSION

It seems from the findings that there is a general awareness that music can be a beneficial teaching and learning tool. Music is being used across a range of subject areas and activities.

What was immediately striking from the responses to the teacher questionnaire was the realisation that music was being used by a significant proportion of teachers already. As can be seen from the findings section, out of the 66 subject areas that responded to the survey, 39 of them used music at least occasionally to accompany a range of activities.

What was also striking was the consistency of types of task for which teachers used music; group work and written exercises were the activities cited overwhelmingly. Approximately 75% of teachers reported noting beneficial effects of its use and they also reported that 100% of students in their classes had a positive reaction to the use of music.

The survey allowed for additional explanatory comments and these made for fascinating reading. Some teachers had well developed strategies for using music, to the extent of creating custom made CDs for use tailored to particular types of task. There was a strong consistency of response with many comments made about the value of music in minimising 'chatting' tendencies. A few teachers encouraged their students to use personal music devices during individual work on computers with the deliberate aim of minimising distraction and therefore maintaining concentration on the task on hand.

One final interesting point from this survey was the extent to which contemporary rather than classical music was chosen by teachers for use, despite much publicity about the 'Mozart Effect' which one might expect teachers to have come across. I found myself that there was an inherent student resistance to classical music and no significant difference to concentration levels or focus on tasks so decided to discontinue its use in my research after a couple of attempts.

It is also interesting to note some connection between particular styles and types of music with student responses in surveys. Those sessions where classical music was used corresponded with slightly lower levels of concentration, productivity and helpfulness. The results of student questionnaires also indicate a strong dislike for the music; range, mean and mode figures are significantly lower than for other types of music. It would therefore seem sensible to use music that is more contemporary.

The responses of students to the use of music were very interesting and informative. It is clear that there was an overwhelmingly positive response to the use of music. The questionnaires reveal that concentration levels during

activities accompanied by music were uniformly high with only slight variations. It would of course be useful to carry out further research using a control group to see if music changed student behaviour in any significant way.

As mentioned earlier I decided to focus my observations on one particular AS Film Studies class and introduced my research ideas to them. They were therefore fully aware that they were helping me in a small scale research project and were quite curious about the process. It is of course possible that this knowledge may have had some impact on their classroom behaviour but, over time, it seemed to me that using music on occasions and being asked to fill in a short survey/questionnaire became a regular part of the teaching and learning process.

The students own comments, in focus group and in private conversations with me outside class, were perhaps the most revealing with an almost 100% positive response. While I am aware that I might find it difficult to be objective in my observations, I am convinced that the use of music in the classroom is beneficial and my (albeit limited) research seems to support some of the research findings detailed in the introduction.

It seemed to me that students did concentrate on tasks with more focus when I played music than when I did not, indicating that using music to create moderate levels of arousal can be beneficial, as Berlyne, Paget and others posit (Op.Cit).

It also seems to support the work of Cockerton (Op. Cit) which suggested that music aids levels of concentration.

I should mention at this stage that, as the research period went on and I could see that music was becoming an almost expected part of the classroom 'environment', I became accustomed to using music to accompany short activities as a matter of course and did not always record formal responses. Overall student responses, therefore, are based on more than just a few sessions of music use, adding to the validity of findings.

CONCLUSION

This research project has helped clarify some of my own responses to the use of music in the classroom. It is clearly something that has been picked up on by other teachers and is used much more extensively than I realised before I began. So are there any tips or ideas for improving teaching and learning practice that arise from my research?

- There seems no doubt to me that certain activities benefit from its use, particularly small group work with a clear goal. Preparing presentations and responses are ideal tasks where students feel that background music creates a more relaxing yet still work oriented environment. The type of music used is clearly important with students responding much more favourably to contemporary rather than classical. Music that is slower in pace seems to create a calmer atmosphere where it serves to relax but not distract students.
- However, students also reported that more upbeat music could also have a positive effect but I feel there should be some careful thought over its use. My own observations here when I used *Babyshambles* were that this music proved slightly more distracting with students commenting on and actively listening much more to the music. Choices of music should perhaps have room for negotiation with students.
- The use of music to modify behaviour seems to be effective: minimising 'chatting opportunities' in IT rooms seems to be an obvious area to experiment. It also seems to create a calmer and more focused atmosphere during other classroom activities.
- Student response shows clear approval of its use; the ongoing questionnaires and exit surveys clearly show massive positive response. The next step might be to collaborate more with students in choosing music to add to my library for use in the classroom. With a modern classroom, equipped with Windows Media Player it is the height of simplicity to create such a library and use it with minimal set-up time and preparation.
- I would still hesitate to use music where students had to write personal responses or concentrate on individual tasks due to its distracting possibilities and other teachers seem to share this view. But it would be interesting to explore further whether its use could be extended and whether or not I am still clinging to slightly dated viewpoints, coming from an era when the ubiquity of personal music devices and background music simply did not exist in the way it does now.

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<http://tip.psychology.org/index.html>

Appendix A

Rebecca Smithers
Wednesday February 28, 2007
[The Guardian](#)

Music helps pupils chill out at home time

A secondary school in the north-east has begun playing soothing music at home time to calm pupils down and stop them getting rowdy at the end of the day.

The experiment has been running for nine weeks at St Mary's Roman Catholic comprehensive in Newcastle.

A "soundscape" involving ambient music and sounds from nature has been developed, which is played to pupils before and after school, and at lunchtime. The same sound is also played at the local Metro station where teenagers gather. Staff at the 950-pupil school said it has made lunchtime easier, while Metro operator Nexus - which part-funded the scheme - said it helps calm the journey home.

The pilot follows successful schemes in which classical music is played at stations at night to calm passengers. The sounds were developed by Soars and Co, an "experience strategy consultancy".

Soars managing director, Brenda Soars, said: "When we started playing it in the dining hall, there's been extremely good results. They're not bad kids at all, there's just a little bit of high jinks." St Mary's citizenship and advanced skills teacher, Mike Potts, said: "We have noticed a swifter delivery of lunch." Several schools in London are planning similar schemes.

Appendix B

Play Mozart to tackle poor behaviour, teachers urged
Press Association
Friday September 29, 2006

EducationGuardian.co.uk

Teachers should play Mozart in the classroom to help calm unruly children and improve their work, according to a new book published today.

The soothing sounds of symphonies and string concertos and have been deployed as weapons in the fight against crime at train stations and other public spaces in recent years.

Today a new book from academics at the University of Derby suggests that the approach may also work with badly behaved three to seven-year-olds in primary schools.

In particular, playing Mozart during maths lessons has been shown to improve pupils' work, say authors Simon Brownhill, Fiona Shelton, and Clare Gratton.

Their book, *101 Essential Lists for Managing Behaviour in the Early Years*, says: "Music can be a very powerful tool in the fight against poor behaviour."

Tchaikovsky's 1812 Overture could "liven up" dozing pupils, while a quieter piece would calm them down.

The authors also recommended tying particular music to a particular activity, such as the Mission Impossible theme tune to "tidy up time".

The book advises: "Play quiet music when the children are working to manage noise levels.

"Play dance music to relieve restless children on the carpet - 'Get up and move!'

"Play music by Mozart whilst the children are working; it has been proven that his music helps children to learn, particularly during mathematics."

Favourite pop songs could be played as a reward for good behaviour, they suggested.

The book also suggested giving pupils red and yellow cards - as referees in football - to badly behaved children.

And old toilet rolls make very good "behaviour binoculars", as Mr Brownhill explained: "The results are amazing as children sit up and behave as you tell them you are going to use the binoculars to scan the room for good behaviour."

EducationGuardian.co.uk © Guardian Newspapers Limited 2006

Appendix C

Using music to aid learning

Here are some specific ways to use music in your classroom:

- Use **upbeat, positive** music to greet students and set the tone for the lesson
- When studying a particular **country or culture**, use appropriate music to support the lesson (e.g. South African choir when studying apartheid, blues music when studying the black history of the USA, the Beatles when studying an aspect of Liverpool)
- Use **relaxing** music (such as Enya) to help your students get in the alpha brain state ready to learn – this should have a rhythm which is close to sixty beats per minute as possible
- Play relaxing **background music** when your students work (there is room for negotiation here over the type of music your students enjoy)
- Use **dramatic music** during a review at the end of your lesson (sometimes called the ‘concert review’)

Remember that having music in your classroom isn’t simply a matter of turning on the radio as a treat – its use needs to be carefully thought out and music selected that is appropriate to the task.

Music can be used in a variety of ways to aid the learning process. The use of music burst into the educational arena in the 1990s with the so-called ‘Mozart effect’ – a temporary improvement in performance in spatial – temporal reasoning by college students who were played the first ten minutes of a Mozart sonata.

Although other researches have failed fully to replicate the specific effect in more recent studies, there is now general acceptance that music can aid the learning process in several different ways. The benefits are certainly not solely associated with baroque music.

It is also worth bearing in mind that if you ask students, almost all of them will say they prefer to listen to music when working at home. The silent classroom traditionally enjoyed by many teachers and seen as a sign of control is not the environment your students would choose to work in. To some students the silence can even be unsettling.

Source: Brin, Best. (2003) Accelerated Learning Pocketbook

Appendix D

As part of an Action Research project I am exploring the use of music as an aid to teaching and learning in the classroom. To help my research I would be grateful if you could complete this questionnaire and post it in my pigeon hole.

**Many thanks for your help,
Aidan Hamilton (CM Film Studies)**

Name:

(All responses will be treated as confidential.)

1. What subject do you teach?
2. How often have you used music as background accompaniment to classroom activities?
(Circle the most appropriate answer)

Never Once a term Once a half-term Fortnightly Weekly

3. Circle the particular activities involved during which music was played:
 - a. group work*
 - b. Silent reading*
 - c. Written exercises*
 - d. Timed essays*
 - e. Note-taking*
 - f. Other (please specify)*

3. Have you ever noticed a beneficial effect on students' work or behaviour when music was played? (Please circle)

Yes

No

4. On the whole have you experienced a more positive or negative reaction to the use of music from students? (Please circle)

Positive

Negative

5. Which of the following types of music did you use? (Please circle)

Classical

Contemporary

'Music for study' CDs

Other

Any other comments on how the use of music affected the learning environment would be very helpful. This may include tips and/or advice:

Appendix E

Subjects	How often is music used?					What activities?					Beneficial effect noticed?		+/- student reaction		Types of music used?			
	never	Termly	Half termly	Fortnightly	Weekly	Group work	Silent reading	Written exercises	Timed essays	Note taking	YES	NO	Positive	Negative	Classical	Contemporary	'Music for study'	Other
66 subject area responded across the curriculum																		
39 of these used music	27	17	9	7	6	22	1	19	0	4	31	8	39	0	18	29	4	5

Appendix F

26th Sept. 06 A2 Film

- Number of students and groupings: 20 students present (10 pairs)
- Type of work: Neo-Realism pitch - pair exercise
- Detail: 35/40/ minutes preparation work, fleshing out details of a movie pitch based on the synopsis of 'The Bicycle Thief'
- Music chosen to accompany work – *Inside in/inside out* The Kooks
- Volume: low to mid

Student feedback:

Did you find that this music helped concentration?

YES 15 NO 2 Unsure 3

Did you find that this music helped create a good working atmosphere?

YES 20 NO - Unsure

Specific student comments:

- Made work seem less like work
- Made work less of a chore
- Atmosphere was more relaxed
- Helped create an atmosphere like home which makes it easier to work
- Made me more prepared to work
- Nice, easy listening
- Motivational

Teacher observation:

- Students appeared focused on task
- Task was completed to a good degree of finish by all groups
- The atmosphere was relaxed but without compromising work rate
- Students seemed good humoured about task
- Responses to task and music were very positive and students were enthusiastic about music as an aid to learning

Appendix G

As part of an Action Research project I am exploring your responses to various types of classroom stimulus. I would be grateful if you could record your responses to the following questions as truthfully and thoughtfully as possible.

(All responses will be treated as confidential).

