En-Quire: Critical Minds Project

London Cluster Final Report
Produced in collaboration with the Art, Design & Museology department,
School of Arts & Humanities,
Institute of Education, University of London

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Participating Galleries:
Whitechapel Art Gallery (lead gallery)
Bow Arts Trust
Chisenhale Gallery
Space the Triangle

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Introduction

The Critical Minds project provides an opportunity for the London Cluster to develop and investigate partnerships between schools, artists and contemporary art galleries. By focusing on learning within the context of these partnerships the research team aim to discover whether traditional pedagogies in art and design can be complemented and extended to develop a more critical and creative curriculum. In response to the generic research question proposed by En-quire: 'What are the conditions for enabling learning in the gallery context?' our analysis counter-balances the Council for Museums, Libraries and Archives' research (MLA 2004) which resulted in a set of Generic Learning Outcomes (GLOs), that is the products of, rather than the conditions for, learning. Our particular interest in young people's access to contemporary art demonstrates a concern to identify the critical thinking students use when engaging with unfamiliar and potentially challenging practices. This way of thinking, and the process of reflection closely allied to it, is one that has the potential to transform attitudes, practices and ultimately values. These processes are central to the reflexive, dialogical and socially engaged practices of many contemporary artists whose work can be seen to challenge normative practices and naturalised beliefs. Such works are often overlooked in the mass media where contemporary practice is represented by only those works that have the potential to shock. With this exposure contemporary art comes to appear absurd, deficient or pornographic. The art gallery and its educational programmes are therefore a vehicle through which these characterisations of contemporary art can be questioned and a fruitful dialogue developed with schools in which the needs and interests of students can be related to the concerns of artists, critics, curators and educators. Additionally, through this research, we hope to provide insights into the ways gallery education enables students to question both assumptions about their habituated ways of learning and the institutional systems that label them as specific kinds of learners.

The London Cluster defines learning as a social and transformative process. This understanding posits learning as something that is constructed by individuals in interaction with others and their environment; put simply, learning is a social process through which people make meaning from experience (Vygotsky 1978). This understanding contrasts with traditional definitions of learning where it is theorised as a process of the acquisition, assimilation and application of knowledge. In this latter definition knowledge is something objective, something that experts (teachers) can pass on to novices (students) through a process that Paulo Freire terms the 'banking system', one that he believes is counter-productive (1990). In contrast, when learning is theorised as a constructive process the learner is recognised as the maker of meaning and the teacher as the person who constructs learning situations to make this process possible. This is not just a facilitative role but a creative and collaborative one.

The geography of our research, across different and institutionally distinct pedagogical sites, and its focus, contemporary art, makes the art gallery an appropriate locus for collaboration. This is a place where professionals from different disciplines (artists, gallery educators and teachers) come together to form partnerships to develop creative, critical and inclusive learning experiences. In this respect the Critical Minds research is informed by the government's drive to develop educational practices through partnerships (www.creative-partnerships.com; engage projects: Envision, www.engage.org/projects/en-vision.aspx and Collect and Share, www.collectandshare.eu.com/) and to understand the conditions under which people best learn (www.inspiringlearningforall.gov.uk; 'About Learning' www.demos.co.uk). Most of these partnerships are concerned to encourage people, including school students, to make good use of the resources provided by public institutions. The MLA's GLOs are a significant contribution to this quest and they are being widely disseminated and applied to learning across the cultural sector. We believe that findings from the Critical Minds research can complement the GLOs and offer alternative understandings of the ways young people learn in the gallery context.

Methodology

Research questions

Generic (En-Quire):

What are the conditions for enabling learning in the gallery context?

Specific (London):

In what ways does action research as a form of pedagogic collaboration enable learning in gallery education?

What conditions and strategies can develop young people's critical thinking in relation to contemporary art?

Action research

Action research refers to a way of researching in which participants in some field, here art education, identify a problem or area for development and collectively investigate how change can be effected. Through collaborative action they implement and review change in a cyclical process that ensures participants cannot distance themselves from the conditions that they intend to change. In this way transformation is not imposed by some external body in the form of legislation or abstract theory but is instead grounded in the working lives of the participants. It is therefore the participants who explore the relationship between theory and practice and thus take responsibility for its theoretical validity, its application and its practicability.

In the model devised by the London Cluster, action research teams were allocated to each of the four galleries: Whitechapel (lead gallery), Bow Arts, Chisenhale, Space the Triangle. These teams comprised art teachers, artists and gallery educators who met to plan, implement and review the pedagogical programme; Critical Minds was specifically designed in relation to the learning of secondary school art and design students. This process of 'reflection-in-action' required not only discursive review but diaristic habits and a regime of recording events and outcomes to contribute to data.

The Higher Education partner, Institute of Education, University of London (IoE) adopted the role of 'critical friend', engaging in observation and participant observation in order to gather data for analysis. In this sense, our report is not typical of action research in that the action researchers are not themselves responsible for the findings and recommendations. Rather they have been responsible for the construction of a specific pedagogic discourse that has formed the object (pedagogic conditions and relations) for analysis and that has in turn informed the findings. We have therefore devised this in-between, hybrid model in order to analyse the perceptions of the action research teams and those of the students. This allows us to identify and examine the various voices at play within the pedagogic discourse, a process that requires some critical distance and therefore places the HE team in a parallel if complementary position. Nonetheless, the collaborative and qualitative orientation of our report is sympathetic to the aims of action research and although the report does not aim to describe the full richness of the experience, both for action researchers and for students, we believe it highlights those elements of the programme that help to answer the research question.

Discourse analysis

The way in which we analyse data throughout this report draws on a type of discourse analysis. We define discourse as a particular way of relating to a phenomenon (here, art in education) that both conditions how it is talked about and how it is produced as a set of practices. As Stuart Hall explains: 'all understanding occurs and all meaning and knowledge are constructed through discourse, discourses both create knowledge and define a way a thing can be understood and spoken about' (in Barker and Galasinski 2001: 31). We therefore look at the ways participants experienced the Critical Minds project as expressed through reflective conversations and interviews. These reflections tell us what artists, gallery educators, teachers and students felt about their experiences at a specific moment after the pedagogic events had taken place, either as a part of the action research process or as staged conversations between students and researchers in the form of interviews. Although the data collected through this process is in the form of language we also recognise that the events referred to are multimodal, combining, for example, linguistic, visual, haptic and kinaesthetic forms of communication in specific social situations. This multimodal experience is the vehicle through which the institutional discourses of artists, gallery and art education are communicated to participants. This means that discourse, in our

understanding, includes modes of communication other then language; as Kress and Leeuwen stress: 'Three things are designed simultaneously: (1) a formulation of a discourse or combination of discourses, (2) a particular (inter)action, in which the discourse is embedded, and (3) a particular way of combining semiotic modes' (2001: 21). Although this research prioritises linguistic forms of data as indicative of the discourses at play in Critical Minds we recognise that the project was a complex combination of interactions and productions many of which prioritised modes other than language (for example, visual objects, gestures represented on film) and that these modes are equally productive of the discourses embedded in the project.

Data

The data that we have selected for our analysis is in the form of transcribed speech and written texts and is drawn from:

- Student entry and exit questionnaires;
- In-depth interviews with 12 students (3 from each school chosen by the action research teams in relation to the categories: 'good' at art, 'resistant' to art, 'wild-card' [in the findings the 'wild card' students are given individual 'labels': hyperactive, live-wire, unfathomable, enthusiastic]);
- Action Researchers' Reviews.

Research ethics

The IoE team followed the British Educational Research Association's (BERA) ethical guidelines (2004) in which respect for participants, democratic values and the principle of academic freedom is considered in relation to responsibilities towards participants, sponsors and the research community.

In order to ensure the confidentiality and anonymity of participants no individual or school is named, although, with agreement, the IoE research team and participating galleries are identified. All participants provided voluntary, informed consent to allow the research team to use statements, uttered or written, as data within the research and for the reproduction of photographic records. Permissions were sought from the Head of each school to undertake in-depth interviews with students. These interviews were conducted to encourage students 'to express their views freely in all matters affecting them, commensurate with their age and maturity' (p. 6). Before the report was completed the action research teams were provided with drafts and invited to comment on matters of fact and interpretation; their feedback informed the final version.

Background (Contexts)

The Critical Minds programme is conceived as a collaboration between artists, gallery educators and teachers who represent three forms of educational practice: artists' placements, gallery education, secondary school art and design. Each of these practices manifests itself as a type of discourse. We recognise that Critical Minds cannot be divorced from the discourses in which it is embedded. It is therefore necessary to establish how institutional discourses frame the developing project and condition the way students relate to it. It is also important to acknowledge the ways in which students themselves are positioned within specific social situations and cultural contexts and how these constitute significant, demotic discourses that parallel the institutional ones and likewise inform the conditions for learning in gallery education. In this way, our research looks at the relationships between these discourses as they meet, complement, contradict or resist one another and in turn form new, pedagogic discourses.

In this introductory section we categorise the schools involved in Critical Minds in relation to their students' socio/economic status taking into account the catchment area and government criteria such as free school meals. We also provide details about the artists', gallery educators' and teachers' backgrounds and other contextual information to indicate the partnership resources. The curriculum subject art and design is the vehicle through which many young people first have access to galleries and artists and we therefore provide an overview of this curriculum (its policy and procedures) to suggest how students' experience is framed by normative classroom practices. We cite students' perceptions of their experiences of the curriculum subject art and design to demonstrate the extent to which they confirm or provide alternatives to these norms. We define the aims of the galleries' educational programmes by citing a document (the Whitechapel's evaluation of 'Creative Connections' [Carrington and Hope 2004]) indicative of the institutional discourse that facilitates and regulates practices in the field (Creative Connections is an ongoing project organised by Whitechapel Art Gallery, the lead gallery in the East London Cluster). These aims are analysed to identify the institutional discourse framing Critical Minds and we cite the views of the action research teams (artists, art teachers and gallery educators) from each of the four galleries to establish points of convergence and difference. We end this section by examining whether artists, as interventionists within the institutional discourses of galleries and schools, encourage participants to think differently about their learning.

Schools

School 1:

School	Co-educational comprehensive, 1154 students, over 17 languages are spoken, media arts college, new block, lots of IT, drama, theatre, 33% eligible for free school meals;
Students	Yr. 10 and Yr. 9;
Department	Successful; orthodox: good resources (including technology);
Teacher	10 yrs, painter, perception that students are becoming difficult, two involved in the project have behaviour monitors;
Artist	Video artist;
Gallery educator	Fine art, new to project, community arts based, little work with schools;
Project	2 x visits to Francis Alys (video artist) exhibition (Phase 2);
Department	Fine art, good results/reputation, 'school art', pastiche-led;
Time/space	5x13/4 hrs + 2 day block, 1 gallery visit (Phase 1).

School 2:

School	Girls' comprehensive, 1415 students, largely of Asian origin (mostly 3rd generation) (mostly Muslim) (aspirational re. the professions), 75% eligible for free school meals;
Students	Yr. 10 and Yr. 11;
Department	Teacher independence within liberal ethos: wide resources (including technology);
Teacher	Newly Qualified Teacher (NQT) crafts (textiles);
Artist 1	Installation: working in schools for 10 yrs;
Artist 2	12 yrs in UK: musician, writer, performance central, extensive educational work with creative writing;
Gallery educator	Former primary teacher (art and design specialism);
The project	1 visit to Whitechapel, Nunnery outside, 2 days;
Time/space	Broken by long stretches, end of project two-day block.