1. On a scale of 1 to 10 (1 being the least value), how well were you able to concentrate in class today?
(Circle the appropriate number)

1	2	3	4	5	6	7	8	9	10
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2. On a scale of 1 to 10 (1 being the least productive), how productive did you feel during the task class today?
(Circle the appropriate number)

1	2	3	4	5	6	7	8	9	10
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3. On a scale of 1 to 10 (1 being the least), how much did the music help complete the task in class today?
(Circle the appropriate number)

1	2	3	4	5	6	7	8	9	10
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4. On a scale of 1 to 10 (1 being the least aware), how aware were you of the music in class today?
(Circle the appropriate number)

1	2	3	4	5	6	7	8	9	10
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5. On a scale of 1 to 10 (1 being the lowest), how much did you like the music in class today?
(Circle the appropriate number)

1	2	3	4	5	6	7	8	9	10
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Thanks for your help. Aidan

Appendix H

Session no. & activity	Music used	Concentration	Productivity	Helpfulness	Awareness	Enjoyment
1/Small gp work – presentation preparation	The Kooks – (soft rock)	Yes 15 No 2 Unsure 3		Yes 20 No 0 Unsure 0	Early simple survey model	
2/Small gp work – presentation preparation	Rodrigo - (classical)	Range: 4-10 Mean: 7.39 Mode: 8	Range: 5-10 Mean: 6.94 Mode: 7	Range: 2-10 Mean: 4.94 Mode: 5	Range: 2-10 Mean: 7 Mode: 10	Range: 1-8 Mean: 4 Mode: 5
3/Individual work – project research	Rodrigo (classical)	Range: 7-10 Mean: 7.67 Mode: 7 & 8	Range: 5-10 Mean: 7.23 Mode: 8	Range: 3-9 Mean: 5.44 Mode: 5	Range: 3-10 Mean: 6.33 Mode: 8	Range: 1-6 Mean: 3.11 Mode: 1
4/Small gp work – presentation preparation	Babyshambles – (indie rock)	Range: 6-10 Mean: 8.05 Mode: 8	Range: 3-10 Mean: 6.83 Mode: 8	Range: 3-10 Mean: 7.16 Mode: 9	Range: 2-10 Mean: 8 Mode: 10	Range: 2-10 Mean: 6.27 Mode: 8
5/Small gp work – research for presentation	Jose Gonzales – (ambient)	Range: 6-10 Mean: 8.05 Mode: 8	Range: 6-10 Mean: 7.89 Mode: 8	Range: 3-9 Mean: 6.79 Mode: 7	Range: 4-10 Mean: 7.58 Mode: 10	Range: 1-10 Mean: 6.25 Mode: 9
6/Small gp work – question sheet responses	Neil Young – (soft rock)	Range: 4-10 Mean: 7.9 Mode: 8	Range: 5-10 Mean: 7.4 Mode: 8	Range: 3-9 Mean: 6.6 Mode: range	Range: 3-9 Mean: 6.73 Mode: 7&8	Range: 2-10 Mean: 5.93 Mode: 8
7/Small gp work – research for presentation	Natalie Imbruglia – (soft rock)	Range: 6-10 Mean: 8.22 Mode: 9	Range: 5-10 Mean: 7.74 Mode: 8	Range: 4-9 Mean: 6.93 Mode: 7	Range: 3-10 Mean: 5.89 Mode: 7	Range: 3-10 Mean: 6.68 Mode: 8
8/Small gp work – presentation preparation	Natalie Imbruglia – (soft rock)	Range: 6-10 Mean: 8.04 Mode: 9	Range: 4-10 Mean: 7.5 Mode: 8	Range: 4-10 Mean: 7.46 Mode: 8	Range: 4-10 Mean: 6.47 Mode: 8	Range: 4-10 Mean: 6.92 Mode: 8

Appendix I

As further part of my Action Research project exploring your responses to various types of classroom stimulus, I would be grateful if you could record your responses to the following questions as truthfully and thoughtfully as possible.

Name:

(All responses will be treated as confidential).

On a scale of 1 to 10 (1 being the least value), have you felt that using music during classroom activities has helped you

(Circle the appropriate number)

1	2	3	4	5	6	7	8	9	10
---	---	---	---	---	---	---	---	---	----

Sample 20 students from single targeted class

Results: Range 5-10

Mean 7.45

Mode 8

Please read the following statements and circle those with which you agree

- **Music helps relax me when working** **90%**
- **Music makes a class feel more comfortable** **90%**
- **Music makes tasks seem less like work** **75%**
- **Music distracts me when I am trying to concentrate** **5%**
- **Music needs to be played at a low level or it becomes distracting** **85%**
- **I don't like music playing in group work** **5%**

Thanks for your help.
Aidan

Breaking Through The Cyber-Space Barrier: An Exploratory Study into the Atomised Learning Environments of A2 Music technology

Julien-Pierre McKenzie

Breaking Through The Cyber-Space Barrier: An Exploratory Study into the Atomised Learning Environments of A2 Music technology

INTRODUCTION

The aim of this Action Research study is twofold. I attempt to explore, and address, teaching for learning issues with regard to the technological reliance on computer software and hardware in music technology. In order to facilitate this I have deployed on each volunteer PC the Microsoft Netmeeting collaborative software. The software has been used primarily as a vehicle for discussion. I also seek to critically evaluate the current composition mark scheme in GCE A2 music technology in a bid to understand both its overt and covert values. There is a wealth of information available with regard to the use of ICLT in the classroom, but very little that examines the impact and challenges of ICLT in the delivery of music technology.

Substantial amounts of research have been completed into the integration of ICLT in the education sector. Becta, a UK agency, supports education departments in their strategic ICLT developments. These strategies ultimately have a far reaching impact on the Sixth Form College Farnborough and the teaching and learning that takes place within the institution. Becta (2005) states that:

'Research demonstrates that ICLT contributes not only in making studying more enjoyable but also enhances learners' perceptions of achievement. Studies also report that learners take more responsibility for their learning, making more sustained efforts with difficult tasks, when using ICLT'.

It could be argued that the mark scheme and specification contain a *'Technologically Deterministic'* (Williams, 1974) bias, unlike the symptomatic technological approach alternative music technology courses and mark schemes contain.

Technology in the learning environment can be used and manipulated and act as a form of social control. Students that rely heavily on computer based technology risk becoming 'Atomised' in terms of social culture, and become much more 'Individualised', where perhaps previously they may have taken part in discussion and the exchange of creative ideas. The learning environment is encouraged by national, and institutional, ICLT policy to move ever forward into cyberspace leaving behind all but the early adopters of technology. Teachers may begin to lose autonomy of the traditional learning environment.

In the *Dynamics of Modern Communication* (1995) Patrice Flichy argues that as technologies develop they further fragment the groups consuming them, creating a more individualistic mode of consumption.

This form of 'fragmentation' and 'individualisation' may work to further prevent collective responses to content, which in turn works to assist those in power whose interests are served by people not acting collectively.

Critical opinion has appeared concerning the use of computers in education. Learning environments are set to be proliferated by convergent technologies.

Journalist Todd Oppenheimer created a great deal of controversy with his 1997 *Atlantic Monthly* article "The Computer Delusion,". The author argues that there is no good evidence that most uses of computers significantly improve teaching and learning.

In the *Atlantic Monthly* article Oppenheimer (1997) makes the following statement with regard to the use of computers in education:

'In fact, when youngsters are put into groups for the "collaborative" learning that computer defenders celebrate, realistically only one child sits at the keyboard at a time. (During my school visits children tended to get quite possessive about the mouse and the keyboard, resulting in frustration and noisy disputes more often than collaboration.) In combination these constraints lead to yet another of the childhood developmentalists' concerns—that computers encourage social isolation'.

By combining both the two areas of research I hope to be able to gain a deeper insight into many of the issues faced designing and delivering a subject that, at present, requires excessive investments in ICLT, whilst hopefully offering alternate solutions to generic problems.

There is a danger here that the research could be too subject specific and therefore non-transferable across subject areas. I therefore aim to extract relevant transferable issues, points for further consideration, and most importantly the views and experiences shared between student and teacher.

At the time of writing the Action Research Project Edexcel (the sole examining body for GCE music technology in the U.K) has proposed a new specification in music technology for first delivery in 2008.

THEORETICAL BACKGROUND

Some years ago I had been in a training session that generated a discussion on Repair Theory; a theory that seeks to explain and rationalise how individuals learn procedural skills. I decided to explore and implement a strategy based on the notion of Repair Theory.

The main thrust of the theory concentrates on how and why learners make mistakes. These mistakes are termed "mind bugs". The theory suggests that when a procedure cannot be performed, a block or impasse occurs and the learner applies various strategies to overcome this. These strategies are called repairs. Although Repair theory had been developed from extensive study of children solving arithmetic problems, it can be applied to the study of music technology. These procedural errors are systematic errors and should not to be confused with "slips" (Norman, 1981) or random mistakes. These mistakes can occur regularly in a particular learner's work.

During the study of music technology, more specifically the study of sequencing using computer software, students carry out many procedures. These procedures can be linear or branching. An example here would be a procedure that requires the initial set-up of the application to perform certain audio tasks. The learner can be expected to run through a minimum of four complex procedures before the actual assessed task begins. Each of these procedures is reliant upon one another in order that the bespoke computer application environment is created. However, it is possible to operate the computer application whilst not following the correct procedures – the lack of formal procedure introduces a great deal of errors in configuration. The issue here is that the application temporarily masks the errors which therefore allow the learner to introduce "mind bugs" into a variety of procedures. It is during these branching procedures that an impasse often occurs. It is possible to reach a given destination in the procedure that seems correct to the learner but is in fact a culmination of "mind bugs" that inevitably lead to an impasse.

It can be seen that learners attempt different repairs and these repairs often manifest themselves as different bugs. These bugs often migrate from one procedure to another dependent on the success of initial and fundamental procedure – "So bug migration comes from varying the choice of repairs to a stable, underlying impasse." (VanLehn, 1990). It could be argued that impasses are actually beneficial to student learning. Impasse-driven learning (Newell 1990; VanLehn, Jones, & Chi 1992) suggests that student learning may be enhanced when responding to an impasse. I thought it useful to attempt to deploy the theory in the classroom.

The results seemed impressive in terms of isolating learners with repeating "mind bugs" and incorrectly repaired procedures. However, other teaching and learning issues became apparent as did the need for a strategy to deal with these issues.

Previously many of the students relied heavily upon either the subject teacher or classroom technician to set up their computer application environment successfully. This is fundamentally down to the nature of the software and the variety of configurations. The number of complex procedures involved meant that those learners who were susceptible to procedural mind bugs and bug migration, required the most assistance. The temptation here is to "patch" the problem by the teacher or technician completing the procedure in the correct manner. This however may lead to a scenario whereby the learner never has the opportunity to address the faulty repair mechanism, or at least attempt to do so. This can be seen as counter-productive in terms of teaching and learning.

Issues of time management also began to manifest. The more I corrected the procedure for the learner the more time inevitably I would waste in the future as the corrective task would have to be repeated on numerous occasions. By isolating the faulty repair, and therefore creating a stable underlying platform, learners are able to continue to work through both linear and branching procedures. This would allow more time for teaching and reduce technological issues created by learners who were blocked in proceeding to the actual set task. It became apparent that Repair Theory had its place when dealing with meta-actions in a procedural environment.

METHODS

In order that I substantiate issues arising from the technological bias in the mark scheme, and the impact on teaching for learning, I have asked for two student volunteers to provide feedback on their experiences throughout the year. This feedback has taken the form of short interviews with participating students. The feedback seeks to identify and inform on effective teaching for learning, and barriers to learning in music technology. To further highlight these issues I have asked the students to explore the use of a collaborative tool (Microsoft Netmeeting) during their lessons. Collaborative tools are

often suggested to offer solutions in terms of teaching for learning in cyberspace. It is expected through the application of the software that useful feedback will emerge.

Students have undertake routine tasks needed to continue with their coursework assignment with the addition of Microsoft Netmeeting. Netmeeting has been used as an alternative mode of communication for the students. The resources available are PC, soundcard, headphones, keyboard, MS Netmeeting collaborative tool, and computer keyboard /mouse.

After reflecting on an individual lesson, a lesson which has a focus on the impact of teaching and learning in cyberspace, the students emailed me their comments with the addition of an informal discussion.

Written documentation and existing research will be used to assist my Action Research exploration.

FINDINGS

Teaching for Learning issues–

Student responses to the study

Wearing headphones and working at a PC presents a variety of challenges for both student and teacher. Music technology students spend most of their time in this environment. One of the major challenges I have found as a teacher of music technology is the development of teaching and learning methods / styles. The subject clearly does not lend itself well to a number of traditional models of teaching and learning styles. The main headings are the students, drawn from their feedback; the discussion that follows each heading is the author's work.

'Although headphones minimise the overall loudness in the room of 15 students, the downfall in this is the sense of student isolation from peers and, more importantly, from the teacher. A 1½ hour lesson can easily turn into 1½ hours of total isolation by wearing a pair of headphones'

'The teacher must physically leave his desk to help the student and this dependence can be seen by all students. In such cases the student can lose enthusiasm for the work due to feeling isolated, not understanding, not being comfortable when asking for help and this can result in poor progress'

As an extension to the action research I decided to introduce Microsoft Netmeeting, a collaborative tool designed for online communication. By using this tool I hoped to converse with students in cyberspace and generate discussion with regard to online communications and computer based learning.

'The online messenger method of communication between teacher and student is very appealing. In the present climate, technology is increasingly becoming a dependence for the typical student'

'This method allows the student to ask for help in confidence in a very subtle way'

One of the constraints of using an online communication tool is the ability to explain in a clear and concise fashion, confirming any errors of interpretation and understanding. Often in these scenarios the language can be reduced to one or possibly two fragmented, often incomplete, sentences and therefore easily misunderstood.

'To give brief messages to students could work, but I can't see it working when trying to explain something'

What became evident in the early stages of the research was that the students preferred to work in cyberspace with some form of online communication but were critical of the issues surrounding the process of teaching for learning. The students became aware of the social limitations offered by working in an atomised environment.

'Communication is vital especially in arts subjects to allow creative minds to share ideas and progress to produce high quality diverse projects'

A large number of students found the configuration / setting-up and management of software a large hurdle to overcome. These tasks in essence required the student to possess procedural skills. I decided to further investigate why students found this problematic and how best to combat this problem in the classroom.

Evaluation of the current composition 6717 / 01 mark scheme

I think it important here to briefly contextualise the current mark scheme before detailing the findings.

The mark scheme is broken down into the three following sections:

- Composition techniques
- Use of Technology
- Score

Within these sections there are sixteen criterion referenced assessment categories. The marks are aggregated so one strong element may compensate for one weak element. Overall the student may pass the module even though they may be carrying a failed element.

The assessment of compositional, and scoring, techniques follow a traditional path; a path associated with pure music composition that does not seek to test the understanding of music technology. Melody, harmony, rhythm, texture, timbre form / structure, style, and coherence are all assessed to produce a criterion referenced aggregate mark.

However, issues begin to arise when assessing the “*Use of Technology*” criterion referenced categories. This section is further sub-divided into three categories:

1. Manipulation of Sounds
2. Creative Use of Technology in the Composition Process,
3. Quality of the Recorded Submission

(Edexcel *et al*, 2005)

The mark scheme level descriptors for ‘Manipulation of Sounds’ are clearly founded on a technological based hierarchical structure; that is if candidates have access to a plethora of technology then they have a clear and distinct advantage over candidates with access to modest technology.

The criterion referenced assessment categories range from “Little effective use of sound manipulation” to “First Class use of technology to produce an imaginative range of sounds and timbres through either recording and / or synthesis and other processes (FX, dynamic processing etc.)”.

Level descriptors for “Creative use of Technology in the compositional process” range from “little effective use of music technology skills resulting in an incoherent and unconvincing composition” to “Highly proficient use of a wide range of music technology skills to develop an imaginative and coherent composition”.

DISCUSSION

Many issues arise during the application and interpretation of the mark scheme. The Mark scheme for the Edexcel A2 Music technology 6717/01 (composition) is an assessment procedure designed within the framework of a national educational policy. The quality of the Mark scheme assessment criteria is central to the quality of teaching, learning, and the dissemination of knowledge. As Ramsden (1992) points out:

‘The process of assessment influences the quality of student learning in two crucial ways: it affects their approach and, if it fails to test understanding, it simultaneously permits them to pass courses while retaining the conceptions of subject matter that the teacher wishes to change’.

In order that a candidate score highly in this section there has to be a substantial amount of resources available to the institution, department, and teacher. An institution that offers this course therefore has to obtain the necessary funding to supply resources in order to deliver the course, that is if it wants to make available the higher grades to its candidates. Investment in music technology(ies) (mixing desks, recording equipment, sound-proofed facilities, etc...) has historically been expensive and, in terms of offering variety in courses, an unattractive option for all those but the more successful institutions. I believe the Mark scheme at this point penalises institutions that offer little in the way of technologically advanced.

Components within the mark scheme fail to test understanding but succeed at forging institutional level technological differentiation. The effectiveness of traditional teaching and learning methodologies can often be marginalised by the reliance on computer / hardware software. This is apparent in music technology where the course seeks to focus on, and develop, the individuals’ I.T. skills

One solution deployed to combat this problem is to drive music technology(ies) into the “virtual” environment; a learning environment where computers replace traditional music technology hardware. A computer with sufficient technical specifications can in theory deliver music technology functionality, previously only available in professional recording studios.

Software synthesisers replace traditional analogue synthesisers. Synchronisation of digital audio and midi data becomes transparent to the end user – an important theoretical concept in the study of music technology. Quality and production of sound becomes less of an issue in terms of capital investment for the institutions (replaced now by a choice of preferred computer hardware and software application).

If ICLT resources are available it is possible to create a perceived learning environment which consists of many “virtual” professional recording studios.

This solution, at first, seems an extremely attractive option. Institutions can justify capital outlay on ICLT resources which includes both the hardware and software needed to complete the Edexcel A2 Music technology 6717/01 (composition) course. An investment in the “virtual” environment reduces capital expenditure on infrastructure and facilitates an increase in student numbers. Becta (2005) makes the following observation:

‘Personal learning spaces place the learner at the heart of the education system, removing all the constraints of the classroom, and enabling anywhere, anytime learning combined with seamless continuity throughout their education.’

Setzer (1997) makes an interesting, and somewhat poetic, observation:

‘We have to radically change the educational process, but this change is not a technological one, it is a humane one. It is sad to see so much hope put on computers as saviors of the educational system, when it represents the continuity of its main problems’.

Czerniewicz (2003) takes a more positive and didactic approach in terms of her view toward technology in education warning ‘*teachers still need to take responsibility as designers of learning. They require techniques, methods, and need to make informed choices regarding instructional strategies’.* She also makes the following observation:

‘Computers in education are generally described in two common ways. The first is the use of computers as value-free, neutral tools (an instrumentalist approach, i.e. just the same as using a pen). The second is a techno-determinist understanding which suggests that the nature and use of computers causes pedagogical and other changes’.

Ward (1999) suggests ICLT can be used to “*Encourage social interaction, discussion and collaborative working of both students and staff”.*

Here the “Trojan horse” of the Mark scheme and specification manifests itself, as opposed to the overt values of ICLT in education, Government policy, and teaching for learning. The mark scheme covertly seeks to focus on, and reward, those centres that encourage “early adopters” of technological developments.

One of the fundamental barriers to learning often encountered in music technology is the basic configuration of PC’s and software for musical manipulation. The use of communication software required to overcome this barrier unfortunately is outside the realm of our current technology.

The reliance on computer hardware to deliver lessons in music technology has a negative impact on learning styles. If students are encouraged to use computers and headphones and work in an “Atomised” environment then a number of innovative learners (McCarthy, 1980) would struggle to discuss their opinions and beliefs, dynamic learners lacking a variety of challenging activities. Therefore the risk of social exclusion is high in an institution that clearly encourages inclusive learning.

CONCLUSION

In terms of teaching for learning Repair Theory has highlighted a number of areas for development. Future lesson design and instruction should be supported by identifying at an early stage those learners that regularly follow incorrect procedures resulting in an impasse. Once identified an analysis of the learners meta-actions may reveal where a “buggy” repair has been made. This data can be used to empower the learner in completing the task.

Very clear and precise procedural flow charts should be available. These flow charts should clearly identify both combinations of procedures (physical and mental). This would enable the learner to review any repairs made and possibly correct any errors introduced in the procedure.

Assumptions can easily be made in terms of knowledge. It is easy to assume that learners are capable of opening and configuring an application when instructed. As this is not part of the assessment it all too often becomes marginalised as a tedious task. It could be argued that a needs analysis be performed (Kaufman, 1979). What we need to know as practitioners is the current ability of the learner and what assumptions, if any, we may have inadvertently made on their behalf. Rodger Kaufman (1982) has described this as identifying the gap in knowledge between what should be and what is.

A mark scheme that reflects a technological deterministic bias can only operate in the confines of either an institution with vast amounts of funding, or an institution that relies heavily upon its ICLT investment. The increase in technological reliance on curriculum delivery leads to the increase in virtual learning environments and with this comes a new challenge for teaching and learning.

The deployment of the hardware and software necessary to improve student achievement in Edexcel A2 Music technology will have a negative impact on the teaching and learning styles available to students and be counter-productive to inclusive learning.

Candidates from institutions with increased levels of ICLT will directly benefit from the Edexcel A2 Music technology 6717/01 (composition) Mark scheme assessment procedure. It could be argued therefore that the mark scheme seeks to exclude those colleges in the Sixth Form Sector that have limited resources in terms of ICLT or professional recording equipment.

A recommendation would be to introduce more theoretical concepts of music technology that could be studied, and delivered, using a variety of teaching and learning methodologies. These concepts would not seek to rely upon the current ICLT investment within the institution to improve student achievement, but that of excellent teaching.

Students are covertly encouraged to pass subjects with very little resistance to their conceptions of the subject matter. The mark scheme should be amended to test “understanding” rather than highlight issues in the allocation of funding for success, teaching for learning, and social inclusion.

Derek Rowntree, (1987) stated that “if we wish to discover the truth about an educational system, we must first look to its assessment procedures”. At present there is no provision for the theoretical concepts of music technology in the Edexcel A2 Music technology 6717/01 (Composition) specification and therefore the assessment of student understanding is not reflected in the mark scheme. If future specifications and mark schemes continue to award, and encourage, institutions to provide the latest technology with little concern for subject delivery then the demands on teaching for learning in cyberspace will continue to grow. With this growth come many issues associated with distance learning, computer based training, and most importantly the student experience of learning itself.

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What- no grades?!

Are A2 Psychology students able to improve their essay writing skills purely on the basis of feedback through marking (oral and written)?

Rebecca Rhodes

INTRODUCTION

Context (setting the scene in relation to the Psychology Department, FSFC and nationally)

The aim of my research project is to investigate the effectiveness of formative assessment, with emphasis placed on feedback. In Psychology I feel we have taken on board the colleges' initiatives for Assessment for Learning with vigour, but only at the AS level. All AS assessments follow the following marking criteria: 1/3 of assessments are returned with no grades (formative assessing); 1/3 are peer/ self marked (formative assessing); and 1/3 are marked and graded by the teacher (summative assessing). All assessments are provided with detailed feedback and students are set targets to be taken in to consideration for the following assessment.

I considered if my feedback for both my AS and A2 classes was effective and how this could be measured. Reflecting further I wondered how students and teachers treated assessments and whether they saw them as a learning process or simply as the summation to a particular unit of work. If assessments are a learning process then I know I wasn't fulfilling this, as more often than not I was returning assessments, going through them with my students and then filing them away. I was doing this with my A2 classes as well.

Successful feedback is best treated as a learning process that is also fluid between assessments, Firstly, the teacher should try to provide constructive and clear guidance on not only what needs to improve but how this must be done. Secondly, the student should have the opportunity to respond to these comments by engaging with, and applying them to that very same assessment in order to aid and improve their learning and understanding of that advice.

On a national level, the concept of Formative Assessment was largely instigated by the research taking place at Kings College in London, with the publication of the now (in)famous *Inside the Black Box* by Black and Williams (1998). Extensive research and implementation of Assessment for Learning is happening not only nationally (in all educational fields from primary to FE/HE) but also internationally where studies have been carried out in Canada, Japan and New Zealand.

Purpose/ Aims (key questions to address)

With this project I wanted to move the focus away from AS students and apply A4L to my A2 classes instead. With them I wanted to investigate the following assumptions:

- 1) A2 students will improve their essay writing skills if they are provided with detailed and specific feedback (orally [one-to-one] and written)
- 2) A2 students will improve their essay writing skills if targets are set and they have allotted time to improve upon their work
- 3) A2 students who are not given grades will begin to focus on assessments as a learning process and regard them as less threatening

At this stage it is worth pointing out that when I refer to grades, I also mean percentages and marks.

Theoretical Background

There has been ample research into the impact of formative and summative assessing and the role both play in our students' learning.

From my research I have discovered that how we assess and the information we provide our students (feedback and/or grades) can impact both the learner's self esteem and their progress.

Self esteem and learning is a very powerful combination. Black et al (2002) make reference to the fact that if feedback is given as a grade it will enhance the students' ego rather than make them reflective upon the actual work itself. Grades lead students to compare themselves with others, focussing on their image and status rather than reflecting upon the work they have just had returned and considering how they could improve it. It focuses on the student's ability rather than effort which can damage the self esteem of low achievers. If students are given feedback only, it forces the student to look at what they can do to improve, which enhances learning. This directly fosters an environment where all learners can succeed, as they are able to build upon previous work (assessments) through the feedback provided, therefore knowing what steps need to be taken in order to improve. Another previous study offering similar support was by Kluger and DeNisi (1996) who commented in their review on feedback that often when students were told they had done well or badly, it had an effect on their egos but it did not increase their involvement with the task. Most recently, Stobart (2006) summarizes key features of feedback and the negative effect it has on students. Such factors included that learning is likely to stop when a summative grade is awarded. Another factor was that grades affect the learner's ego (by reconciling the mark with a view of themselves as learners) and can lead to a focus on success in comparison with fellow class mates rather than on the learning process. This especially has an effect on students who get low grades.

Progress is another facet of learning. High achievers can become focussed on maintaining their position of success so that they lose focus of the learning process and how they can improve. How often have you heard a student say, 'I'm

happy with this grade' or 'I got what I wanted.' Butler (1988) found that learning gains were greatest for Year 7 pupils who were given only comments compared to her other two groups (they were either given marks only or marks with comments). These two groups showed no gains. Butler found that students ignore comments when marks are also provided. A more recent study by Harlen (2006) concluded that feedback is most effective when students are involved in the process of setting targets. This encourages an active participation in their own learning rather than being passive and following the advice of the teacher.

METHODS USED

The target population

I taught two A2 classes, so was able to keep one as my Action Research (AR) group, and the other as my control. My AR group was chosen randomly.

	Class size	Gender break down	GCSE average
Action Research group	17 (18 for first ½ of year)	Females: 13 (14) Males: 4	Females: 6.18 Males: 5.91 Overall: 6.12
Control group	16	Females: 8 Males: 8	Females: 6.44 Males: 5.49 Overall: 5.97

Data collection

- I provided my students with several Questionnaires throughout the course of the year. These included the following:
 - What do students know about Assessment for Learning (appendix 2).
 - Insight in to students' submitted work (appendix 3)
 - How did students find the written and one-to-one oral feedback and target setting (appendix 4)
 - Opinion on the re-working of essays and target achievement (appendix 5)
 - Reflection upon formative assessment at the end of both modules, Environment in January and Crime in May (appendix 6)
- Course reviews were carried out in January specifically asking my AR class to reflect upon the project
- Essay results
 - Marks for both Section A and Section B essays throughout the entire year
 - Section A essays are the equivalent of a single sided A4 typed essay divided up in to two parts. The first part requires a detailed description of a specific study. The second part requires students to think about the problems psychologists face.
 - Section B essays are the equivalent of three sides of typed A4, divided up in to three parts. The first part is a description of four or five studies. The second part is structured analysis of these studies, comparing and contrasting. Finally, the third part requires the students to engage with a 'real life' scenario whereby they need to apply their psychological knowledge.
- Diary reflections
- Comments made by students from both classes during lessons

Classroom resources

I revised the feedback sheet that we provide students for Section B essays (appendix 8) , and wrote a feedback sheet for Section A essays (appendix 7), both based directly on the OCR Psychology Mark Scheme

Ethical considerations

When I presented my project idea there was initial reservation about potential negative feedback from students and parents alike with regard to no grades being provided throughout the entire academic year. Two actions were taken regarding this. Firstly, a detailed explanation of what Assessment for Learning is, and how my project was going to impact my action research class was given to each student. At review evenings I was willing to provide grades if requested as all assessments had been graded and recorded. However no grades were ever demanded. I am also pleased to say that no issues were ever raised, to my knowledge.