School 3:

School	Co-educational comprehensive, 1080 students, ethnically diverse (no dominant culture) money for new arts block (art and design excluded). Coming out of special measures, social economic disadvantages: above 21% SEN, 63 languages, 48% EAL, high student mobility, attainment on entry low compared to average, Local Education Action Zone, technology college, 55% eligible for free school meals;
Students	Yr 9;
Department	Diverse practice, informed by teacher interests/specialism fairly well-resourced, best ever grades for art and design last year (2005);

Teacher	3 yrs, fine art (mixed media), experience working with gallery and artist;
Artist	Mixed-media/conceptual (inc. video) everyday life as practice;
Gallery educator	Artist, arts project management and training, former Steiner school teacher;
Project	Phase 1: Whitechapel 3 x visits 'Faces in the Crowd'; Phase 2: Museum of Childhood, (Paul McCarthy exhibition deemed unsuitable for under-16s) Chisenhale Gallery;
Time/space	Once a week, 2hrs am, 12 weeks.

School 4:

School	Co-educational comprehensive, 1350 students, challenging, inner-city, deprived area, EAL 75%, many ethnic communities, Bangladeshi, Pakistani (Muslim) (girls wear the hijab) Hindu (cultural memory differences, religion interwoven) strict. Contemporary art deemed offensive (nudes) attainment on entry low, pressure on teacher to perform, 33% SEN, sports and arts mark status (drama), over half are eligible for free school meals;
Students	Yr. 10;
Department	Feels neglected, budget cuts year-on-year, limited resources;
Teacher	HoD, prior experience of working with same team;
Artist	Photographer, ('not in the normal sense') already worked on research projects;
Gallery educator	Painter (landscape), PGCE in art and design, secondary and primary experience;
Project	Chisenhale Gallery exhibitions;
Time/space	1. Once a week, 1hr, some sessions missed, 2 x gallery whole day, 4 x classroom; 2. Block of 5 days (whole days) gallery space with field work, use of new technologies (galleries).

Art and design

Art and design is a National Curriculum foundation subject at KS3 which ensures that all students participate in art education for the first three years of their secondary education. At GCSE it is a popular option, 209,647 students elected to follow the subject in 2005, and rising numbers are following art and design at 'AS' (58,182) and 'A2' levels (40,454). In addition there are a number of full time vocational courses such as AVCEs increasing the student population engaging with visual education as a potential route into employment and thereby highlighting the need for art educationalists to engage with contemporary practices.

Art education has a long and distinguished history in this country and at times has been a vehicle for progressive education positioning art and design within

both creative and affirmative discourses (Ruskin 1840-; Morris 1883; Fry 1909; Read 1943; Richardson 1948; Thubron & Hamilton in Lynton 1992). The effect of these discourses in schools has been somewhat intermittent, and it was not until the arrival of the National Curriculum (DFE 1991) that an attempt was made to legislate for progressive principles within the general aims of the subject so that creative and self-expressive practice rather than skills-based training became an entitlement for all (5-14 years). In the current version (DfEE 1999) the opening lines echo these sentiments: 'Art and design stimulates creativity and imagination. It provides visual, tactile and sensory experiences and a unique way of understanding and responding to the world' (p.166). However, for some years before its publication there had been calls to ensure that the subject also acknowledged the visual arts as a critical practice (Field 1970; Eisner 1972; Allison 1972; Thistlewood 1989; Hughes 1998; Steers 2003). It was recognised that the subject should not only encourage young people to make works of art but that it should enable them to engage critically with visual culture; just as in English language and literature, art and design should be concerned with the reception as well as the production of cultural forms. However, despite revision the critical dimension is still seen as a fragile and limited aspect of the curriculum (Hughes 1989; Davies 1995; QCA 1998; Addison et al 2003; Downing and Watson 2004).

The two most common ways in which art teachers confidently address critical studies is by directing students to analyse canonic works of western art with reference to the formal elements and by recourse to transcription and pastiche, an acritical orthodoxy where students 'copy' and/or emulate the work of a favoured artist by using photographic reproductions.

> *4/enthusiastic:* Normally it will either be analysing a piece of work that we are working on, say an artist, or we'd be copying one of the works and making it into our own.

It is however possible for transcription and pastiche to lead to critical forms of practice if students are encouraged to move away from the imitation of surface to a consideration of process:

> *2/artist 1:* There's nothing wrong with engaging in an exercise that is derivative, so that you can understand how that style works, understand the pros and cons in reference to what you like. It helps to inform, especially when you are young and in a formative stage, your interests and your passions and your likes and dislikes, and there's nothing wrong with copying as an approach to understanding art. (13.12.05)

Critical studies as an investigative process is perceived as alien to the making-led practices which characterise discourses in the subject and which are believed to be an outlet for self-expression and the 'accurate' representation of the visible world (Atkinson 2002). When questioned about the type of art that they liked, students were most likely to interpret this question in reference to practical activities undertaken in their art lessons. Over one half (57.1%) of students referenced making or skills, whilst just over one third (33.8%) produced the names of artists/styles.

Table 1: What sort of art did students like?

	No. of students	%
Practical: - referenced making/skills	44	57.1
Theoretical: - referenced artist name or art movement	26	33.8
Other	7	9.1
Total	77	100.0
Left blank	2	-

The prominence of making and practical activities within students' perceptions of 'art' was further demonstrated when students reported what they enjoyed about their art and design lessons. Table 2 indicates that for over one half of students (50.6%) making, and the satisfaction gained in making, was the aspect of their art lessons that brought them the most enjoyment; this was by far the most common response to this question. The social aspect of the art lesson, and the acquisition of new techniques/skills were both given as factors contributing to enjoyment by 13.9% students in each instance. Although only 13.9% saw the social dimension of the art lesson as a reason for their enjoyment, findings from the exit questionnaire show that working with others was the skill that most students agreed they had developed as a result of this project (73.4% 'strongly agreed' or 'agreed' with this; see Chart 9). It is notable that learning about artists was only considered an enjoyable part of the art lesson by 1.3% students.

Table 2: What did students enjoy about their art lessons?

	No. of students	As % of all students in Cluster
Making/satisfaction	40	50.6
Social	11	13.9
Creativity/expression	7	8.9
Techniques/skills	11	13.9
Learning about artists	1	1.3
Other	6	7.6
Left blank	3	3.8

Chart 1 illustrates the findings from Table 2, reinforcing the notion that for the vast majority of students making/satisfaction and the ability to develop new techniques/skills feature strongly in what they enjoy about their art lessons. This was true across all four of the schools taking part in Critical Minds.

Chart 1

What students liked about their art lessons
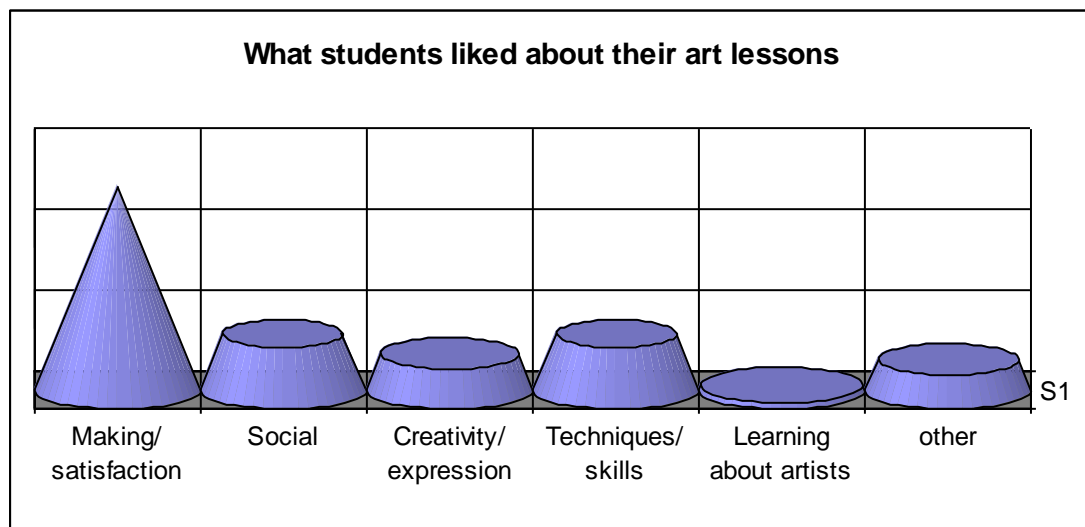
Chart 2 disaggregates the findings by school, showing that beyond making, there were some distinct differences between what students enjoyed. Students at school 2 strongly enjoyed the creative/expressive dimension of their art lessons, whilst this aspect was not mentioned by any students at school 4, who were more likely to enjoy learning techniques/skills. Students at school 3 were the only respondents who claimed to enjoy learning about artists, this part of the art lesson was not reported as an enjoyable aspect by students from any of the other schools.

Chart 2
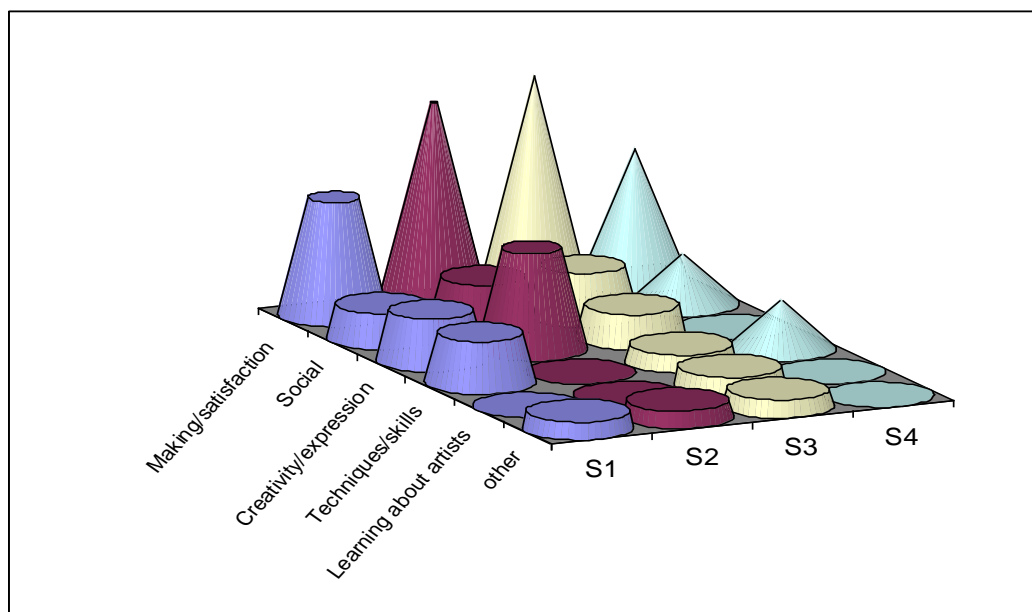
Making takes on this privileged position because it is seen to answer the primary aim of developing practical skills for the purposes of expression. This emphasis on making also militates against contextual approaches not only because of time restrictions but because the discussion of traditions and

imposition of conventions is seen as potentially contaminating, a dilution of the personal expression which is supposedly the ultimate goal of the subject. This is very peculiar to art and design as one of the artists notes:

> *2/artist 1:* Thinking back to my learning art at school and learning science, it would be just like practical science everyday and you would never just do practical science everyday because there's the context to put it on and you are making sense of why did someone do that and the other things they had been looking at. (16.3.05)

However, those students who enjoy the way the subject is currently taught reaffirm their preference from traditional making practices:

> *4/enthusiastic:* I like painting a lot and just using my imagination or copying a piece of art work and creating it into my own work…
> (When you think of contemporary art what springs to mind?)
> I do not know… I haven't got a clue.

With the aim to develop discursive, critical practices this making-led climate was perceived by the artists as an obstacle:

> *3/artist:* 'Dialogue' was our issue, so we were thinking 'how can we get discussion going' and this superseded activity. (14.2.06)

Despite the move towards more discursive and collaborative practices many of the students maintain a sense that art and design is somehow divorced from social and cultural practice and is rather an outlet for personal creativity:

> *1/resistant:* … it helps you to be creative. You can do anything, just like using your imagination.

> *3/resistant:* Art is really creative and I really get into it and want to do more. Sometimes I even spend time like during my break doing my work, cos I really look forward to it.

> *3/good:* Yeah, I like it cos it shows our creative side and we can be as messy or do whatever we want and it still is art. I think it's really good.

Additionally the time out from the logocentric curriculum afforded by art and design is seen as an opportunity to relax, to engage in expressive, therapeutic activity.

> *2/good:* I think art is more relaxing. If you're having like a bad day you can show that through your art, like. If you're feeling upset like, and you're asked to do a shading thing, you can shade it dark, and if you're happy then you can reflect that in your drawing, or whatever you do.

> *1/hyperactive:* … some time you come from playtime happy or sad and by using art you can express your feeling in a more visual way.

3/unfathomable: Art makes you relax more because its not like, its stuff that you know that you can do, that in other lessons you have to learn about and stuff like. So Maths, you have to, it's more complicated than art.

In the same way that some students identify with the subject and see it as an escape from the disciplinary structures imposed by the logocentric curriculum, many parents/carers and other subject teachers (often including the senior management team) relegate the subject to one in which recreational and remedial functions are foregrounded.

2/live-wire: I think a lot of people in my class chose art because they thought it would be easy.

3/good: In art you can just be as whacky as you want and then like you really enjoy yourself but in other lessons you have to really study about what you're doing. But in art you can just know what you are doing and just get on with and just be as messy or as whacky as you want.

2/good: I mean, you can give them instructions, but I think it's best to just let them have their way and just let them interpret what they're going to do and what they feel like doing. Art is not right or wrong, it's what you think something should look like. So I don't think somebody should be telling you what to do, you should just come up with it. That's why it's all different.

These perceptions constitute a notion of art that is peculiar to schools, one that bears little relationship to contemporary practices (Dawe-Lane 1995; Dawtrey et al 1996; Hughes 1998; Burgess and Addison 2004) but one that has developed out from the discourses of expressivism that fuelled aspects of early modernism (Kandinsky 1911; Croce 1901; Dubuffet 1948). In expressivism at its most extreme, all cultural conventions are seen as an obstacle to the expression of pure feeling. Within this tradition, language, especially in its reflective and analytical rather than poetic modes, is seen as an inadequate vehicle for communicating the immediacy, complexity and sublimity of human experience, experience that can be embodied through the arts (Witkin 1974; Abbs 1987; Hargreaves 1983; Ross 1984). The discourse of expressivism tends not to be so extreme in schools (Taylor 1986) but traces of it remain sedimented within populist notions of art as a 'mirror of the soul'.

1/hyperactive: Art means so much stuff, believe it or not, it means body and soul… If you're doing a project about anger and, for instance, you decide you're going to have a baby, there's no way in hell or heaven that you can sit down and do something really deep and dark about art. You'd probably just chuck it in the bin and start doing this totally miraculous thing about love and other stuff and next thing you know you might draw this pregnant woman with a baby. There are load of pictures like that, I seen. I don't think you should have all this long debating and talk in the classroom about what art means. You should make art… if

you want to talk you should act or be in English, right? If I talk in art I like to have a laugh and talk with people, but then I don't concentrate and my art is not so good, you have to have your mind in art. So I think it's about body and soul and other matters. I don't really think, like, anyone is with me, but I don't care what anyone else thinks.

Despite the necessity for instruction and explanation and a fondness by students for social chatter, an antipathy for language has developed in the artroom, especially in relation to discursive and written activities. Within this pedagogic discourse word and image are conceived as opposites designating text as 'matter out of place'.

2/good: I like writing because I like English and I like being creative in the pen. I like being imaginative.… Not in art. I'd jot stuff down, but not like the way we did it because I just think in art you should just use your hands, but like not in writing.

Other students recognise that the regimes of assessment within schooling ensure that writing is an inevitable albeit a necessary evil.

2/live-wire: Anyway, you have to write in art because otherwise you can't show that you've understood it.

This antipathy is at odds with the uses of text/image in the wider field of material and visual culture. Students often come across works of art not in galleries and museums but through the mass media. Students were asked to indicate sites where they had seen contemporary art outside of the classroom. The findings, in Table 3 see overleaf, show that for 60.8% students the Internet was their primary source for viewing or encountering contemporary art. Students were not asked to elaborate on the types of works they had seen which they felt were 'contemporary art'. However, the top three responses – the Internet, magazines (given by 44.3% students) and newspapers (by 30.4% students) are all sites where image and text coexist, within a multimodal totality sometimes including sound. This suggests, if not confirms, that students are more familiar with the intersection of text/image through their actions outside of school, an experience of visual and material culture that is not continued into their practice in the art classroom.

Table 3: Where had students seen contemporary art outside of the classroom?

	No. of respondents giving this as an answer	As % of all students in Cluster
The Internet	48	60.8
Magazines	35	44.3
Newspapers	24	30.4
Public spaces	22	27.9
Art centres	21	26.6
Studios	14	17.7
Community centres	12	15.2
Total no. of instances	176	-

Chart 3 illustrates other points of encounter with contemporary art given by students. Public spaces were cited by 27.9 % and art centres by 26.6%. A range of answers given by just one or two individuals, and therefore not included in the composite data here, although still worthy of mention were: buses, books, posters, cartoons and bands.

Chart 3
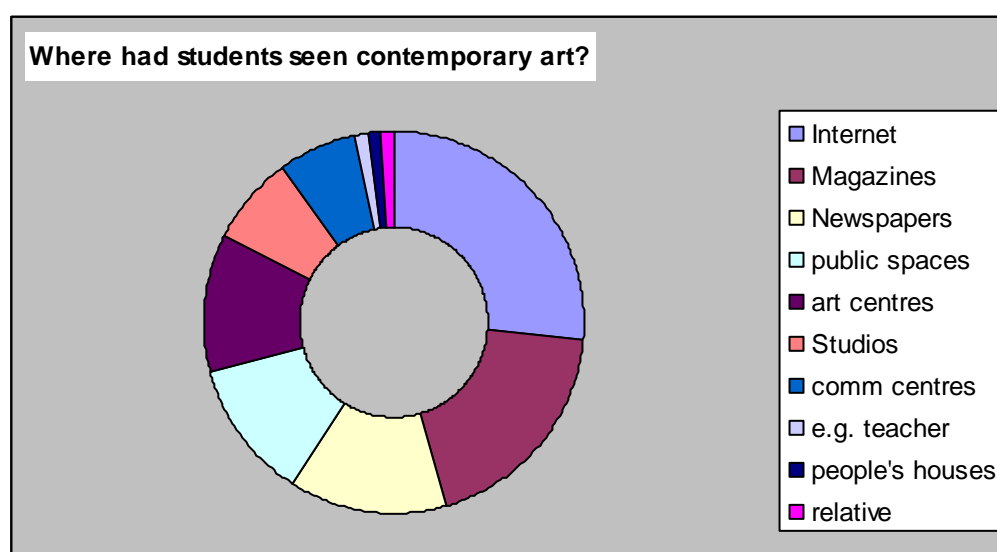
In modern and contemporary practice, artists, craftspeople and designers frequently deploy language in the form of speech and writing to complement or even displace the image (it should be remembered that writing is a visual mode). When artists use multi-media, the boundaries between different modes of expression and communication are blurred and the reception of the work is dependent on multimodal readings (Kress and Leeuwen 2001). Many students are familiar with and adept at using multimedia technologies so that the division between word and image is largely restricted to school art and design. This understanding of visual culture is quite distinct from the culture of school art where the dominant values are presented in the form of a binary

opposition, that between accuracy and expression, with their implications of objective and subjective practices (Atkinson 2002). Despite the promised panacea of new technology and examples of exceptional practice in some art departments (iJADE) traditional drawing and painting remain the dominant practices. Although these practices are still vital and potent to artists working within the contemporary field, school art continues to privilege optical and mimetic procedures rooted in a nostalgic pictorialism that limits understanding. Most of the artists' projects within Critical Minds explicitly challenge these understandings employing discursive, questioning strategies and moving between and across semiotic modes.

In these ways, 'School Art' is often characterised as insular and retrospective (Hughes 1998; Steers 2003; Downing and Watson 2004). However, it must be reaffirmed that this model of art and design does provide an important and popular alternative to the logocentric curriculum, a counter-weight to information-led pedagogies that can all too easily alienate students whose social background denies them access to the social and cultural capital necessary to achieve within an academic environment.

> *2/live-wire:* I like them a lot [art lessons] They're practically the only lesson I enjoy in school … You don't get bored to death. Everything else is really, to pass it you have to learn a certain something. There's no, like you have to know it for definite. You have to know the rules of it, you have to know everything about it. But with art you don't need to, there's all sorts of answers. There's not just one answer like 2+2 is 4, there's lots of different answers.

Gallery partnerships: artists, art teachers, gallery educators

The questionnaires indicate that east London students' introduction to galleries tends to be facilitated through school visits to the large national institutions. Of the students taking part in Critical Minds, 87.3% had visited a gallery prior to the project. Of these, school trips accounted for 77.2% whilst only 6.3% had made visits on their own.

Table 4: Who had students visited a gallery with? Chart 4:

	No. of students giving this answer	As % of all students in Cluster
School	61	77.2
Family	19	24.0
Friends	10	12.7
On own	5	6.3
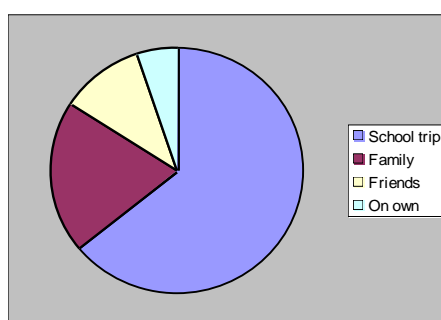
Bearing in mind that school visits were providing gallery exposure for the majority of students, they were asked to list the names of any of the galleries they could remember visiting. The aggregated findings are shown in Table 5

below. Tate Modern was the most commonly recalled gallery, being listed by just under one third of all students (33.0%). Behind this was Tate Britain, recalled by 19% students and then the National Gallery, London – by 5.1%. 21.5% of students claimed they could not remember the name of the galleries they had visited.

Table 5: Which galleries did students remember visiting?

| | School 1 | School 2 | School 3 | School 4 | Total for Cluster | |
					No. of students listing this gallery	As % of all students in Cluster
Tate Modern	7	19	0	0	26	33.0
Tate Britain	5	6	3	1	15	19.0
National Gallery	2	2	-	-	4	5.1
Don't remember	6	-	9	2	17	21.5

Chart 5 shows the spread of gallery visits by each school. This indicates that Tate Britain was the only gallery recalled by students at school 4, whereas students at school 1 listed the names of seven different galleries they had visited, either as a school trip or external visit. Students at school 1 also reported greater diversity in the spaces visited than students at the other schools, claiming visits to sites from the Dali Museum and Henry Moore Institute to Tate Modern and Tate Britain. Tate Modern accounted for the gallery listed by most students at school 2, whereas Tate Britain was the only gallery recalled by students at all schools. The chart indicates the prominence of national institutions within students' experiences of gallery visits.