However, there is no denying that of the class of 17, there were two vocal students who found the concept of getting no grades very frustrating, and these were voiced intermittently throughout the year. As these students were very mature, they were able to appreciate what the project was trying to investigate and were extremely accommodating, accepting that several students in the class may in fact benefit from receiving no grades.

Teaching strategies implemented and practicalities of these implementations

The A2 course is more structured than AS, therefore allowing times when I was able to leave the classroom to feed back to the students on a one-to-one basis whilst the rest of the class worked.

- I made the commitment to return essays within a three lesson turnaround (usually a week rather than the departmentally allocated two weeks).
- When setting and returning the marked essays, I allocated more time to feeding back and providing generic comments and advice that applied to the entire class.
- I also gave class time for students to read my comments and to generate any questions they may have regarding what I had written in preparation for the one-to-one chats.
- At varying stages of feedback, questionnaires were filled in by the students.
- There was never really enough time to sit down with all students during the one-to-one feedback sessions as it took longer than I expected. I literally worked my way from the bottom up. In my opinion, the students who were getting U to C grades needed more feedback than those who were getting B and A grades. If there was time, I saw everyone, but as the year progressed I found myself focussing on those who needed it most.

FINDINGS

Throughout the year I found myself reflecting upon the practicalities of my project. It was undeniably time consuming providing the feedback during the one-to-one sessions. The students became frustrated with the endless paperwork of reflecting upon their work and setting targets and I found the tracking of this all at times quite lengthy.

Diary Extracts

Throughout the course of the year I kept an electronic diary of my thoughts. A few extracts are included below.

Both Sarah C and Laura C were really concerned about not receiving a grade as both thought it was essential for their progress. Some students spoke up and said that they prefer it when they don't get grades as it de-motivates them and makes them feel worse for it especially when they had put in the effort.

I'd booked a computer room for the students to re-work their essays. In the previous lesson I told the class to come prepared with their electronic and paper versions of their work. Naturally, certain students didn't- either forgetting or providing a range of excuses. This made me extremely frustrated- what are they supposed to do? It seems like such a waste of what I perceive to be beneficial and valuable time!

Marking the essays doesn't take any longer between the two classes. And when I get my AR class re-submits, having already discussed targets with the students, I am only looking for certain changes so the time of doing this isn't extreme. Upon reflection it would have been much easier and faster if all was done electronically with changes and comments in a different colour and then they are simply emailed from student to teacher and back again. It is almost fruitless when students resubmit changes without giving me the original which prevents me from being able to assess the improvements.

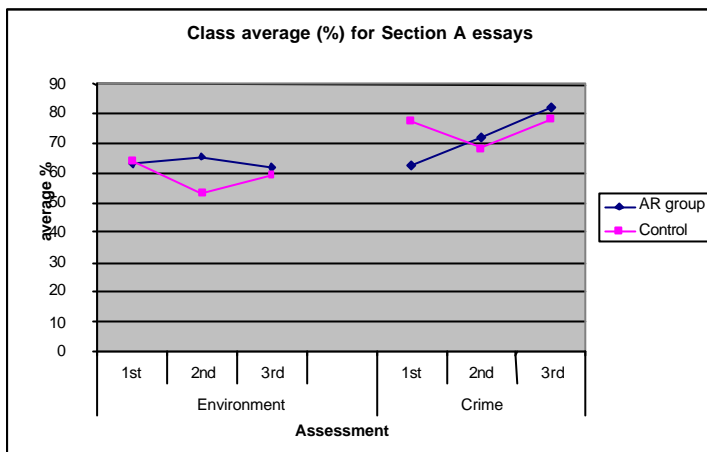
Some don't put a lot of effort in to their work, and are not referring back to previous comments and feedback making the same mistakes. They know they don't count, 'so why try?' is the attitude of a few.

Doing this project has challenged me at times. I know the effect and impact grades can have on students. There have been times when I thought providing a grade might in fact provide some students with increased motivation and others with a pat on the back, but I know from the research that I need to persevere. If I don't, what message am I sending to the students and more importantly to those who have appreciated receiving no grades.

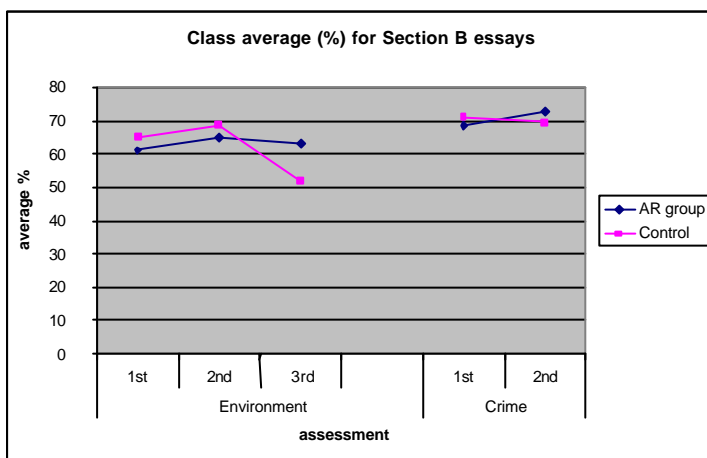
It's getting harder to get all essays in from students. This makes it equally difficult getting students to re-submit if I haven't had anything to mark in the first place- so I am not doing a re-submit for this essay. It has been a battle getting students to re-submit their work (both if they do it in class, or if they take it away to do). This part of the research strategy makes it long and drawn out and less effective.

My perception

With the range of feedback provided to my AR class, I felt that there remained a steady improvement from initial to final assessments for the Environmental module when compared to the control class (which fluctuated more between assessments). I felt that the students were taking heed of their own individual progress and were becoming increasingly aware of what they needed to do to improve and of the learning process. When I returned graded assessments to my control class, often I would hear comments from students who would compare their results, spending little time reading my comments. The focus was most definitely a discussion comparing grades, and trying to out do one another. For the Crime module, my AR class improved from one essay to the next whereas once again my control group displayed fluctuations between essays.



Both graphs show the average percentage for each assessment (by essay type) per class.



From this it can be seen that my AR class showed steady improvement across all assessments.

Overall it is fair to say that both classes began and ended with similar grade averages, but it was the essays in between that showed the largest variation.

I wasn't always convinced that when the students had the opportunity to re-submit work that all students from my AR group took full advantage of it. Certain students did, and their individual grades did improve throughout the year. Those who didn't, fluctuated. I felt I had a hand in guiding my students' progress as I was more engaged with their thoughts, efforts and reflections. On a positive note, individually, there were more students improving from one essay to the next when compared to the control group for both Section A and B essays.

Towards the end of each module, during revision time, I created small slips of paper for my AR group which had the students name, and whether they were at, above or below their minimum grades for both Section A and Section B essays. I offered this to students to collect at the end of the lesson. On both occasions only three students collected them, two of whom were high performing students and were the same two who from the outset were not enthusiastic about receiving no grades.

The Students' perceptions

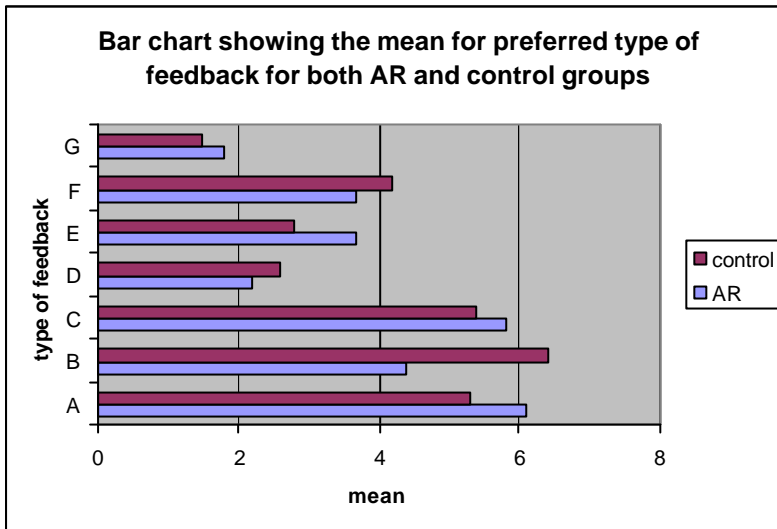
At the beginning of the year I gave both classes a questionnaire (appendix 2) in order to ascertain their awareness of Assessment for Learning and Formative Assessment. Results showed that less than a third were fully aware of what these were. I believe this lack of awareness did create a barrier to the implementation of the key concepts for my project to my AR class and it meant I had to be that little bit more convincing in my 'selling' of the concept.

When I asked the students 'What should a teacher provide you with to enable you to achieve success in their subject (not only to Psychology) there were a range of comments. Below are the comments that students wrote with specific reference to feedback:

- One-to-one chats
- Avoid just giving ticks, but give comments as well
- A grade is needed as comments are not enough (if I get a C it will make me work harder)
- Feedback doesn't have to involve grades, but instead a detailed comment on how to improve

- Lots of thorough feedback
- Make sure that feedback also emphasizes work that has been done well

I also asked the students' *What type of feedback do you prefer?* I provided a range of combinations that included grades, written feedback, oral (one-to-one) feedback. Below is a graph that shows the overall mean preferences by class (the lower the mean is the most preferred).



KEY

- A: grade only
- B: written feedback only
- C: oral feedback only (one-to-one)
- D: grade and written feedback
- E: grade and oral feedback
- F: written and oral feedback**
(used in this project)
- G: grade, written and oral feedback

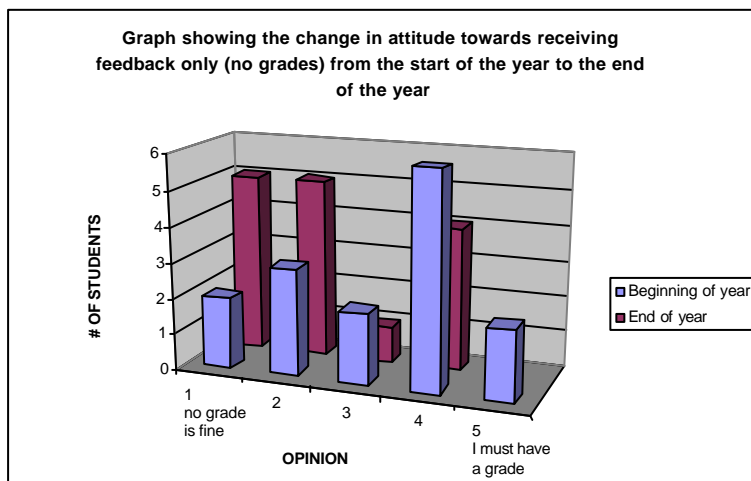
The most popular choice from both A2 classes was receiving all three (option G). The least preferred for my AR class was option A (grade only) and the least preferred option for my control class was B (written feedback only). The combination that I was implementing with my AR class (option F) was ranked 3rd equal out of the seven choices for most preferred.

I also asked both classes 'What do you think is the purpose of grades and feedback?' This is what they had to say:

Purpose of a grade	Purpose of feedback
<ul style="list-style-type: none"> • Shows you where you are at • Motivates you • Enables you to push yourself and something to work towards • A high grade is motivating • Can act as a guilt trip • Can inspire to achieve 	<ul style="list-style-type: none"> • To encourage • Good for revising • Helps understand • Allows targets for specific problem areas

At the end of both modules I gave my AR students another questionnaire (appendix 6) to gather their thoughts on the feedback they had received. I found that their attitudes had changed from the beginning of the year.

One of the questions measured the shift in attitude towards not receiving grades (see graph below). At the beginning of the year over half the class felt that it was important that they received grades on their work (8/17) and by the end of the year this had halved. As for the students who were content with receiving no grades, this doubled from five initially to 10 by the end of the year.



Further qualitative findings from this questionnaire included:

- Overwhelmingly strong support for the quality of written feedback which the students found helpful, enabling them to know exactly what they needed to do to improve
- Overwhelming support for the re-submission of work as the students found this beneficial even though it meant extra work. However a vast majority felt that they never made the most of the opportunity and time given to them to improve upon their work.
- Compared to their other subjects, they were getting the most support and feedback from Psychology and that this has given them increased confidence
- Students felt that they were now focusing on the comments which they didn't really do before.
- Mixed reaction to the power of grades. Some still felt that grades meant praise and that grades allow you to gauge where you are at. Other students commented on the fact that they feel demoralized in their other subjects when they get a grade, whereas in this class they don't and that it helps them learn better.
- Mixed reaction to the quality of verbal feedback. The students who had done well found the verbal feedback least beneficial however those who were struggling found the time invaluable as they were able to clarify what I had written and ask questions
- When asked to reflect upon not receiving a grade for work, some wrote that in the beginning they felt it was a disadvantage but now they don't as they appreciate the detailed comments they were getting instead. There were four who didn't necessarily need a grade, but either wanted it or found that it helped in knowing where they were working at
- Overall, the students were extremely positive about the action research project and their experiences

DISCUSSION

What worked well?

I felt that even though my AR class did not out perform my control class (contrary to my background research) I had in fact achieved and learnt the following:

- Students are more aware of assessment for learning, specifically formative assessment
- Students were receptive to feedback only.
- Students spent quality time reading feedback and improving upon their work.
- I became more efficient in my marking.
- I learnt how to word my feedback so that it was not only highlighting the positives but also providing specific guidance as to what needed to be improved.
- I was able to sit down with students more often in a one-to-one situation even though with large class sizes this can be very difficult and time consuming.
- Work needs to be returned quickly or else it becomes a distant memory for the students thus meaningless when it is returned and feedback is almost worthless.
- Setting a maximum of three targets meant that students were more focussed on what they had to rectify, rather than re-writing the entire essay again.