Chart 5
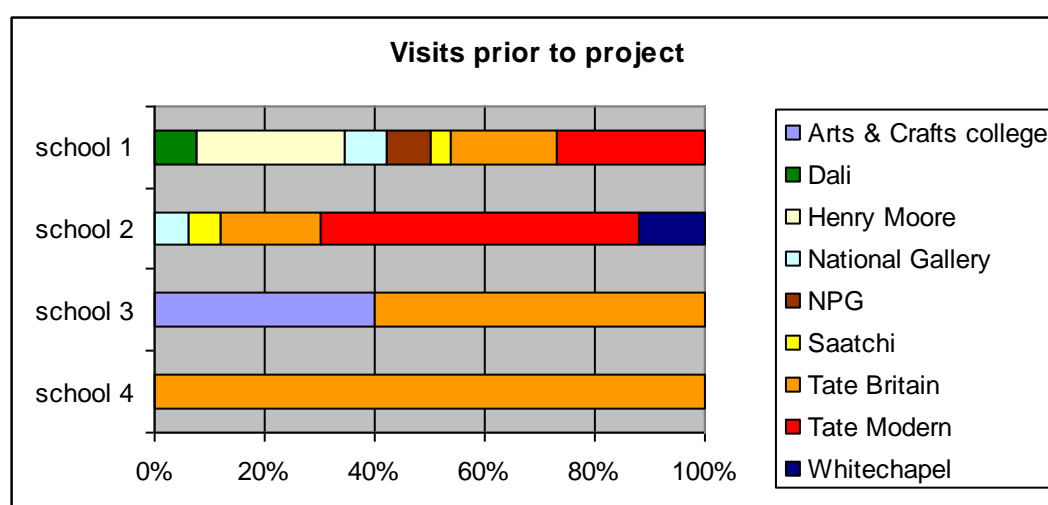
This dependence on the Nationals is not surprising given that they house many of the canonic exemplars students are encouraged to reference in their work. They also offer practicable, published frameworks for accessing works

of art. Both the collections and the pedagogic apparatus therefore take on the status of legitimated knowledge. Additionally, their popularity may be partly due to the relatively anonymous environment they provide for both teachers and students placing less responsibility on the dialogue required to sustain the partnerships necessary for working with smaller, local galleries as in the Critical Minds project.

Institutional discourse
Just as we have begun to map students' perceptions in relation to discourses in the field of art and art education in order to understand their experience of art and design in schools, here we investigate the educational discourse within the Whitechapel art gallery to exemplify the language and rhetoric that forms around contemporary art when it is exhibited and promoted within local communities. We interweave statements by gallery educators with an analysis of an official document to establish the aims of educational partnerships and how they impact on learning.

The Whitechapel Art Gallery has been a pioneer in the development of outreach programmes enabling artists to collaborate with local schools and communities, including the recent 'Creative Connections' (beginning 2002). It should be remembered that Critical Minds draws on the action research undertaken by participating artists, gallery educators and teachers and therefore includes evaluations of existing and ongoing practice, including Creative Connections). For the purposes of this report, the aims of Creative Connections have been selected as indicative of gallery education. The aims are stated as follows:

> With a focus on improving students' visual literacy, creative skills, understanding and enjoyment of modern and contemporary art Creative Connections aims to increase students' motivation to achieve, particularly at exam level, while encouraging an increased awareness of the role of contemporary artists within society, through interaction with living artists.

> Placing artists in schools Creative Connections aims to foster creative collaboration between artists and teachers, giving teachers the opportunity to extend their engagement with modern and contemporary art, and through regular forums and inset sessions, Creative Connections aims to support the professional development of both teachers and artists.
> (www.whitechapel.org/content.php?page_id=1905 n.d. retrieved 23.3.06)

In these aims gallery educators are positioned as mediators who connect the rapidly changing field of contemporary practice to the mainstream curriculum, a role that presupposes art teachers are unsupported in developing a critical and creative curriculum that makes reference to contemporary art. In effect, such support implies a deficit model (Dawe-Lane 1995; Burgess 2003):

> *3/gallery educator:* The vast majority of teaching in art is skills-based [cites evidence from report "School Art, What's in it?" (Downing 2004]

Most artists and galleries can bring an expansion of that, and risk-taking. (14.2.06)

Gallery educators believe that they can ameliorate this situation through their brokerage:

> *2/gallery educator:* I think, having worked with lots of teachers and lots of artists… there is a big difference between them, and the whole sort of brokerage issue in this project has been easy because you've made things quite easy. (21.02.05)

The actions which gallery educators deploy within Creative Connections are characterised in two ways, one: a nurturing role, 'encouraging', 'foster'[ing], and 'support'[ing], a role replicated in Critical Minds, albeit with more egalitarian intentions:

> *2/gallery educator:* Everyone is sort of on an equal platform and understands that at the beginning, and the teacher feels valued as a maker and a practitioner themselves. (21.02.05)

And two: by actions that pertain to measurable outcomes of progression: 'improving', 'extend'[ing], 'increase'[ing]. Gallery educators participating in Critical Minds notably assess the project in such terms:

> *2/gallery educator:* It was definitely a progressive process. I mean, I don't actually think it started really, really properly until we were actually concentrated working in the gallery and at that time that was that point where I thought the [students] were having really serious transformation (13.12.05)

Gallery educators are in a position to mediate between schools and artists because they have access to the resources (curators, critics and contemporary artists) that teachers supposedly lack. These resources provide them with intellectual and cultural capital, a capital that can be redistributed through the agency of the artist. In Critical Minds most artists differentiated their role from the other roles in the partnership:

> *2/artist 1:* I'm not hired as an educator, I'm hired as an artist and it's really important that when you're hiring someone like me, or someone like X, you're not hiring an educator, you're hiring essentially an adjunct to an educator. (22/02/05)

Through school placements gallery educators are able to introduce artists as agents of change. Indeed Creative Connections claims that over a sustained period, gallery educators can facilitate 'interactions' and 'collaborations' between artists and teachers that will enable students to gain pleasure from modern and contemporary art, develop an awareness of art as a social practice and improve their school performance.

This process also makes possible collaborations between artists and teachers that encourage mutually informing, reflexive partnerships.

3/teacher: I felt supported. I wasn't on my own. It's a very solitary experience, teaching. In the classroom with loads of lads coming in and out. You don't talk to adults unless you seek them out! It's lonely! Sometimes a whole week of only speaking to children. Sometimes talking to adults is a most scary proposition because your vocabulary has been reduced to the level of 14-year olds. You lose social skills. (14.2.06)

The rhetoric of the aims of Creative Connections closely mirrors government policy documents (NACCCE 1999; DCMS 2000; DCMS 2001) in which museums, galleries and libraries are seen as central to the development of a multi-skilled population in support of social inclusion. Its aims also relate to the five generic learning outcomes (GLOs) of the MLA (2004) particularly the activities and cognitive and cultural competencies as outlined in the expanded descriptions which can be found at (www.inspiringlearningforall.gov.uk):

GLOs	Creative Connections
1. Knowledge and Understanding 'deepening understanding'	• understanding; extend [teachers'] engagement
2. Skills 'intellectual skills' 'knowing how to do something'	• visual literacy; creative skills;
3. Attitudes and Values 'opinions about [self]/other people' 'positive attitudes'	• awareness; motivation to achieve;
4. Enjoyment, inspiration, creativity	• enjoyment; creative collaboration;
5. Activity, behaviour, progression	• interaction; collaboration; inset; regular forums; achieve… at exam level

However, Creative Connections stresses learning as a social process whereas the GLOs are more concerned to understand the effect of learning on individuals.

Charts 6 and 7 explore students' perceptions of the difference between gallery and classroom education.

Chart 6

Difference learning in gallery

Chart 7

Difference learning in a gallery

Legend: school 1

Categories: See 'real' thing, Different environment, More fun, More interactive, Use imagination, Depends on gallery, No difference, No answer

Difference learning in gallery

Legend: School 2

Categories: Meet different people, See 'real' thing, See context of work, Get ideas, Get out of school, Different environment, Form own opinion, No answer

Difference learning in gallery

Legend: School 3

Categories: See 'real' thing, Different environment, Meet different people, More fun, Get out of school, Inspiring, Experience more, More physical, See in different way, No answer

Difference learning in gallery

Legend: School 4

Categories: Different environment, More fun, Think in different way, More group work, Less time than school, No answer

20

Students were asked to provide in writing what they saw as differences between learning in the gallery and learning in the classroom. Although these comments were collected following the students' participation in the Critical Minds project, they made no reference to the specific context of the gallery/artist partnership with whom they had worked, nor did they make any reference at all to the 'artist' specific to their project or as a generic title. Responses were coded by commonality and the most pervading themes charted above. Chart 6 illustrates commonalities of response across all four schools, whereas Chart 7 breaks down responses by school.

In all of the schools apart from school 4, students expressed the idea that being in the gallery enabled them to see 'the real thing' as opposed to working from reproductions. Students also commonly made reference to the different environment, which in many instances they linked to new stimuli and inspiration. The talked of a gallery being a 'more fun' place to learn and individual students made reference to being enabled to see or think in different ways within the spatial configurations of the gallery environment.

Artists as agents of change

At the beginning of the project when the action research teams were introduced to the MLA Generic Learning Outcomes many of the gallery educators found them acceptable as a pragmatic framework within which to investigate learning. Teachers too were familiar with conceiving learning in relation to given aims, objectives and learning outcomes which they have continuously to articulate and record as evidence of the efficacy of their teaching. However, there was a noticeable resistance by the majority of the artists who perceived them as a set of limiting criteria, a mechanistic and reductive set of abstractions that in no way represent the complexity and richness of learning within artistic practice. This sense of different values and ways of working remained throughout the project and informed the developing dynamic of the action research teams.

> *1/teacher:* I was getting quite cross and I felt I was seen as the one that was nagging all the time and I hate that. I was the one who was saying 'quiet!' and actually blowing my whistle and it was awful. (14.12.05)

> *2/artist 1:* You know we're hired for our skills and as you said, one of the great skills is this unspoken skill, this unspoken understanding, that we're not educators and we're not disciplinarians. I think one of the greatest compliments that you can get… is the teacher coming up to you afterwards and saying 'I had forgotten how to teach that sort of way' - to get kids to think in a different sort of way. (22.02.05)

> *1/teacher:* The kids as well take in on board better than if it was coming from me, you know, having somebody else actually explaining it [a painting in a gallery] to them is also good. Actually, just having somebody else there putting it across, it's just a different technique, a different way of seeing. (21.2.05)

1/artist: as not a trained teacher, I can come up with the creative exercises… I really am trying to think: 'will that work as a group?' No, that should be broken down and stuff. But I don't know how to do it (14.12.05)

3/gallery: educator It wouldn't be right for teachers to impose artists' role onto themselves. It informs what I do; but it wouldn't be right.

In the following section we discuss how students perceive this dynamic. It is evident that many of them do see the experience as different.

2/good: The fact that we had two artists that we could go to and I think it's improved my ability to do art more because we've got feedback from actual artists and to work with them is a really nice thing,

1/resistant: There was a difference because with [the artist] it was more like fun and you get to walk around and express your ideas, but, like, when you're in the art room the vibe isn't really here.

4/good: Cause it's just great to do something arty, but not really, concerning that much art … Like, in the art class we wouldn't do this basically. We just draw.

1/good: It's very different because we didn't really do any drawing or making of any sort. It was all like about filming, which was just a different thing.

4/enthusiastic: I liked the fact that it wasn't all in the room all the time. It was out in the park doing the work, as well as getting ideas and things like that… It just means that I can be free and use my imagination as much as I want**.**

Of particular interest is the way that many students characterised the experience as not only pleasurable but as liberating, a freeing process that appears to have encouraged them to take ownership of the project.

1/resistant: It was like, it gave us like more freedom to like use our own ideas, and, yeah, like to be out of lessons and be doing something more interesting, and stuff like that, yeah.

4/good: Yeah. Freedom… in our art lessons we have to do like a certain thing for our course work. With this… it's like a topic and you just pick what you wanna do and you just do it in your own way with more freedom.

Writing, which students see as antithetical to the subject, was introduced in ways where its normative function was replaced by exploratory and metaphoric uses.

> *2/artist 1:* I was wondering… whether it would be accepted or not, because it's not necessarily viewed as what one does in art class, to actually pick up a pen and write. But they seemed to be perfectly willing to do it and a lot of the stuff I was seeing around the table was great; it was poetic, it was stretched and surreal and comfortable with being like that. (16.3.05)

The artists noted that teachers are liable to become institutionalised, establishing routines and formulaic procedures that are antithetical to creative and critical practice.

> *2/artist 2:* Quite often when I have been to secondary schools, I find the challenge is sometimes not the isolation of the students, but the teacher and how, being involved in that system has actually affected them from having a relationship with a gallery or contemporary artist and they have been a teacher first and an artist second, rather than an artist first and maintaining that level. (21.02.05)

> *3/teacher:* I put one of my drawings on the table and they couldn't believe I could draw! 'Oh miss you mean you can draw as well?' 'As well as what?' 'Teach!' And that's my sad point, me personally wishing they didn't think they needed an artist in the room to feel they had an artist in the room.

> *3/artist:* It's the problem of having an artist in school. They then see the art teacher as just a teacher. But then there's the contradiction of the art teacher showing their art. There's no reason why the project we did couldn't happen without me. Why couldn't a more experimental project happen in the classroom?

Findings

The institutional discourses of gallery education, school art and artists' interventions frame the way in which Critical Minds has been designed and implemented as an educational programme. Students' reflections on their experience of these discourses, as a discourse itself, demonstrate that they often recognise the conditions that best support their learning (understandings that the action research teams are not always able to discover because they do not have the opportunity to engage in one-to-one, in-depth conversations with students). To this end, the terms we employ to categorise the findings have emerged from an analysis of transcripts of interviews between IoE researchers and students. These emergent terms were reformulated from the conversational language of the students into terms that relate to specific learning theories (an additional conditioning discourse) as well as the terminology of the research questions. Thus 'conditions for learning', 'critical thinking' and 'transformations' become the main categories within which the emergent terms are framed. As Wood and Kroger (2000) point out: 'The task of discourse analysis is not to apply categories to participants' talk but rather to identify the ways in which participants themselves actively employ and

construct categories in their talk' (pp. 29-30). However, Fairclough and Wodak (1997) recognise that: 'Discourse is not produced without context and cannot be understood without taking context into consideration… discourses are always connected to other discourses which were produced earlier as well as those which are produced synchronically and subsequently' (p. 277). We intersperse the voices of the students with those of the action researchers to discover how the pedagogic discourse produced by the partnership is experienced and understood differently by the various participants. In addition, these understandings are correlated with the findings drawn from the entry and exit questionnaires.

Conditions for learning

The way we are structuring these findings acknowledges how students experience pedagogic relationships in school settings, the site where they were introduced to the Critical Minds project. As we have demonstrated the majority of students receive the art and design curriculum as a given, a type of knowledge which is manifested as a set of practices in which certain values are embedded, specifically the objective/subjective oscillation between accuracy and expression. It is within the regime of accuracy that many students see themselves as excluded ('I can't draw') and thus as failures; whereas within the discourse of expressivism many see themselves as included ('I can be myself') and thus as contributors, although this contribution is not always valued ('a child of five could do it'). We therefore begin the analysis by looking at the pedagogic relationships between teachers and students, artists and students and within students' peer groups, before moving to a consideration of the ways students do, or do not, take ownership of the project and their own learning. This is followed by an examination of motivational factors that can be deployed strategically by adults to encourage engagement with and ownership of learning.

Adult expertise/support

The rhetoric of art and design promotes freedom as the ideal condition within which students can develop as unique individuals: 'Art and Design is the freedom of the individual, the freedom of expression and the freedom to fail without retort' (Waterfall in DfEE 1999: 116). However, as we have demonstrated, although students experience their art and design lessons as different to dominant logocentric pedagogies, they nonetheless note its constraints. The comments below indicate that despite the emphasis on self-expression students appreciate a structured environment in which they are supported by adults. The discourse on accuracy and the wider experience of schooling possibly condition these responses.

> *2/live-wire*: Well, obviously there are wrong answers, you can't just, well I mean, I know people do it, just like draw a line on a piece of paper and say 'that's art' but I think the right way to teach art, I think we're being

taught art really well because we've all got our own little projects, but we all still get the teacher's attention, yeah.

What the student is articulating here, beyond the discourse on accuracy, corresponds to theories of pedagogy in which learning, as a cognitive process, develops in the first instance through interaction with others, not as an isolated, independent act: 'Every function of a child's cultural development appears twice: first, on the social level, and later, on the individual level; first, between people (interpsychological) and then inside the child (intrapsychological). This applies equally to voluntary attention, to logical memory, and to the formation of concepts. All the higher functions originate as actual relationships between individuals' (Vygotsky 1978: 57).

> *2/good:* … we can interact with people who do this for a living and that helps us to express it in class and we produce more good work.

Further to this social conception of learning Vygotsky theorised a fundamental condition for learning which he referred to as The Zone of Proximal Development (ZPD). This term denotes: 'the distance between the actual development level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers' (Vygotsky 1978: 56)

> *2/live-wire:* But we managed to still create an original piece because there was a lot of people who didn't think we could do it, but we proved them wrong and we did it by asking for help, I think.

> (Do you think a gallery is a good context for learning?)
> *1/resistant:* Yeah… it's usually if you're with somebody that can explain it; it's better for learning than just walking around. You can walk around and like admire work and things, but to understand what they were like, what the meaning was to their work, you'd need somebody to be with you, I think.

> *2/good:* … when we first started with Miss A we got the idea of 'habitat' and I didn't know what she was talking about. As the lessons went on she was gradually explaining, she was a good explainer. When you needed help she would come to you, because there's like so many people in the class so, like, it was hard for her to get around. But she did come and I think I produced really good work, like, with her help as well. But she wants you to, with your own mind, think of the ideas. She doesn't always give you the answer, which is good.

There is a recognition here of the way teachers have to structure the learning experience to account for an oscillation between individual and group needs, to translate new concepts into accessible terms (an incremental process) and, in time, slowly withdraw support to encourage students to work independently and take ownership of their learning.

4/good: They did help providing the cameras. Instead of telling us what to do, they told us like a topic. Not really that 'you have to do this!' Just a way of doing something. We had to figure it out and do it in our own ways.

These comments echo the notion of 'scaffolding', a metaphor used by Wood, Bruner and Ross (1976) to define aspects of Vygotsky's ZPD process. Here a teacher or peer provides students with assistance in those tasks or concepts that they are unable to tackle on their own, providing positive reinforcement and praise even when 'errors' occur. Once students have developed the skills to understand this process the teacher or peer slowly dismantles the scaffolding leaving students to continue their work independently. As Benson (1997) claims: 'Scaffolding is actually a bridge used to build upon what students already know to arrive at something they do not know. If scaffolding is properly administered, it will act as an enabler, not as a disabler.' (Accessed 8 May 2006 from http://www.galileo.peachnet.edu/).

1/resistant: I think you need to be quite positive a lot of the time and use constructive criticism instead of just pointing out negative aspects.

Mutuality

While most students recognise that supportive structures are important in making learning possible, they are keen to point out that they prefer pedagogic relationships in which there is mutual respect. As bel hooks claims in her argument for engaged pedagogy: 'respect… is essential if we are to provide the necessary conditions where learning can most deeply and intimately begin' (1994: 13). Both the most positive and the most negative comments by students relate to these relationships.

1/good: She [the artist] talked to us much more as if we were adults, that's not compared to my teacher… I liked that she talked to us as adults, and even when some people were messing about and not listening she like tried to explain why they should listen, not just shouting at them and telling them what to do. She seemed very different to our teacher, I guess she seemed like I would be if I went into a class, she seemed almost like one of us, yet she was still quite, I don't know, in charge and wouldn't let us mess around too much. [pause] But then like we always knew our teacher was in the room as well.

2/live-wire: was babying us and we found [it] really irritating. I'm not going to name names… That's just my own personal opinion. And Z was babying us and then this person that had supported all of our work before, suddenly turned around and agreed… I know they probably had their reasons, we still felt hurt that we weren't trusted, to be trusted to do our own piece of work.

2/good: They were friendly and they did interact with us like how we would interact as teenagers, but you have to remember they are grown-

ups so you can't exactly be, you know, teenager-like with them. But if they got angry they didn't lose their cool; they like made us understand stuff. But I don't think they did get angry.

2/artist 2: I think, like most young people, the students enjoyed being treated like adults and being given responsibility for their own work/exhibition. It's sometimes easy for me to forget how important encouragement and unconditional support can be – especially when it comes from someone who does *have* to give it – both X and I were always aware that we weren't teachers. (14.12.05)

Another alternative to the prescriptive, teacher-directed models can be found in heuristic education where teachers and students work together to discover solutions for themselves through a process of trial and error, a way of problem-solving that provides a certain mutuality in pedagogic relations (Schon 1992). Some artist-led initiatives have moved beyond this mutuality by developing a more engaged approach where students are invited to instigate projects based on their own interests and lived experiences rather than on problems provided by others (see Lacy 1995; Paley 1994; Harding 2005). Freire calls this approach 'problem posing' as distinct from 'problem-solving' education (1990). None of the projects in Critical Minds took on this form exactly, indeed the evidence suggests that most of the adult teams doubted students' capacity to generate projects from their own experience because schooling discourages and disempowers such approaches.

2/artist 2: Going into schools rather than gallery education I've become aware that there isn't the chance for people to develop their own ideas. Projects are set, and what's nice about going in as an artist is that you don't necessarily have to follow that model. (16.3.05)

However, adult teams recognise that it is important for students to ask questions and listen to others as a pre-condition for developing critical skills, skills that will enable self-esteem, self-determination and, ultimately, well-being.

3/artist: You should be able to walk into any space, in any context and be able to ask questions, have a really good discussion… You don't have to have art history knowledge because that's what's so scary… you feel inadequate. The questioning thing is the only way to approach art.

2/artist 1: it's nice that they are able to express their opinions too and be able to defend their position and ask questions. We, as a society, tend to try to dampen a lot of that down because if you ask too many questions then you're a troublemaker! (13.12.05)

2/artist 1: As Walt Whitman said 'to make a better society you need to make better people' and part of making better people is making people who question, who want to know and who have opinions and are willing to get into arguments. (13.12.05)

Student ownership

Lack
The comments by students indicate that they accept aspects of the given power relations within schooling, albeit reluctantly in some instances. This acceptance can be seen to be generational in its formation, simulating familial relationships where guidance, support and boundary setting characterise interactions. However, it is evident that students want their voices to be taken seriously appreciating a space for equitable if not equal relations. As a consequence, within formal pedagogic situations, students are unlikely to make personal meaning unless adults recognise them as both subject to and agents of learning.