Barriers

At times it did feel like it was an up-hill battle with certain students as they wanted grades or at least made it known that they were finding it difficult to ascertain where they were at. As mentioned in my diary extract above, I was struggling with my own dilemmas regarding this as I felt that at times I was losing the motivation, support and respect of these highly intelligent and capable students by not giving them what they wanted. I don't believe it was detrimental to their progress and success on the course, but I think it did impact upon the ethos and atmosphere of the class to a certain extent. I underestimated how disorientating and frustrating receiving no grades could be for some students but at the same time was always surprised when the most conscientious of students would admit to feeling demoralized upon receiving grades in other subjects.

Perrenoud (1991) reported that formative assessment requires a shift in students' attitudes toward work. Many students do not have a desire to learn as much as possible, but rather to do the minimum to get by. I believe this could be said of many A2 students, with my AR students being of no exception. Through this project, my attempts at implementing certain ideals required a significant shift in their attitude and overall commitment. They needed to take a more serious attitude towards their learning and college work. Evidence supporting the fact that they were not willing to alter their work ethic is reflected in many of their comments where they admit that they didn't put a lot of effort in to the resubmissions of work, or even their initial assessments.

Collecting back the re-submissions from students was challenging. If work was done in class the students felt rushed. If it was set as homework it was perceived as less of a priority as it had already been done once. The students have had little prior experience of re-submitting work so they found this expectation very new to them, seeing it as more work. The students knew the benefits of doing it but moving from an attitude to an actual behavioural shift was difficult.

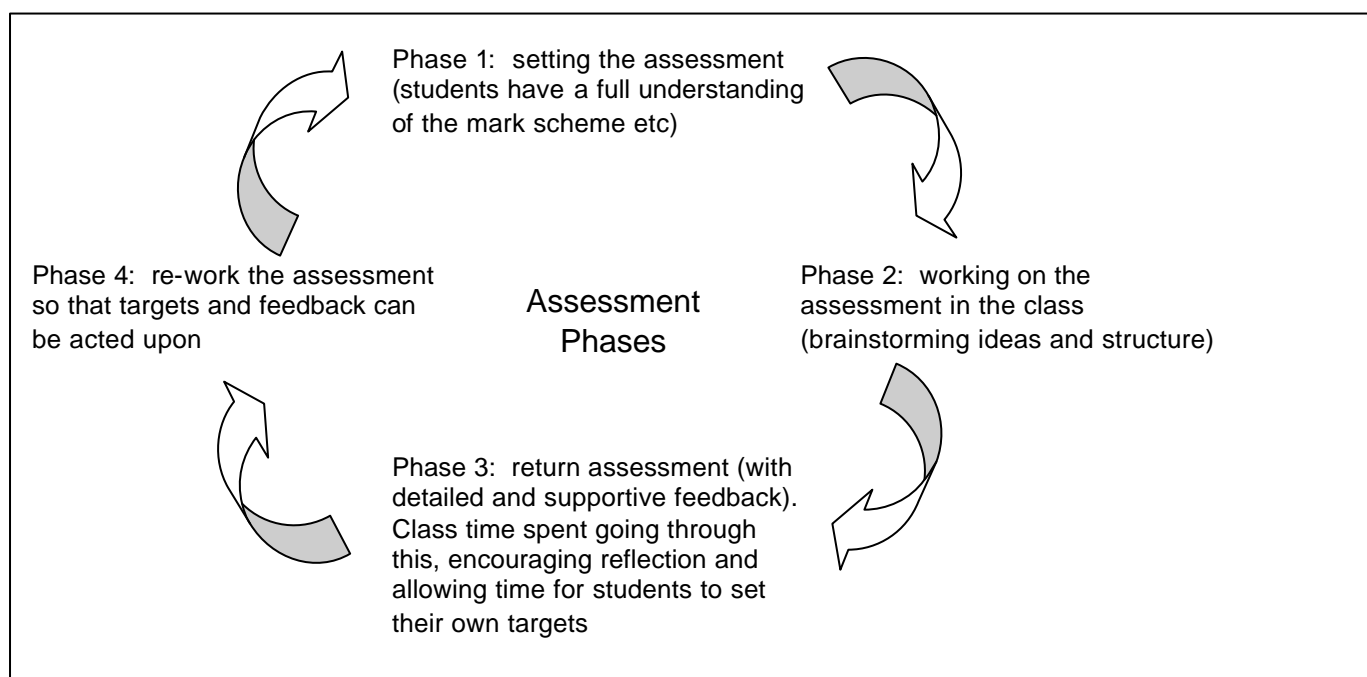
In March I attended an INSET in London entitled *Embedding Assessment for Learning* by Ruth Sutton. Ruth commented on my project voicing her opinion that not only was it a great and courageous idea but also that I shouldn't expect it to

succeed as there were several barriers in my way. Having completed my project I imagine some of the main barriers she was making reference to included student commitment and attitude to 'extra' work, as well as the fact that my sample consisted of A2 students who have had limited exposure and experience of formative assessment.

CONCLUSION

Significance of the work for my own professional practise

- In an overly assessed environment, it felt that the key objective for my action research was on the learning process rather than on assessment for the sake of assessing.
- Assessments must be marked and returned promptly. The longer it takes to return, the less significance the feedback has for the students.
- Students need to have hands on experience of what formative assessment is, ideally before they reach A2, if it is to be effective
- Time needs to be allocated during the course of a year to work on assessments. The student plays a significant role in their learning by being part of each phases (see diagram below)



College-wide implications

- Assessment for Learning and formative assessment can only be effective if it is supported and implemented across the college. If it is being done in 'pockets' then it will be very difficult to measure its overall impact and benefits on the students' learning
- If grades can have an effect on ego building, then it is vital that FSFC emphasises not only that the college itself is excellent but that all students can succeed and learn here. As Black et al (2002) write 'Schools that emphasize excellence in achievement run the risk of sending the message that the only students who are valued are those that achieve the highest standards. Students whose performance falls below the highest levels come to believe that they cannot succeed and so disengage. Schools that value excellence in progress are sending the message that everyone can improve, and by feeding back to students about things that are within the students' control, emphasize that further improvement is possible.'

Future Implications

- For feedback to be effective, time must be set aside for students to follow-up on comments made by the teacher to fully involve the student in the learning process. This would involve student's setting their own targets.
- Whilst the students are re-writing their assessments, at this point I would hold my one-to-one discussions regarding the targets set. This is supported by Harlen (2006) who suggests that students' learning is greatly enhanced if they are part of the target setting process. I felt that I played a prominent role in the setting of targets. Upon reflection I should have encouraged my students to set their own instead.
- On a more practical level, I would get all assessments emailed to me so that I could provide feedback via the 'comment' function on Microsoft Word

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Useful web-sites

- 15) Information on how teachers can improve their feedback practice cited on www.heacademy.ac.uk/senlef.htm
- 16) Research on Assessment for Learning
http://www.standards.dfes.gov.uk/research/themes/assessment_for_learning/?digest=all
- 17) For a list of resources regarding A4L <http://www.qca.org.uk/7658.html>

APPENDICES

Appendix 1: Outline of Assessment for Learning and the Action Research Project

Assessment for Learning

Successful learning occurs when learners have ownership of their learning; when they understand the goals they are aiming for; when, crucially, they are motivated and have the skills to succeed.

Paul Black, *Assessment for learning: Beyond the Black Box*

All through your educational lives (at least 11 years), you have been assessed on a regular basis. When you have had work returned it would have had a grade or mark, and hopefully it had comments from your teacher as well.

What did you take the most notice of? What impact, if you were to reflect, do you think this grade had on you? Did you feel motivated to improve? Did you compare with your fellow peers and instantly feel better or worse? Were the comments of any help, telling you the things you had to do to improve?

Your education

It's all about YOU! It should be about supporting you to succeed and showing you the way in order for you to do the best that YOU can. It's about you fully understanding what is expected of you, how you need to go about it, and then hopefully, being given the correct support in order to improve any mistake. Of equal importance is to be proud of the things you did right. Does a grade, on its own, do this?

The message now confronting the educational community is that assessment which is explicitly designed to promote learning is the single most powerful tool for raising standards. Assessment FOR learning (A4L) aims to enable ALL students to achieve the best of their ability by challenging the traditional approach assessment has had for decades. This traditional approach is to provide a summative (end of topic) grade which reflects what you know. This is often referred to as assessment OF learning. However, A4L takes a different approach. One of its focuses is to use assessment to support learning. The main priority is to promote student learning, essentially through feedback (without a grade) where the emphasis is placed on comments. These comments identify what has been done well and what still needs improvement by giving guidance on how to make that improvement. Feedback will help you learn. For A4L to be successful, it is essential for students to be fully involved in the learning process, by reflecting upon their work and actively responding to the feedback by setting goals and targets.

The Action Research Project

This year I plan to mark all your essays providing you with detailed feedback and discussing targets with you. I will not be giving you specific grades or percentages for your work. I will keep you informed as to your progress in relation to your minimum grade during the reviewing process and if requested.

What I need from you

You will need to be willing to invest effort in to this and have the belief that you can achieve success. You will need to take heed of any guidance given, and display the commitment whereby you apply all feedback to your re-drafting of work. You will have to be very reflective on your work, completing several questionnaires throughout the year, whereby honesty would be appreciated.

What you can expect from me

I will mark your work within 3 lessons. This is so that when I feedback to you your work will still be fresh in your mind. You will get detailed written feedback commenting on things done well, and areas that need improving- with advice on how to do this. You will also at times be given one-to-one oral feedback. Class time will be set aside in order for re-drafting your assessment, taking on board all advice and targets set.

Key concerns

- My key concern is that while I am giving you feedback, I will be out of the room, and will have to rely on you to be responsible independent learners.
- I am also aware of the fact that the concept of not getting a grade for every assessment is possibly new to you, and will take some getting used to. I need to you be open-minded, and appreciate the fact that I would never put your learning in jeopardy. Regular reviews will be carried out whereby your grades will be accessible

I would like you to go away and think about the above information. Feel free to discuss it with parents/ caregivers at home. In the space below, please write down any thoughts you might have, concerns, or questions you may wish to raise during the next lesson.

QUESTIONNAIRE FOR STUDENTS- INITIAL

In AS Psychology, Assessment for Learning was carried out as an essential part of aiding students to succeed.

1. Do you know what assessment for learning is? YES NO

If you said Yes to the above question, can you please provide a brief description of what you think assessment for learning is: _____

2. Below are a series of statements. Tick any one that you think is true about assessment for learning

TICK	Assessment for learning...
	i. means that students are made fully aware of all learning goals
	ii. aims to help pupils know and recognize the standards they are aiming for
	iii. involves self assessment
	iv. involves peer assessment
	v. provides feedback so that students know their next steps to build on success and strengths, as well as to correct weaknesses
	vi. believes that every pupil can improve
	vii. involves the teacher and student in reviewing and reflecting on assessments
	viii. ensures that students take increasing responsibility for their progress and to become more actively engaged in their learning

3. Do you know what formative assessment is? YES NO

If you said Yes to the above question, can you please provide a brief description of what you think formative assessment is: _____

4. In your opinion, what should a teacher provide you with to enable you to achieve success in their subject (not specific to Psychology). Try to avoid commenting directly on lesson activities, but rather exam technique, questions, assessments, marking and feedback.

5. In AS Psychology which of the following did you experience (tick for yes if you did) and provide any further comment or opinion

TICK	Did you...	Comment
	Get told about the actual mark scheme so that you were fully informed as to what the examiners would be looking for and marking?	
	Get some assessments back without a grade or mark?	
	Get action points which informed you on areas you needed to improve?	
	Know how to improve from each assessment to the next?	
	Find feedback told you what you had done right?	

6. When you get assessments returned (in Psychology or any subject), what do you focus on? (circle only one response)

GRADE

COMMENTS made by teacher

Why? _____

Why not the other? _____

Any further comment? _____

7. Below are several possible ways in which you can receive feedback on your assessed work. Rank each one, with 1=most preferred and 7=least preferred.

	Grade only
--	------------

	Written feedback only
	Verbal feedback only (one-on-one)
	Grade and written feedback
	Grade and verbal feedback
	Written and verbal(one-on-one) feedback only
	Grade, written and verbal (one-on-one) feedback

Can you please provide a reason for your 1st and 7th choices

1st: _____

7th: _____

8. What purpose or function do you think receiving a grade has? _____

9. What purpose or function do you think written or verbal feedback serves? _____

Thank you for completing this questionnaire

1: QUESTIONNAIRE FOR STUDENTS- 1st submit of assessed essay

Upon submitting your work, can you please complete the following questions.

1. How much time in total did you spend on this essay? _____
2. When completing this essay, did you refer to any of the following for guidance? (please tick)

	How to write A2 essays (pink) booklet
	Examiners mark scheme
	Hints sheet (green)
	Other (please specify)

3. What areas of this essay do you think you did well on? _____

Why? _____

4. What areas of this essay do you think might need improving? _____

Why? _____

Stage 3: Post-discussion task setting

Having had written and verbal feedback on your assessment this is your chance to reflect further about what needs to be done to improve your current essay and future essays.

Goals for THIS assessment.

What do you plan to do to improve this piece of work?

1)

2)

3)

Aims and goals for future assessments

When you get set your next essay, what do you plan to do the same (to retain previous success) and what do you plan to do differently, to show that you recognize the standards required in order for you to improve?

1)

2)

3)

3: QUESTIONNAIRE FOR STUDENTS- Re-working of essay

1. Did you find the feedback (both written and verbal) supportive and informative? Why/ why not? _____

2. What changes do you plan to make?

CHANGES	Teacher comments only
1)	
2)	
3)	

You have been given class time to re-work your essay, with the intention of making improvements.

3. Did you find the time given in class to re-work your essay, applying the advice you were given, enabled you to feel more confident and informed about what was required of you to improve THIS essay? Why/ why not? _____

4. Do you feel as if you have a better understanding as to how to improve and write better essays in the future? Do you feel more confident in yourself? _____

Teacher use only

The end: How have you found assessment for learning, specifically formative assessment?

Please answer the following questions below and provide comments.
Your honesty and self reflection would be appreciated.

With specific reference to Psychology:

If you think back to the beginning of the year, I explained to you that I would not be giving you any grades, but giving ONLY FEEDBACK on submitted work, **what did you think?**

1	2	3	4	5
That's ok				I MUST have a grade

Comment: _____

How do you feel **NOW**?

1	2	3	4	5
That's ok				I MUST have a grade

Comment: _____

OVERALL

1) The quality of written feedback has been helpful

1	2	3	4	5
Strongly agree				Strongly disagree

Comment: _____

Could this have been improved? YES NO?

If YES, how? _____

2) The quality of verbal feedback has been helpful

1	2	3	4	5
Strongly agree				Strongly disagree

Comment: _____

Could this have been improved? YES NO?

If YES, how? _____

3) Taking the opportunity to re-submit work has meant I have been able to rectify areas that I had made mistakes on

1	2	3	4	5
Strongly agree				Strongly disagree

Comment _____

Could this have been improved? YES NO?

If YES, how? _____

4) I do not feel disadvantaged or uninformed by not receiving grades/ %/ marks (consider how you felt about this at the beginning of the course).

1	2	3	4	5
Strongly agree				Strongly disagree

Comment _____

5) Compared to my other classes, I feel I am getting a large amount of constructive and supportive feedback in Psychology.

1	2	3	4	5
Strongly agree				Strongly disagree

Comment _____

6) I feel that through all the feedback I have received I am becoming more confident in what is expected of me and what I need to do in order to produce a quality piece of work.

1	2	3	4	5
Strongly agree				Strongly disagree

Comment _____

7) I feel I have taken every opportunity to improve upon my work

1	2	3	4	5
Strongly agree				Strongly disagree

Comment _____

Could this have been improved? YES NO?

If YES, how? _____

8) Do you feel this approach to assessing your work has been beneficial?

1	2	3	4	5
Strongly agree				Strongly disagree

Comment

9) Any other comments?

Thank you

A2 PSYCHOLOGY FEEDBACK SHEET: Section A Essay

NAME: _____

ESSAY TOPIC: _____

Poor	High			

Part A: A description of ONE study (6 marks)

Terms and concepts

Confident use of psychological terms and concepts					
---	--	--	--	--	--

Evidence

The answer is detailed and accurate					
The answer is well organized					

Understanding

The answer gives a clear account of the specific topic from a psychological perspective					
There is clear understanding of what has been written					

Part B: Discussion of difficulties encountered when carrying out psychological research (10 marks)

Terms and concepts

Confident use of psychological terms and concepts					
---	--	--	--	--	--

Range of difficulties

There is a good range of points that consider the difficulties (or issue) being raised					
--	--	--	--	--	--

Evidence

Each point has been clearly explained and elaborated upon in coherent and thorough detail					
---	--	--	--	--	--

Argument structure

The answer engages with the question throughout displaying clear argument structure and is appropriate					
--	--	--	--	--	--

Overall

A2 PSYCHOLOGY FEEDBACK SHEET: SECTION B ESSAY

NAME: _____

ESSAY TOPIC: _____



Part A: 10 marks- It should consist of four to five paragraphs.

Concepts and Terminology: This is measuring the quality of your written English and use of psychological terminology. [3 marks]

Appropriate terms and concepts are presented and used in a confident way					
Spelling and sentence structure is good					
Views are expressed clearly					
Punctuation is appropriate					

Evidence: This is measuring the range of studies/ theories you have described and in how much depth. There should be four pieces of psychology. [4 marks]

Appropriate psychological evidence is accurately described					
Studies/ theories chosen are wide-ranging					
Detail is appropriate					

Understanding: This is how well you have understood what you've written. [3 marks]

The answer shows excellent understanding of the question throughout					
Terminology, examples, expansion of complex points are clear					
Answer is coherent and well structured					
Final sentence links directly back to question					

Part A Comments: _____

Part B: 16 marks- It should consist of four paragraphs.

Range of issues: This is how well you have identified and defined each appropriate evaluation issue. There should be 4. [4 marks]

There are a range of issues					
Each issue has been identified					
Each issue has been made relevant to the question					
Each issue has been explained and elaborated					

Evidence for issues: This is how well you discuss psychological research in relation to your four evaluation issues. There should be at least two studies linked to the issue. Always given examples to illustrate the points you are making. [4 marks]

Studies chosen are appropriate for the issue					
Studies have been commented on effectively					

Analysis: Here you should include analysis sentences at the end of each 4 paragraphs, as well as using linking phrases (e.g.: also, by way of contrast...) [4 marks]

There is analysis in the form of comparisons and contrasts					
This analysis is accurate, detailed and effective					

Argument Structure: This is an overall view of how well your paragraphs are structured and presented. Also takes in to account the quality and persuasiveness of your argument. [4 marks]

Answer is appropriately structured					
There are compelling arguments that demonstrate originality and insight					
There is 360° analysis of each issue					

Part B Comments: _____

Part C: 8 marks

Application: This is how many relevant suggestions you make. Aim for at least three and make sure they are relevant to the scenario in the question.

[4 marks]

Suggestion (s) made are appropriate to the request					
Suggestion is based on appropriate psychological evidence					
Suggestion is detailed and clearly explained					

Comments: _____

Application Interpretations: Reasons: This is whether each suggestion is backed up by explicitly named and relevant psychological research.

[4 marks]

There is a clear rationale for each suggestion					
There is confident use of terminology, examples and points are fully explained upon					
The answer is clear and well structured					

Comments: _____

Overall:

A comparison of the views that non-dyslexic and dyslexic students have of themselves as learners.

Val Shelford

INTRODUCTION

Aims

- To raise the students' awareness of their own levels of academic achievement and of the difficulties that they and their peers commonly experience.
- To study the effects that the students' academic difficulties could have on both their performance and, especially, on their feelings of worthiness.
- To examine the influence that constructs such as the academic self-concept and self-esteem can have on the achievement, motivation and peer relationships of students.
- To gain a better understanding of how the students feel about themselves as learners.
- To determine to what extent a student's dyslexia is detrimental to a) his academic performance b) his self-concept c) both, by using a control group for comparison.

Setting the scene

My original research study in 2004-5 focused on the academic performance and self-esteem of 19 dyslexic students at this college, but I did not use a control group at the time. The data was gathered using both student self-reporting and teacher and student rating scales. The students reported themselves as competent in their subject studies and generally positive in terms of their academic self-concept, and their teachers confirmed these views. In several ways, these findings contradicted the trends that I had observed in the literature on the relationship between dyslexia and self-esteem.

My own interest in these findings, and that of a number of other members of staff, motivated me to extend the study in 2007 to include a comparison with non-dyslexic students of a similar age and background. None of the survey tools or methods used in the previous project was altered in any way; however, no further review of literature was undertaken.

This study, then, examines the views that 19 non-dyslexic have of themselves as learners, and compares these views with those of the 19 dyslexic students in the previous investigation.

Survey tools

The **Student Interview** was the first tool used to investigate four main themes related to the self-concept and academic achievement. These were the students':

1. **performance** – how the students perceived their own performance and how they believed their subject teachers rated their performance.
2. **difficulties** – the type of academic problems they commonly experienced, the reasons for them, and what the students felt that they could do to overcome them. The study also looked at how confident the students were that they could overcome their difficulties and whether they believed that their peers experienced similar difficulties.
3. **classroom behaviour** – particularly the students' willingness to take risks, and their relationship with their peers in class.
4. **emotional responses** – to their academic studies, their teachers and their peers.

The **Student and Teacher Questionnaires** were designed to measure their respective views of the students' **academic self-concept**.

The statements on the questionnaires required responses on a Likert scale, where a rating of 1 signified 'strongly disagree', 2: 'disagree', 3: 'neither agree nor disagree', 4: 'agree' and 5: 'strongly agree'. The responses reflected the students':

- sense of agency
- self-efficacy
- motivation
- confidence
- peer relationships
- attribution for success and failure
- locus of control

Theoretical background

The original literature review attempted to do the following:

- establish definitions and a better understanding of a) 'dyslexia' and b) the 'self-concept'
- consider what difficulties are commonly associated with dyslexia and how well dyslexic learners usually cope with these difficulties
- determine what factors influence academic success
- ascertain what links, if any, exist between **dyslexia**, the **self-concept** and **academic achievement**
- describe recent research relating to these three areas of study.

The key findings were as follows:

- *Dyslexia is a variable syndrome for which there is still lack of agreement upon a suitable definition. Nevertheless, one of its key features appears to be a deficit in phonological processing skills, that is, the way in which the brain codes the spoken attributes of words.*
- *The range of difficulties encountered by dyslexic students is considerable, but a significant proportion of them experience difficulties with reading, writing and spelling.*
- *Other dyslexic students encounter problems with memory, organization and planning, and concentration.*
- *Although these difficulties hamper the academic success of dyslexic students in various ways, students develop coping strategies to a greater or lesser degree.*
- *Burden (2005) distinguishes between 'self-concept' and 'self-esteem' by using Burns' (1981) proposal that the self-concept can be divided into two parts:*
 - a. the 'self-image', which is the set of beliefs that we hold about ourselves on several domains
 - b. 'self-evaluation', which describes our appraisal of these beliefs, including how firmly we hold them, and is usually termed 'self-esteem'.
- *Whilst there is agreement in the literature that relationships exist between self-concept, self-esteem and academic achievement, a causal link between dyslexia and low self-esteem remains unproven.*
- *Academic self-concept is a strong predictor of academic achievement and vice-versa.*
- *There are several factors that are influential in raising or lowering a person's academic self-concept. These include:*
 - a. the social perceptions and behaviour of others (particularly peers and teachers)
 - b. the attitudes that students hold towards school / college, literacy and themselves as learners (including motivational factors, confidence and self-efficacy)
 - c. the students' belief in their own competence (sense of agency)
 - d. the extent to which an individual believes he is in control of outcomes (locus of control)
 - e. previous educational experiences – either successful or otherwise
 - f. the responsibility that a student feels for his own successes and failures (attribution)
- *There are several factors that can influence the academic success of both dyslexic and non-dyslexic learners. Riding (2002) categorises these into:*
 - a. the learner's home background
 - b. the influences of peers
 - c. the effects of school / college, generally – particularly teaching
 - d. the individual characteristics of the learner.
- *The literature suggests that there are several factors that can hamper profoundly the academic progress of students, and some of the effects of these are more pronounced for dyslexic learners.*
- *Recent studies show a lower level of self-concept and self-esteem in students with dyslexia than in those without. Nevertheless, there is some evidence that:*

- a. dyslexic learners adopt coping strategies, learn to overcome their difficulties and feel positive about themselves and their studies
- b. other variables such as family background, motivational factors and educational environment combine to enhance dyslexic students' academic self-concept, irrespective of their specific learning difficulties.

METHODS

The Sample

The sample of 19 non-dyslexic students matched that of the original sample in terms of average GCSE score.

The Survey: Overview

As with my previous survey, I decided to gather a mixture of both quantitative and qualitative data from the survey, using semi-structured interviews for each student in the sample, and questionnaires completed by both the students and their teachers / tutor. This mixture of data would provide more depth and breadth to the survey: the quantitative data would provide trends and measurable statistical data, but no commentary; the qualitative data would offer the richness of the students' own experiences and give them a voice. I also considered that data just from the students themselves might be subjective, but asking questions of a number of teachers and the student's pastoral tutor would help to make the data more objective and provide a broader spectrum of opinion. It would also be interesting to see whether the students and their teachers viewed the students' self-esteem in the same way.

The Interview

Before each interview took place, the students received a letter explaining the broad aims and purpose of the survey, reassuring the student of anonymity and confidentiality, and thanking the student for participating. The students were interviewed individually during a tutorial in January or February 2007. The interviews and questionnaire completion took about 10-15 minutes per student.

The sixteen interview questions had been drafted for my previous survey in 2004, after studying two self-esteem questionnaires recommended by a tutor at the University of Southampton. These were downloaded from:

www.positive-way.com/self-est1.htm and www.users.globalnet.co.uk/~ebdstudy/strategy/lawseq.htm in September 2004.

The questions were designed to ascertain the students' attitudes to their subject studies, their skills and difficulties, their self-image and behaviour. Some of the questions indicated high self-esteem and others low self-esteem.

A copy of the interview questionnaire appears in Appendix I.

The Student Questionnaire

The students were asked whether they were familiar with the Likert scale of answers and were shown an example before completing the questionnaire. Without exception, all students had previously used a Likert scale. Verbal instructions were given on completing the questionnaire, and clarification was offered to each student.

The twelve statements were drafted after referring to the two self-esteem questionnaires mentioned above. Five of the statements indicated a high level of self-esteem when agreed with, and the remaining seven statements indicated a low level of self-esteem when agreed with. This mixture was deliberate to prevent the students from tending to allocate similar numbers to all the statements.

A copy of the student questionnaire appears in Appendix II.

The Teacher / Tutor Questionnaire

Once each student had agreed to participate in the survey and had been interviewed, questionnaires with an accompanying explanatory memo were sent via pigeon-holes to all his / her subject teachers and tutor. All responses were collected by April 2007.

The same questions were used in this questionnaire as had been used in the student questionnaire (albeit phrased in the third instead of the first person) so that the teachers' view of a student's self-esteem could more accurately and easily be compared with that of the student.

A copy of the teacher / tutor questionnaire appears in Appendix III.