> *2/live-wire:* We were going there [gallery exhibition of students' work] expecting like to be able to do our own thing and then we were given photos and told to arrange them and I was just like 'well this isn't what I was expecting'… I wouldn't want my mum to come to a gallery and see how I had arranged some photos. I'd want my mum to see how we'd done some work.

Here, expectations about what constitutes student production and what counts as art combine with a sense of disempowerment and alienation. This lack of ownership was felt by a number of students toward the end of the project.

> *2/live-wire:* I did like doing this project a lot and I liked the artists we were working with, but I don't think the final gallery is a fair representation of the work we've done. It's like [pause] it's [long pause] I can understand why it is the way it is because it is a school thing, it is funded by the Government, although it's an outside project it's not, it's a school thing.

The exhibition marked a stage when adults intervened in the student production both because of pressures of time and also a perceived need for a representative and coherent presentation that they assume students are unlikely to realise.

> *2/gallery educator: [choosing images for the exhibition powerpoint]* I thought this photograph kind of suggested conceptual, critical thinking more than some of the other images which were just workshop shots. And I guess it will come out more professionally than the other things, which I think is important to the girls, that it feels like a proper exhibition (02.11.05)

> *2/gallery educator:* what are we going to do about these labels? Because the girls seem to want them just put up like that, but they've done this sort of bubble writing, you know, um…I thought I could print them out on the computer or we should use a uniform font or something? (08.11.05)

Self-expression
In secondary art and design, despite the rhetoric of self-expression, the curriculum is largely determined by educationalists. It is true that at GCSE students are expected to make choices and plan the trajectory of their work; nonetheless, the framework within which such autonomy is encouraged is circumscribed by learning criteria that inhibit students' agency. In contradistinction students experience of the Critical Minds project provided a certain freedom from constraints, an opportunity for self-expression.

> *3/good:* Yeah, I mean when I say whacky like, when we done our film art… it was just like a side of us that we wanted to express to other people, like the way we was.

The 'whacky' and 'weird' descriptors that figure in some of the responses indicate that students recognise the difference of these projects to the prescriptive regimes under which they usually work. But this difference does not always revolve around issues of ownership.

> *4/good:* It was just weird. It 's been like a daily routine and then it just changes.

Congruence
Despite the fact that the art and design curriculum is often critiqued as insular and removed from the everyday experiences and needs of young people, some students are able to identify with school practices from a number of subject positions. For example, it is notable that 50% of the students (2) identified as resistant to art for the purposes of the research typology of Critical Minds contradict such labelling.

> *2/disengaged:* I do like my art lessons… that's the lesson that I actually concentrate in once I get into the work and I actually do enjoy art a lot. It's like your own, you're expressing your own, yeah, you're expressing your own working through, not just writing, like through something else… And basically it's included to our environment as well, so it shows where we live and everything, as well.

The art and design curriculum is often perceived as reproducing bourgeois values; visiting galleries is a primary means by which the middle classes enable their children to adopt those markers of distinction that provide them with the taste and authority to take up professional and leadership positions (Bourdieu 1984). Gallery visits within the official curriculum are in this sense a form of distribution, in this instance of social capital. While for many inner-city students there is a clear disjuncture between their usual leisure activities and visits to galleries, some have the social (and cultural) capital that results in a cultural competence when using such venues. The student below has an awareness of the different systems of perception and interpretation acquired through informal as well as formal processes of socialisation. This enables her to be quite dismissive of what Critical Minds has provided because, for her, cultural capital is already a possession.

> *2/good:* I have been to a lot of galleries because my uncle is an artist…
> Yeah, I mean, I go to galleries anyway, so nothing's really changed
> about that, but I go to them more now because it's kind of nice after this
> project and having different ideas.

Although Critical Minds aims to introduce students to critical practices in the
field, some students were able to bypass this aim and identify with the 'cool'
status that has accrued to high-profile, contemporary art (Stallabrass 1999).
This provides a form of cultural capital that is linked to an international, street-
wise, global culture.

> *4/good:* I like the scary art… There's this artwork, David Shrigley: I think
> he's just funny. He is like a cartoonist, if that's the word. It's just so crazy
> and so random and I like being crazy and random. It's just cool; it's cool
> artwork. Yeah.

Most members of the adult team thought very highly of this student and yet
her interview suggests less critical thinking than others. She identifies here
with 'cool' as an attribute of both artists who are provocative and humorous
and of herself (an academic student who is also a leader and a 'funky' role
model).

Making sense of activities in relation to personal preferences
For some students there is, however, no such congruence and they have to
work at making sense of the art and design practices by relating them to
habituated modes of making, for example those that exist in the home (Mason
2005). The student cited below identifies himself as an imaginative person,
despite the opinion of some of the adults involved in the project:

> *4/artist:* He is confident playing football maybe; he is not confident
> thinking about art. So I don't have any strong opinions about him except
> for he needed a lot of pushing, he needed a lot of direction. He needed a
> lot of attention.

The student recognises that his Critical Minds homework provides an outlet
for therapeutic, expressive almost cathartic responses. He suggests that he
usually finds it difficult to work this way in a public forum, possibly because of
the emphasis in this part of the project on emotional disclosure, a practice in
which boys are often reluctant to participate.

> *4/resistant:* The one that they gave us a sketchbook to take back home,
> we did pictures of how we felt. First I thought it was a bit strange. When I
> went home, I found it kind of easy, cause I just draw a few pictures,
> cause I am a very imaginative person… so a few crazy images of how I
> felt. Mostly it was easy and fun to do; a kind of like release or stress or
> whatever's in it. Eventually I got the idea. So I wanted to do like a
> cartoon book, where you kind of lift the pages and things that move. We
> did it with a video camera and play dough.

He evidently prefers to work in haptic modes, engaging physically with plastic materials in combination with new technologies; preferences that correspond to the findings of Ofsted (2004) who claim that 'the interests and achievements of boys, in particular, can be secured by starting with direct exploration of materials or the use of ICT' (p. 3). At a later stage in his interview he comments on the acoustic potential of the gallery space, 'Surroundings… kind of, we just shout and echo'. In this different space he revels in the materiality of 'noise' recognising that certain spaces can be used as an acoustic field, a place to foreground sound. This recognition reinforces his preferences for non-logocentric, physical experiences, preferences that could be valued as multimodal resources as practised within contemporary art.

Strategies to encourage ownership
In traditional pedagogy, 'ownership' is the term often used to refer to the way students gradually take control of, rather than instigate, the learning process, one where they take possession of learning through a combination of teachers' guidance and their own efforts. This is in contradistinction to the transmission model termed 'spoon-feeding' which can produce a culture of dependency blocking any possibility of autonomy while ensuring 'good' results. In the former, ownership may take place at the moment in a pedagogic situation where the learner's interest in the object of study appears self-generated, an interest that potentially leads to student initiative and resourcefulness, whether individual or collaborative.

> *4/resistant:* They were kind of giving me ideas of their own as well to help me come up with ideas… So I made one idea, which I saw when I went further through the park, next to the palm tree thing, that says 'freezing' while it is supposed to be in the sun. I put a little sign that it says 'freezing'… like a postcard.

In this particular project students are taken out of the gallery and school context into the local environment where they are invited to make textual interventions in an attempt to encourage viewers to see the familiar in unexpected ways. One strategy provided by the artist is to deploy inversion, an accessible procedure in which an expected characteristic is replaced by its opposite. Although the resistant student acknowledges that the artist and teacher initially give him ideas, on reflection he claims ownership of the inversion for himself. By providing strategies to encourage ownership, educators enable students to find some sense of congruence between the curriculum and their interests; in effect they generate an interest that might not occur without their intervention.

Motivation

Interest
Interest is a primary motivational factor and is particularly important for school age students. As Kyriacou's research findings (2001) indicate although young people are highly motivated and many elements of the environment pose

challenges for them, after a number of years in education this intrinsic motivation is undermined and dampened. The most ubiquitous reason given by students to account for disaffection with schooling is boredom and the way that much of the school curriculum appears to have little relevance to their lives and possible futures. This disjunction suggests a need to explain the educational rationale for specific types of knowledge and to make connections explicit. Below we provide testament by students who developed an interest in the project and seek to identify which factors they found motivational.

> *4/resistant:* I think it was very fun, very good… It was very interesting as well, it engaged you in what they [the artists] were doing and you know, lots of communication, it made you come across the kind of people that you don't normally speak to.

This student is aware that he does not usually have the opportunity to work with artists and that this is potentially a lack. Additionally, by identifying an increase in communication he suggests that the give and take of conversation, discussion or debate does not characterise normal interactions in his art and design lessons. His key words: 'fun', 'interesting' and 'communication', in combination with 'inspiration' from the student below, correspond directly to some of the outcomes highlighted in the GLOs (MLA 2004).

> *1/resistant:* They [the artists] also like helped us think of ideas for our video and inspired us.

Disrupting expected patterns
Critical Minds activities were located in both schools and galleries but also in in-between spaces: journeys to and from the official locations, field-work in parks and playgrounds. The rhythm of the project disrupted the usual pattern of the school day and this was experienced as motivational, even liberating as was working in groups and producing artwork on a much larger scale (these communal and spatial factors are discussed at more length in the next section).

> *4/resistant:* … we go outside, which we don't go often, and we do a lot of big art stuff than you know in the classroom. Like the big canvass, or the one all of us did with one video camera, standing in our group and talking about our group like that. We don't do that often.

Connecting to youth culture
As many teachers come to understand, and as Willis (1990), McRobbie (2000), Buckingham (2005) and others have demonstrated, it is also motivational to make connections between the objects of study and current taxonomies within youth culture. This is a strategic deployment of demotic discourses that may be, as with the case of celebrity cited here, acritical. We have already noted the 'cool' cachet that one student attached to specific forms of contemporary art; below other students recognise that the persona of the artist equates with fame and celebrity and this is a hook with which

teachers can draw students into an engagement with practices they might otherwise dismiss.

> *3/resistant:* Yeah, cos an artist, I think, they draw things and they're quite famous and they know the things that they do.

> *1/hyperactive:* (the project was film-based) Film is much easier [than drawing]. Film is more fun because it makes, it feels like someone like 50 cent and guys that you would normally see on television, that's how it makes you feel. You know, like many people are going to watch you on that particular film so you think, 'ah if loads of people are going to see me I better make a good impression.' I find I really liked it, it was very fun.

On one level, students' participation in a project that had a high profile within each school provided them with a sense they were involved in something worthwhile. Prior to the final exhibition, opened by a government minister, the gallery educators had stressed to students the potential significance of the project for informing government policy and thus providing it with a missionary status.

> *3/unfathomable:* it was interesting because it got a lot of people involved like the government and artists and stuff like that.

Public voice/exposure
Indeed, the opportunity to show their work in a public space other than school was in itself motivational for a large number of students.

> *3/resistant:* … some man was looking at it and he was presenting it to other classes, I think other schools came as well, and other schools really liked it a lot. And it was really nice and my work was the best one.

> *2/disengaged:* Basically I want to say it was really good because we got a chance of showing our art to other people as well and things like that… I think others should get the chance to do it as well, the same.

> *3/unfathomable:* Because normal work is just when work is not going anywhere and if you're doing the project it's like, it's going to go somewhere you want it to be at its best…

> *3/unfathomable:* Yeah, because you don't want people thinking it's a rubbish piece of work.