FINDINGS

Full details of the findings pertaining to non-dyslexic students are provided in Appendix IV. Those pertaining to dyslexic students can be found in my dissertation.

Student Interviews

Performance

All 19 dyslexic students commented that they were meeting or exceeding their minimum grades and most believed that their teachers' ratings would be similar. However, fewer of the non-dyslexic students – 14 – rated themselves in the same way; 4 felt that they were performing well in some of their subjects but not others, and one student said that she was not performing as well as she should. Again, most students believed that their teachers' ratings would be similar.

Difficulties

Type of difficulty

A comparison of the type of difficulties experienced by the 2 groups is shown in Table 1 below.

Table 1

Type of difficulty experienced by dyslexic students	Number of students
Essay writing	8
Spelling	5
Note-taking	3
Reading aloud	3
Short-term memory	3
Getting ideas down on paper	3
Keeping up with the class	3
Concentration	2
Slow reading	2
Processing thoughts	1
Writing neatly	1
Organisation/Time Management	1
Motivation	1

Type of difficulty experienced by non-dyslexic students	Number of students
Comprehension of subject matter generally	9
Comprehension of 'new' AS level subjects not covered at GCSE	5
Coping with the difference in level between GCSE and AS level	6
Comprehension of subject-specific vocabulary	2
Concentration	4
Memory	3
Organisation/Time management	3
Keeping up/coping with volume of work	2
Recalling mathematical equations	1
Researching topics	1
Paying attention to detail	1

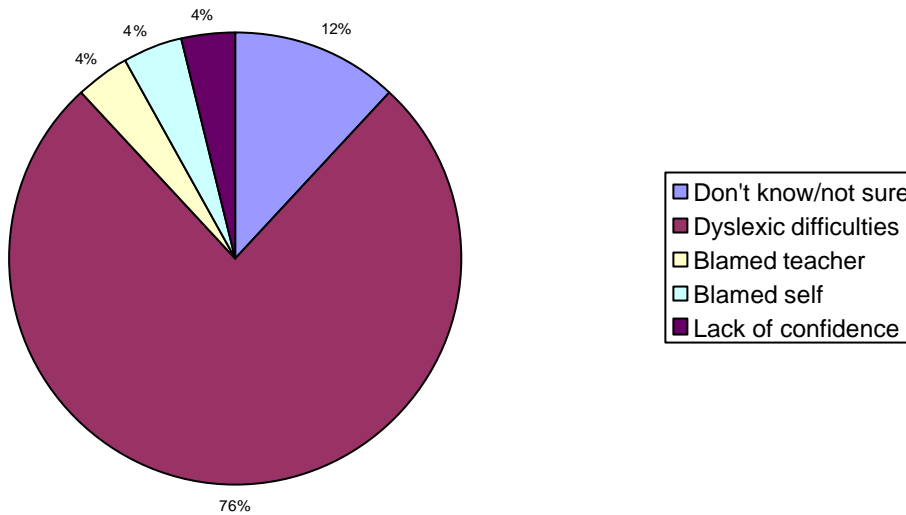
Almost 60% of the total of 37 difficulties mentioned by the non-dyslexic students related, to some extent, to comprehension or coping with the demands of AS level courses, whilst those of the dyslexic students were almost exclusively of a typically dyslexic nature.

Reasons for difficulties

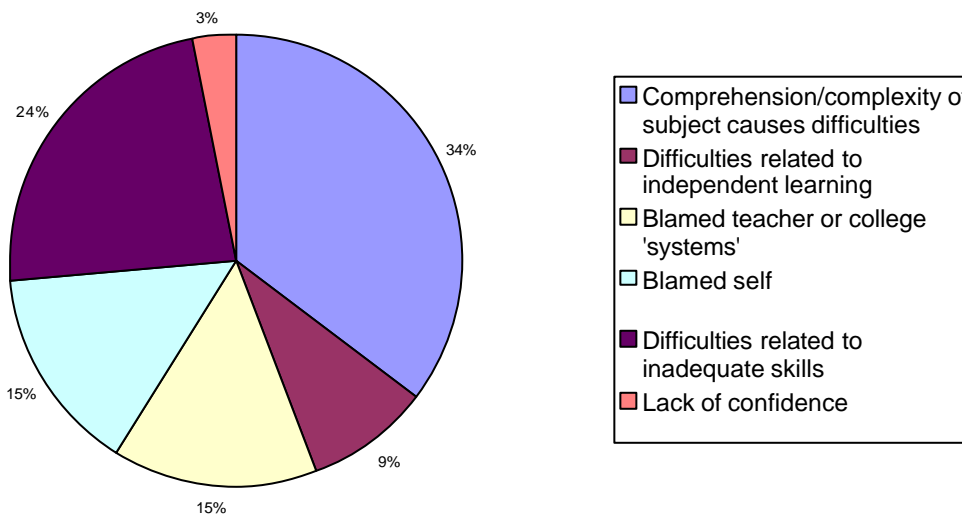
The students were all asked to consider why they experienced difficulties. Their reasons are summarized and compared in Table 2 below.

Table 2

The dyslexic students' reasons for difficulties with their subject studies



The non-dyslexic students' reasons for difficulties in their subject studies



The reasons given for most difficulties reflected the type of difficulty to a significant extent. Few students from either group blamed anyone but themselves for their difficulties.

Belief that peers experience similar difficulties

Whilst all of the non-dyslexic respondents believed that they were not alone in experiencing difficulties in their subject studies, only 12 of the dyslexic students felt that this was the case. This latter finding is not surprising since the dyslexic students would, presumably, have compared themselves with non-dyslexic as well as dyslexic peers and would not, therefore, have expected many of their peers to encounter dyslexic-type difficulties.

Strategies for overcoming difficulties

Table 3 shows a comparison of strategies suggested for overcoming difficulties.

Table 3

Strategies for overcoming difficulties

Dyslexic	Non-dyslexic
Don't know (3)	Don't know (1)
(3)	(1)
Teacher/peer support (4)	Teacher/peer support (6)
Ask teachers for help (3)	Ask teachers for help (5)
Ask for notes (1)	1-to-1 feedback from teacher (1)
Student initiative (29)	Student initiative (25)
Rehearsal/review strategies (11)	Rehearsal/review strategies (8)
Work harder (1)	Work harder (7)
Read more widely (4)	Read more widely (2)
Plan more effectively (6)	Plan more effectively (3)
Writing / note-taking strategies (6)	Writing / note-taking strategies (1)
Other skills improvement (1)	Other skills improvement (4)

Most of the suggestions put forward, by both groups, for overcoming difficulties involved the students themselves in taking the initiative. However, it could, of course, be argued that strategies requiring the support of others involve the initiative of the student in asking for help. Few students did not know how to tackle difficulties.

Confidence in overcoming difficulties

There was a very high level of confidence amongst the non-dyslexic respondents that difficulties could be overcome – only one student was not very confident. In contrast, only 14 of the dyslexic students felt that they would be able to overcome their difficulties.

Classroom Behaviour

The students were questioned on various aspects of their behaviour in class, and on most of these, the results were quite similar.

None of the dyslexic sample felt that they were unappreciated in class, compared with 17 of the non-dyslexic students (the other 2 stated 'sometimes'). Most students in both groups were confident that their peers liked to hear their ideas in class, too. The results were identical as far as peer opinions were concerned: 5 students from each sample felt that peer opinions were more important to them than their own; 6 stated 'sometimes', and 8 'no / not really'. However, many of the non-dyslexic students commented that they were easily swayed by those students that they perceived to be strong performers in certain subjects, whilst the dyslexic students tended to lack self-confidence in their own views.

Responses on the other aspects of classroom behaviour were a little different. Whilst only 4 of the non-dyslexic sample admitted that they hesitated to do or say things in class because of what others might think (another 4 'sometimes') 8 of the dyslexic sample were hesitant (plus 3 'sometimes'). Conversely, the dyslexic students were more often willing to take reasonable risks in class (12 'yes', 1 'sometimes') compared to the non-dyslexic students (7 'yes', 5 'sometimes').

Emotional Responses

The students were asked to respond to 4 questions about their usual emotional reactions to situations: whether they criticised themselves often, whether their peers or teachers criticised them often, whether they blamed themselves whenever things went wrong with their subject studies and, finally, whether they had the ability to solve problems rather than worry about them.

Results were similar for the two groups on all 4 dimensions. The students were generally or sometimes self-critical, but did not believe that they received criticism from others. A few respondents stated that any peer / teacher criticism was 'constructive, not negative'.

Whilst a significant majority of both samples blamed themselves when things went wrong, most qualified their admission of self-blame by saying that having accepted that they were to blame, they then 'moved on'. One non-dyslexic respondent on this dimension stated 'Blame is not appropriate at this college', and only one respondent from each sample blamed his teachers instead of himself.

Many students considered that they were quite good problem-solvers (7 dyslexic; 9 non-dyslexic). The 'other' 9 non-dyslexic respondents to the question 'Do you have the ability to solve problems rather than just worry about them?' all stated that they worried first and then did something about the problem. Most of the 8 'other' dyslexic respondents would only concede that they tried to solve problems.

Student and Teacher Questionnaires

Sense of Agency

Both students and teachers were asked to what extent they agreed that the students possessed the necessary skills to achieve good results in their subject studies.

16 of the non-dyslexic and 11 dyslexic students agreed that they were capable of achieving good academic results, whilst approximately two-thirds of both groups of teachers' replies demonstrated agreement.

Self-Efficacy

The two questions designed to assess the students' self-efficacy in relation to their subject studies focused on whether or not they began each lesson with a positive attitude and whether they struggled with feelings of inferiority. Nearly three-quarters of teacher responses indicated a positive attitude in their students, whereas only 7 dyslexic and 9 non-dyslexic students themselves felt that they started their lessons positively, and a significant proportion - 9 dyslexic and 6 non-dyslexic students - remained non-committal.

There was a significant difference between the 2 groups when it came to feelings of inferiority in relation to subject studies. 11 non-dyslexic students disagreed that they felt inferior, compared to only 4 dyslexic students. However, 5 of the former and 10 of the latter group remained non-committal, and several of the teachers possibly felt that they were unable to rate this dimension very accurately as approximately 40% of them were also non-committal or did not respond.

Motivation

16 of each group of students felt motivated for academic success, with over 78% of the non-dyslexic students' teachers and 88% of the dyslexic students' teachers agreeing with them.

Confidence

There were more mixed responses concerning the students' levels of confidence. 12 non-dyslexic and 8 dyslexic students felt that they displayed academic confidence (6 of each group were non-committal) and about 46% of both groups of teachers supported their views. Almost one-third and one-quarter of non-dyslexic and dyslexic students' teachers, respectively, were non-committal.

Peer Relationships

The students rated themselves on 3 statements concerning their relationships with peers; these were whether:

- a) they believed other students found subjects easier than they did
- b) they felt able to ask questions in class in front of their peers, and
- c) they were afraid to ask questions in class in case others thought they were foolish.

The results were similar for both groups, with 9 non-dyslexic and 10 dyslexic students agreeing to a) 13 and 12 respectively agreeing to b) and 11 and 12 disagreeing to c). Teacher opinions were much more widely distributed between the 5 Likert scale ratings on the first 2 statements, but over 60% of teachers supported student disagreement that they were afraid to ask questions in class.

Attribution

The students, again, rated themselves similarly on the attribution dimension. 14 non-dyslexic and 13 dyslexic students did *not* attribute their accomplishments to luck, and their teachers strongly supported this view (86% and 87% respectively, of which over 50% of each group strongly disagreed). Fewer students – 8 and 7 respectively – disagreed that their failures were due to incompetence or inadequacy (teacher support for this view was higher at 64% and 77%, respectively) whilst 5 and 9 from each student sample remained non-committal.

Locus of Control

The students reported whether they struggled to perform well, and whether they blamed themselves for difficulties with their academic studies. On the first of these aspects, the 2 groups rated themselves quite differently: 10 non-dyslexic, but only 4 dyslexic students disagreed that they struggled with their studies (6 and 8 respectively were non-committal). Teacher ratings were more widely distributed. However, 9 non-dyslexic and 7 dyslexic students blamed themselves for difficulties, whilst 5 and 6 from each sample were non-committal. It appears that teachers found the latter statement difficult to rate as 54% of teachers of non-dyslexic students and 46% of dyslexic were non-committal on the question of self-blame.

DISCUSSION

The first part of this section discusses only the findings of the most recent survey of **non-dyslexic students**, as the findings of the survey of the dyslexic students are discussed in full in my dissertation. However, the section ends with a comparison of the 2 surveys.

It seems then that, in general, this sample of non-dyslexic students has a very positive academic self-concept. The students believed that they were performing well and possessed the necessary skills to achieve academic success. They did not consider that they had to struggle to perform well. Nevertheless, the students acknowledged that they experienced difficulties (were unanimous that their peers did, too) were honest about and aware of the reasons for these difficulties and shared a very high level of confidence that these could be overcome. Furthermore, the students proposed several strategies for overcoming difficulties which were largely dependent on their own initiative and effort.

Peer relationships were usually strong. The students felt comfortable with and appreciated by their peers and felt fairly confident about asking questions in class. However, there was some evidence of students avoiding the risk of failure in the classroom and valuing peer opinions more highly than their own, perhaps because they perceived many of their peers to be academically stronger.

The students possessed sufficient levels of self-belief and a strong motivation to succeed, but were perhaps not quite so confident in a more general sense.

Finally, a significant proportion of the sample tended towards being 'internalisers', who feel in control of academic outcomes, are self-critical, blame themselves when things go wrong (and then 'move on') and are confident in their ability to solve problems.