> *2/good:* To have a private viewing at this age is really nice because it's something you can put down that you've done and something you can be proud of, which is good. I got to work with my friends and stuff, that's nice.

However, if these motivational factors are isolated from critical discourses and deployed merely as strategies to gain attention, then they are not enough, indeed they may even be counterproductive.

Critical thinking

The Critical Minds project confirms much existing research (Davies 1995; Addison et al 2003; Downing and Watson 2004) that claims art and design is a making-led, expressive and non-discursive subject in secondary schools. This was confirmed by a number of students in the interviews who were at pains to show how they value the potential of the subject to offer an affective alternative to the logocentric curriculum with its language and number-based systems and procedures. However, Critical Minds was designed to discover whether access to contemporary art and artists would encourage students to develop a more discursive, inquiring approach to art and in so doing support critical thinking.

It is the logocentric curriculum that is traditionally given credit for enabling critical thinking, a term that describes an analytical and reflexive approach rather than a reactive or habituated one. Problem solving has already been cited as a process that requires critical thought, an approach familiar to design-based activities in which pragmatic solutions are realised in response to practical difficulties. Already here it can be seen that language is not necessarily fundamental to this way of thinking, that it might be possible to offer solutions in the first instance through drawing and modelling. The processes employed in fine art practice whether affective, conceptual, metaphoric, perceptual, further intensify the types of critical thought that people can deploy in art and design and complicate those definitions of critical thinking that focus on reasoning, argument and judgement conceived of solely in terms of language. In this way, the production of artworks by students participating in Critical Minds (including drawings, films, 3D constructions, performances, text-pieces) could be seen as holding or embodying critical thought. However, the following analysis is primarily based on data taken from the student interviews and therefore focuses on discursive and reflective thought rather than making. In this respect it must be admitted that this research is partial and does not pretend to do justice to the full experience of both the students and the action researchers.

In order to provide a holding form for the diverse ways in which critical thinking can be manifest we make reference to a useful model devised by Ron Barnett (1997) in which levels of knowledge are related to the domains of self and the world. We understand the 'world' here to refer to social, cultural and natural experiences suggesting that critical thinking enables a person (self) to deploy critical skills in order to interact with others and their environment and thus contribute to critical thought, a phrase that Barnett uses to describe the collective and collaborative endeavour that results in forms of knowledge (p.17). This thought thus enables individuals to work together to inform and potentially transform experiences; in other words it provides them with a degree of agency. Critical thinking, defined purely as a set of cognitive skills divorced from the contexts in which they are formed and applied, results in a series of

competencies that fail to acknowledge how they are socially and culturally produced and therefore how they embody specific power relations. We therefore acknowledge these power relations in the way we analyse how students navigate and deploy the various discourses, demotic and institutional, at play in Critical Minds.

	Domains		
Levels of Criticality	*Knowledge*	*Self*	*World*
4. Transformatory critique	Knowledge critique	Reconstruction of self	Critique-in-action (collective reconstruction of world)
3. Refashioning of traditions	Critical thought (malleable traditions of thought)	Development of self within traditions	Mutual understanding and development of traditions
2. Reflexivity	Critical thinking (reflection on one's own understanding)	Self-reflection (reflection on one's own projects)	Reflective practice ('metacompetence', 'adaptability', flexibility)
1. Critical skills	Discipline-specific critical thinking skills	Self-monitoring to given standards and norms	Problem-solving (means-end instrumentalism)
Forms of criticality	*Critical reason*	*Critical self-reflection*	*Critical action*

('Levels, domains and forms of critical being' in Barnett 1997: 103)

The following analysis tends to gravitate to levels 1 (critical skills) and 2 (reflexivity) although in some instances student statements can be interpreted as indicative of 3 (refashioning of traditions). In the exit questionnaire students were asked to rate the extent to which participating in Critical Minds had enabled them to develop skills in areas that pertain strongly to level 1. Charts 12-15 show the findings, broken down by each school. Aggregated data can be found in Chart 16. In the interviews and action research reviews the rhetoric and hyperbole of some statements might appear to correlate with level 4 (transformatory critique) but as they are not accompanied by critical explanation we have saved them for the final section 'Transformations' where participants make claims about profound changes in attitudes and values.
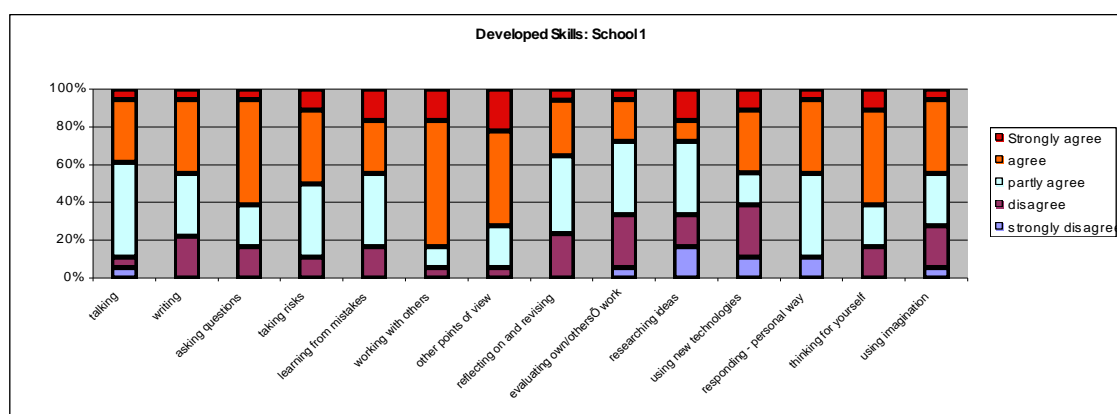
Critical skills

Chart 12

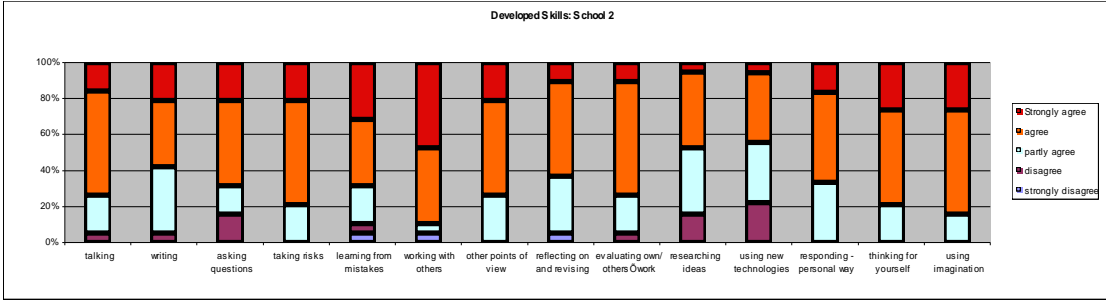## Chart 13

Developed Skills: School 2

Chart 14

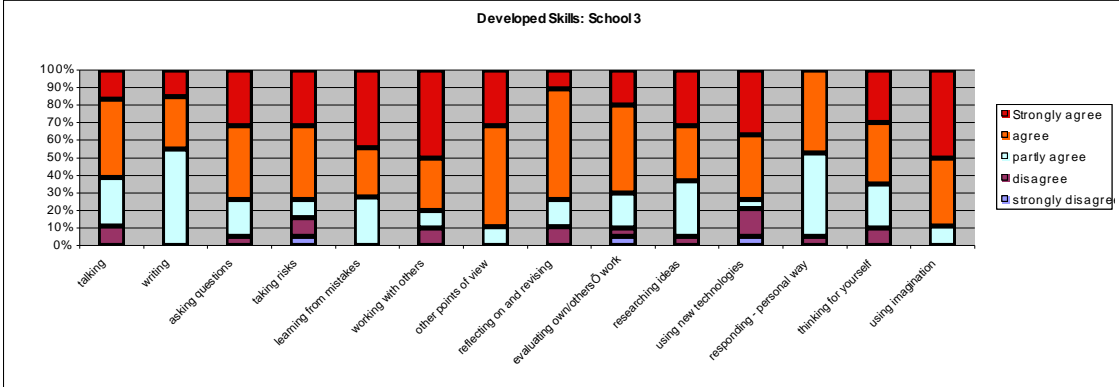Developed Skills: School 3
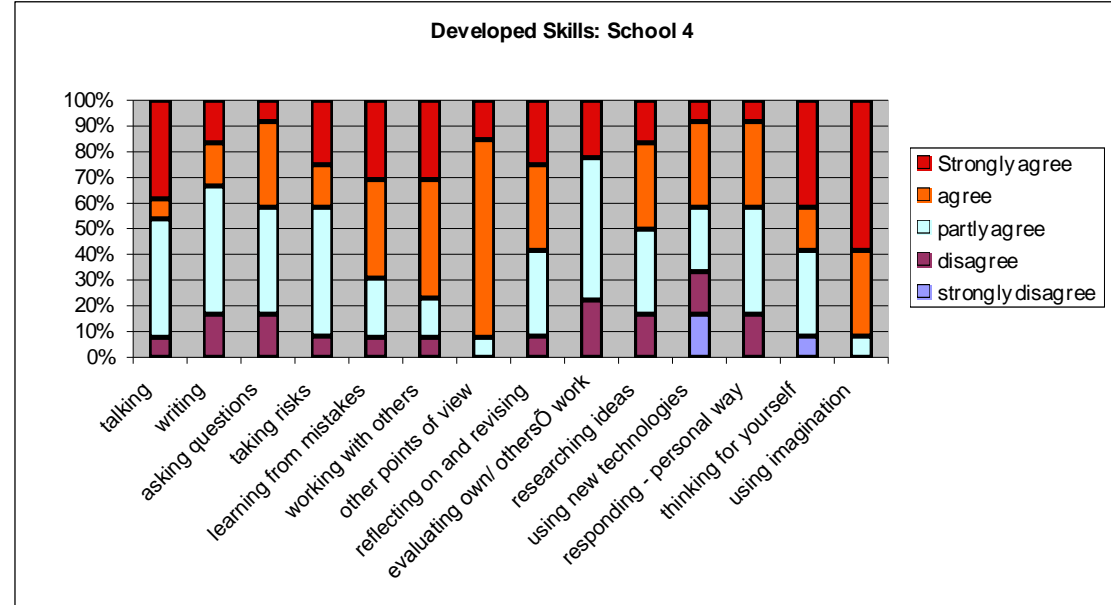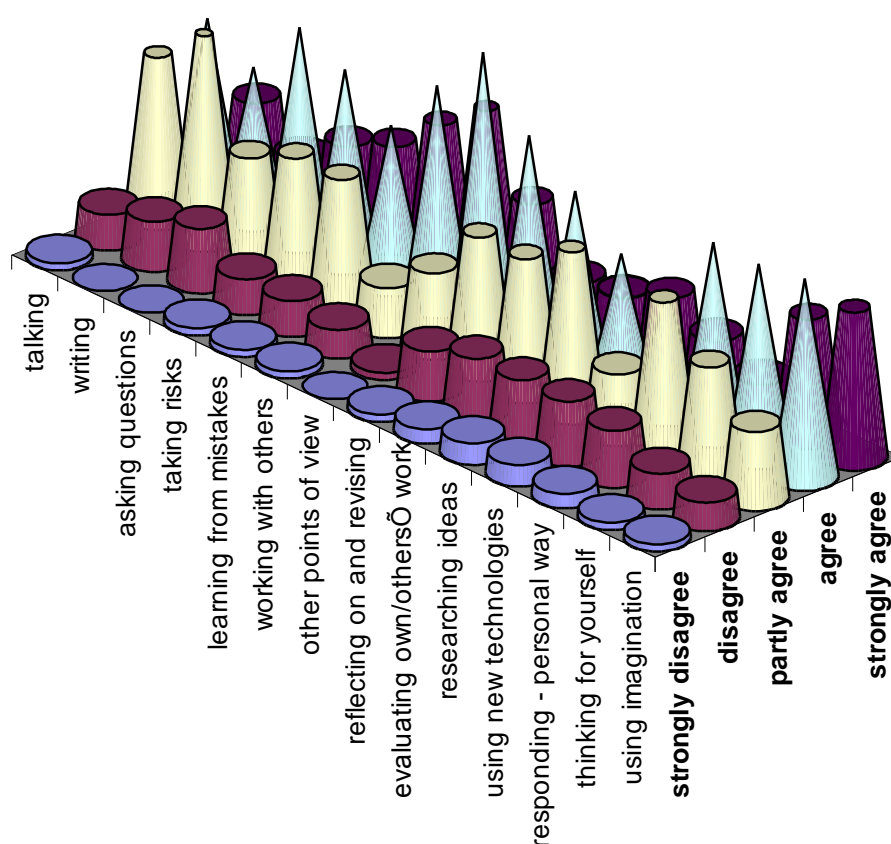
Chart 15