A comparison of the 2 surveys – dyslexic and non-dyslexic students

The original aim of this investigation was to compare the results of non-dyslexic students with those of the dyslexic students in a recent study, in terms of their academic performance and self-concept. It soon came to light that the two sets of students experienced difficulties of a very different nature. In their interviews, the dyslexic students had focused almost entirely on difficulties of a typically dyslexic nature such as essay writing, spelling, reading aloud and short-term memory. In contrast, the non-dyslexic students focused on problems of comprehension and coping with the academic demands of Level 3 courses.

Both groups of students indicated that they would take the initiative in overcoming difficulties, and proposed a number of rehearsal and other strategies to do so. However, whilst not being quite so sure as the dyslexic students that they were performing well, the non-dyslexic students were more confident that they could overcome their difficulties and were, perhaps unsurprisingly, more certain that their peers experienced similar difficulties.

In considering academic self-concept, it appears that both groups of students viewed themselves positively. However, on a number of dimensions, the non-dyslexic students rated themselves particularly strongly. This current study showed considerably fewer students with feelings of inferiority in relation to their subject studies and fewer students who had to struggle to achieve good results. There was also less hesitancy in classroom situations than amongst dyslexic students, and a great deal more confidence in the students' ability to solve problems. Finally, the non-dyslexic students were a little more certain that they were capable of achieving good academic results.

In other respects, results were similar, as were student and teacher ratings, generally, on the questionnaires.

CONCLUSIONS

Future implications

The first main implication for the college is to continue to provide the necessary educational environment in which students can maintain their positive academic self-concept. This involves the encouragement of goal-setting activities, the promotion of an atmosphere in which good behaviour, diligence and striving for academic improvement are standard practice, and values such as mutual peer and teacher respect and empathy are shared throughout the establishment.

The other implications for the college are related to the difficulties experienced by the samples of students and strategies to overcome them. The difficulties of the dyslexic sample have already been addressed by Study Support since 2005. Structured Study sessions have been timetabled for dyslexic students; these are for one period per week and include the presentation of strategies to overcome all the areas of difficulty that dyslexic students typically find problematic. The following implications, then, are drawn from the difficulties specified by the non-dyslexic sample of students. (That is not to say that these suggestions will not be relevant to dyslexic students, too.)

Firstly, the fact that a significant proportion of the sample stated that they experienced problems with comprehension of level-3 course subject matter (particularly 'new' courses) suggests that more could be done within subject areas to facilitate both the transition from level 2 to level 3 courses, generally, and also the introduction of subjects not previously studied, specifically.

Secondly, the number of students suggesting that they need constantly to review work done has implications for both subject areas in their provision of workshops, and for 'Upgrade' department in its provision of revision workshops.

Thirdly, all students should be made aware of the link that many of them already perceive between strategies such as effort / hard work / reading more widely and overcoming difficulties.

Finally, a number of students felt that they should improve various study and time-management skills. This has implications for the college, generally.

If the above suggestions were acted upon, learners should continue to achieve their full potential and value themselves highly in the process.

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Burns, R.B. (1981) *The Self-Concept*. New York: Longman.

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10. Do you feel unappreciated in class?

11. Do you hesitate to do things or say things in class because of what others might think?

12. Whenever things go wrong with your subject studies, do you blame yourself?

13. Do you have the ability to solve problems rather than just worry about them?

14. Do you take reasonable risks in class?

15. Do your peers usually like to hear about your ideas in class?

16. Do your peers' opinions count more to you than your own?

APPENDIX II: Student Questionnaire

STUDENT QUESTIONNAIRE

NAME:

Please circle the appropriate number according to the key shown below:

- 1= strongly disagree
- 2= disagree
- 3= neither agree nor disagree
- 4= agree
- 5= strongly agree

1. I feel motivated to achieve good results in my subject studies.

1	2	3	4	5
---	---	---	---	---

2. I have the necessary skills to achieve good results in my subject studies.

1	2	3	4	5
---	---	---	---	---

3. My accomplishments in my subject studies are due to luck.

1	2	3	4	5
---	---	---	---	---

4. My failures in my subject studies are due to incompetence or inadequacy.

1	2	3	4	5
---	---	---	---	---

5. I have to struggle to perform well in my subject studies.

1	2	3	4	5
---	---	---	---	---

6. Other students find their subjects easier than I do.

1	2	3	4	5
---	---	---	---	---

7. I blame myself for any difficulties with my subject studies.

1	2	3	4	5
---	---	---	---	---

8. I begin each lesson with a positive attitude.

1	2	3	4	5
---	---	---	---	---

9. I struggle with feelings of inferiority in relation to my subject studies.

1	2	3	4	5
---	---	---	---	---

10. I am a confident student.

1	2	3	4	5
---	---	---	---	---

11. I think I am able to ask questions in class in front of my peers.

1	2	3	4	5
---	---	---	---	---

12. I am afraid to ask questions in class in case others think I am foolish.

1	2	3	4	5
---	---	---	---	---

Thank you for completing this questionnaire.

APPENDIX III: Teacher / Tutor Questionnaire

TEACHER/TUTOR QUESTIONNAIRE

STUDENT'S NAME:

Please circle the appropriate number according to the key shown below:

- 1= strongly disagree
- 2= disagree
- 3= neither agree nor disagree
- 4= agree
- 5= strongly agree

1. S/he is motivated to achieve good results in her/his subject studies.

1	2	3	4	5
---	---	---	---	---

2. S/he has the necessary skills to achieve good results in her/his subject studies.

1	2	3	4	5
---	---	---	---	---

3. His/her accomplishments in subject studies are due to luck.

1	2	3	4	5
---	---	---	---	---

4. His/her failures in subject studies are due to incompetence or inadequacy.

1	2	3	4	5
---	---	---	---	---

5. S/he has to struggle to perform well in subject studies.

1	2	3	4	5
---	---	---	---	---

6. Other students find their subject studies easier than s/he does.

1	2	3	4	5
---	---	---	---	---

7. S/he blames her/himself for any difficulties with subject studies.

1	2	3	4	5
---	---	---	---	---

8. S/he begins each lesson with a positive attitude.

1	2	3	4	5
---	---	---	---	---

9. S/he struggles with feelings of inferiority in relation to subject studies.

1	2	3	4	5
---	---	---	---	---

10. S/he is a confident student.

1	2	3	4	5
---	---	---	---	---

11. S/he is able to ask questions in class in front of her/his peers.

1	2	3	4	5
---	---	---	---	---

12. S/he is afraid to ask questions in class in case others think s/he is foolish.

1	2	3	4	5
---	---	---	---	---

Thank you for completing this questionnaire.

APPENDIX IV: Findings pertaining to the sample of **non-dyslexic students**

Performance

Table 1 shows the students' rating of their academic performance.

N=19	Quite well / o.k.	O.k. in some subjects, but not in others.	Not as well as I should
Student ratings	14	4	1
Students' estimates of how teachers would rate them	11	6	2

Difficulties

Type of difficulty

Table 2 shows the types of difficulty experienced by the students.

Type of difficulty	Number of students claiming experience with this difficulty
Comprehension of subject matter generally	9
Comprehension of 'new' AS level subjects not covered at GCSE	5
Coping with the difference in level between GCSE and AS level	6
Comprehension of subject-specific vocabulary	2
Concentration	4
Memory	3
Organisation / Time management	3
Keeping up / Coping with the volume of work	2
Recalling mathematical equations	1
Researching topics	1
Paying attention to detail	1

Reasons for difficulties

Table 3 shows the students' reasons for difficulties experienced:

Reasons for difficulties	Number of students
Comprehension of AS subjects doesn't come naturally / takes time.	7
AS level is more complex / involves more analysis than I had anticipated.	5
I do not receive so much help / There is more emphasis on independent learning than with GCSE.	3
Poor memory skills	3
Poor concentration skills	2
The teaching styles don't suit me.	2
College social activities are distracting	2
My own absenteeism	1
Procrastination	1
Lessons are too long	1
Lack of confidence / anxiety	1
Poor research skills	1
Leaving work until the last minute	1
Poor group-working skills	1
Inability to think logically	1
Rushing work	1
Not reviewing work often enough	1

Belief that peers experience similar difficulties

Table 4 shows students' opinions as to whether their peers experience the same difficulties as they do:

Other students on my courses experience similar difficulties.	Number of students
Yes / Some / Probably	19
No	0
Don't know	0

Strategies for overcoming difficulties

Table 5 shows the various strategies suggested by the students for overcoming their difficulties:

Strategies for overcoming difficulties	Number of students
Don't know	1
Strategies requiring teacher or peer support. Total:	6
Receive one-to-one feedback	1
Ask teachers for help	5
Strategies requiring student initiative. Total:	25
Constantly review / reinforce work done	7
Work harder / Put in more effort	7
Read more widely around the subject	2
Manage my time more effectively	2
Believe in myself	1
Prepare more effectively	1
Try to become a more independent learner	1
More practice of difficult tasks	1
More effective note-taking	1
Improve listening skills	1
Improve concentration	1

Confidence in overcoming difficulties

Table 6 shows the students' confidence in their ability to overcome their difficulties:

Confidence in overcoming difficulties	Number of students
Very / Fairly confident	18
Not very confident	1
Don't know	0

Classroom Behaviour

Table 7 shows the students' assessment of their classroom behaviour:

Classroom behaviour	Yes	Sometimes	No / Not really	Not sure
Feel unappreciated	0	2	17	0
Hesitate to do or say things	4	4	11	0
Take reasonable risks	7	5	7	0
Peers like to hear my ideas	16	1	0	2
Peers' opinions more important than mine	5	6	8	0

Emotional Responses

Table 8 shows the students' typical emotional responses:

Emotional responses	Yes	Sometimes	No / Not really	Other response
Criticise self often	9	4	6	0
Peers / Teachers criticise often	0	0	16	3
Blame self when things go wrong	7	7	4	1
Able to solve problems	8	1	1	9

Student and Teacher Questionnaires

Sense of Agency

Table 9 shows student and teacher belief that students are capable of achieving good academic results:

Likert scale rating	1	2	3	4	5	No response
Student responses N=19	0	1	2	10	6	0
%	0	5.3	10.5	52.6	31.6	0
Teacher responses N=78	0	8	18	35	17	0
%	0	10.2	23.1	44.9	21.8	0

Over 84% of students agreed that they were capable of achieving good academic results, whilst approximately two-thirds of the teachers' replies demonstrated agreement.

Self-Efficacy

Table 10 shows the students' and teachers' views of two aspects of the students' self-efficacy:

Likert scale rating	1	2	3	4	5	No response
Positive attitude. Student responses	1	3	6	7	2	0
%	5.3	15.8	31.6	36.8	10.5	0
Teacher responses	1	7	12	35	23	0
%	1.3	9.0	15.4	44.9	29.5	0
Feelings of inferiority Student responses	2	9	5	3	0	0
%	10.5	47.4	26.3	15.8	0	0
Teacher responses	6	21	34	14	1	2
%	7.7	26.9	43.6	17.9	1.3	2.6

Motivation

Table 11 shows the responses to whether students and teachers felt that the students were motivated to achieve good results in their subject studies.

Likert scale rating	1	2	3	4	5	No response
Student responses	0	0	3	11	5	0
%	0	0	15.8	57.9	26.3	0
Teacher responses	3	5	9	38	23	0
%	3.8	6.4	11.5	48.7	29.5	0

Confidence

Table 12 shows student and teacher views on whether the students displayed confidence:

Likert scale rating	1	2	3	4	5	No response
Student responses	0	1	6	8	4	0
%	0	5.3	31.6	42.1	21.0	0
Teacher responses	0	18	24	30	6	0
%	0	23.1	30.8	38.5	7.7	0

Peer Relationships

Table 13 shows how students and teachers rated the students on various aspects of their relationships with their peers:

Likert scale rating	1	2	3	4	5	No response
Other students find subjects easier Student response	0	0	10	9	0	0
%	0	0	52.6	47.4	0	0
Teacher response	4	16	26	22	7	3
%	5.1	20.5	33.3	28.2	9.0	3.8
Able to ask questions in class Student response	0	3	3	9	4	0
%	0	15.8	15.8	47.4	21.0	0
Teacher response	3	12	18	30	15	0
%	3.8	15.4	23.1	38.5	19.2	0
Afraid to ask questions in class Student response	4	7	1	7	0	0
%	21.0	36.8	5.3	36.8	0	0
Teacher response	16	32	21	8	1	0
%	20.5	41.0	26.9	10.2	1.3	0

Attribution

Table 14 shows the students' and teachers' views of whether the students attributed their accomplishments to luck and their failures to incompetence or inadequacy:

Likert scale rating	1	2	3	4	5	No response
Accomplishments due to luck Student responses	3	11	4	1	0	0
%	15.8	57.9	21.0	5.3	0	0
Teacher responses	41	26	7	3	1	0
%	52.6	33.3	9.0	3.8	1.3	0
Failures due to incompetence / inadequacy Student responses	1	7	5	5	1	0
%	5.3	36.8	26.3	26.3	5.3	0
Teacher responses	29	21	14	9	3	2
%	37.2	26.9	17.9	11.5	3.8	2.6

Locus of Control

Table 15 shows the students' and teachers' views on whether the students struggled to perform well and whether they blamed themselves for difficulties with their academic studies.

Likert scale rating	1	2	3	4	5	No response
Struggle to perform well Student responses	3	7	6	3	0	0
%	15.8	36.8	31.6	15.8	0	0
Teacher responses	16	25	19	15	2	1
%	20.5	32.1	24.4	19.2	2.6	1.3
Blame self for difficulties Student responses	1	4	5	8	1	0
%	5.3	21.0	26.3	42.1	5.3	0
Teacher responses	6	20	42	7	1	2
%	7.7	25.6	53.8	9.0	1.3	2.6