Developed Skills: School 4

Chart 16

Developed skills - all schools

The two skills which students most commonly agreed ('strongly agreed' and 'fairly agreed') they had developed as a result of the project were 'working with others' (of all students 32.9% 'strongly agreed' and 40.5% 'agreed') and 'seeing things from others' point of view' (of all students 20.3% 'strongly agreed' and 50.6% 'agreed'). The significance of the former is addressed in the later section on communities, collaboration, mutuality. The ability to see things from others' points of view is possibly a pre-requisite for such communities because it enables dialogue and potentially the mutuality that students so prize. Given the aims of En-quire it is particularly gratifying to find students identifying these two skills as the most significant. As can be seen from Chart 16, very few students claimed to have developed no skills in any of the areas. The two skills which drew negative or more neutral responses were 'using new technologies' and 'researching ideas.' Of these two skills, both drew some level of disagreement from 15.2% students, whilst researching ideas drew the highest neutral response, given by 30.4% of all students.

If the above charts indicate student responses to skills identified by the research team, the following sections categorise examples of critical thinking

as identified or used by students during the interviews. It is therefore not a comprehensive list of critical thinking skills or the ways Critical Minds fostered such thought, rather it is a demonstration of the use of critical skills deployed by students while reflecting on their experience of the project and can be said to indicate their perceptions of their own learning.

Awareness of the need for critical thinking

The first section demonstrates that some students recognise the need for critical thinking within art and design, perceiving the Critical Minds project as something beneficial to both an understanding of art and to its making (although one student notes that its associated activities can be irritating).

> *3/unfathomable:* Usually teacher says what to do; you do it. But in like these projects you get your mind into it because its more interesting so, like, learn to listen more and get into it more and stuff like that.

> *2/good:* I didn't think there was going to be that much writing in the project because art, you don't do much writing, but it helps writing stuff down because you can go back to it and you can produce more better art. With everything, you have to write stuff down because you won't remember everything, which is good, but it was annoying sometimes.

Recognition (and aesthetic appreciation) (level 1)

One of the skills, or possibly dispositions, that is traditionally prized in art education is aesthetic appreciation, the ability to find pleasure in both natural and cultural experiences. In relation to works of art two categories are privileged, the 'beautiful' and the 'sublime', whereas with design this duo is supplemented by 'fittingness'. Students are said to participate in aesthetic appreciation if they recognise (the critical part) and enjoy that which is beautiful (pleasing), sublime (awe inspiring), or fitting (appropriate for purpose). Although we would suggest that these categories are not universal but culturally and historically specific, students tend to be taught how to appreciate them with reference to 'neutral' formal properties, ones that can supposedly be applied to all visual practices. These properties include visual and spatial elements such as line, tone, colour, shape and volume. On one level this list enables students to access traditional art but does little to provide a vocabulary to help them address its symbolic forms or the social contexts in which it was produced. Neither does it support students to investigate dominant contemporary forms such as installation, performance or dialogical practice. It is therefore not surprising that the student cited below gravitates to a contemporary example that can be analysed through formal means.

> *1/good:* I like Michael Craig-Martin because it's kind of, I don't know, I just like it. …
> (Can you say what you like about his work?)
> Um [pause] just because of the bold colours, I suppose. In a way it's quite bland because it's just flat, but I don't know. It's, you know, I

haven't had to think like this before. [pause] um I think [pause] I like the fan on the big building, I think it's really nice. Now why do I think it's nice? I guess I like the shape, the way it curves around. I like the bold colours because it's bright and happy and especially if its colours that I like anyway.

Categorisation (level 1)

The ability to distinguish between different phenomenon so as to create patterns of difference and similarity by which to come to know the world and navigate experience is seen as quite primary to critical thinking. Such patterning also enables students to set up the structures required for analysis, that is the ordering of experience into constituent parts as a means to understand the relationships that make up some whole. (It is worth noting that sometimes analysis is seen as alien to artistic thinking where 'poetic' and/or syncretistic thinking, in which the world is perceived as a whole, overrides analytical methods; Ehrenzweig 1967). The formal elements described above are a typical analytical structure and in this instance students are given the categories to enable them to use a privileged discourse in art education. For example, the degree to which students are able to apply a formalist terminology when they annotate their sketchbooks, both in relation to their own and others' work, largely determines how they are assessed in relation to the GCSE objective 'AO2: analyse and evaluate images, objects and artefacts showing understanding of context' (Edexcel 2003). In the statements below it is evident that students are trying to define their understanding of contemporary art in relation to the official discourses provided by Critical Minds but also in relation to their phenomenological experience of works of art.

> (What kind of art did you do at the gallery?)
> *4/resistant:* I'd call it expressive.
> (What is contemporary art for you?)
> I think it's like simplicity in the work and originality and a lot of imagination in the work. So contemporary art is, you know, let's say maybe something new, or something that makes you feel a different way or something like that. Something that you find speechless when you look at it with no expression or you don't know what you think. Something that questions what you thought already or what you didn't… That makes you think; wonder. People would say it's a shed (referring to Simon Starling's 'Shed boat' exhibited in the Turner Prize exhibition 2005) and you know they normally don't think of anything else. It's stuff that makes you think and wonder.

This student has understood that contemporary art often questions expectations and assumptions in an attempt to change perceptions. Additionally he recognises the way artists may deploy ambiguity as a means to engage audiences actively in meaning making. Later in the interview he noted:

> *4/resistant:* I think that anything can be contemporary art. If you rearrange this table and take a picture it can be art. You know do shapes and stuff.

Here he realises that within the discourses of contemporary art any material can be transformed and reframed as art, that even mundane objects of everyday use are an available resource. However, he has recourse to a formalist language in his final explanation.

Comparison (level 1)

The process of categorisation produces the structures through which the world is named, a process of differentiation that marks out the interests of a particular individual, social group or culture. Often phenomenon are paired to form what are termed binary oppositions: these are either/or structures in which the one term is dependent on the other for its meaning, e.g. male/female; good/evil; word/image; success/failure and which help to simplify the complexity of experience. However, they also serve to inculcate dominant social and cultural values (one term is always privileged over the other) so as to inform behaviours and attitudes. This emphasis on extreme difference encourages students to make comparative judgements, a process that is particularly common in school, whether those judgements are being made by teachers or students and whether they are about student in relation to student or between student and some normative criteria. The following statement is a response to a question about the difference between working in the gallery context and the art room where the researcher notes the 'whiteness' of the former space:

> *4/resistant:* The classroom, it's not that it's not good or anything if you look at it at an artistic way; the different colours, the stuff here. It's like a mixture. I mean even the dirt. Some bits like this, playing with different colours and stuff.

The student differentiates these spaces and the implied cleanliness and austerity of the gallery by evoking the art room's material qualities. He diplomatically frames his description by qualifying the status of the 'dirt' and 'stuff' (usually pejorative terms), as necessary for 'artistic' action, 'playing'. Previously he noted that the gallery space afforded an echo so that he was able to play with his voice differently to the way the classroom allowed, a place, in contradistinction, that is full of 'stuff', absorbent, saturated. Despite an evocation of the art room that might indicate a space of some interest for him he nonetheless continues by explaining that it is place of routine, where his imaginative potential (as far as he is concerned) goes unrecognised. Post-project on returning to the classroom he opines:

> *4/resistant:* I was sad at first, but eventually I got used to it again. When we got back we continued again. So I would have said I was sad but got on with it basically.

Contextualisation (level 2)

A number of students demonstrate that they understand how practices and the meanings and values attached to them are contingent and context specific. They can say, for example, how the reception of art requires skills in which interpretation is made possible through contextual information or how student production may be conditioned by adult expectations and thus limit their potential.

> *1/resistant:* I think it's quite important to understand what they [artists] meant when they made the art and how they were inspired… Because that's why they did the work, so if you're looking at the work you'd need to know that, why they did it and what meaning it has to it, otherwise you wouldn't understand it.

> *2/live-wire:* Well, it's a school thing… Even though the work we did was good… the final thing that people are going to see needs to be like simplified and just made easier and like [pause] all that people are going to expect from a Year 11 art show is like what they're getting.

In relation to the Critical Minds project one 'resistant' student claimed:

> *4/resistant:* I am not saying it was bad or anything. It reminded me these things that you do to get young people off the streets. To do something productive, or you know, something worth the time to take them away from what they are doing.

Through his participation in Critical Minds and its congruence with community projects aimed at engaging alienated youth, he realises that the project is different to school work, possibly a vehicle through which to encourage the active participation of resistant or reluctant learners. However, he implies that such activities are not necessarily aimed at learning but rather for the purpose of containment, demonstrating an almost cynical mistrust of the motivations of the project instigators. Notice too how he disassociates himself from this resistant group (he uses the third person 'them').

The following student notes that certain practices in school art, different genres, require different conceptual frameworks and methods: life drawing is a vehicle for developing mimetic skills of representation, whereas imaginative briefs require both personal and inventive responses and do not depend on perceptual criteria for assessment.

> (What do you think are the critical, the main skills to know in art lessons?)
> *1/good:* [long pause] I think that's a difficult question because [pause] it's really just to draw exactly what you see normally, if you're doing life drawing. If you're making something up then you do exactly what you think. I don't know. Like I said, there are all these different types of art now, so you can just kind of do anything and say it is 'art', so it doesn't matter anyway.

However, in her closing remarks she acknowledges that the contemporary art that she has been introduced to in the project puts into question these very same criteria, that such practice is potentially devoid of skill.

Making sense of something new through existing frames of knowledge

The process of contextualisation and the intertextuality of the references students deploy make it evident that they often achieve this skill by comparing the new phenomenon to existing frames of knowledge. In the example below, the student relates the animation he was intent on producing (and the absurd incongruities and juxtaposition of scale that he had been advised to use) to a genre of film exemplified by a recent remake of a classic movie.

> *4/resistant:* Mostly, kind of what you see in old movies like King Kong, or something where you have those little buildings and this giant thing. In these days when you look at it you know it's not real, cause then people used to think it's like a big giant; so it's kind of recreating something like that. You just put an animal that you don't really see it. You see an elephant in the middle of London.

The foregrounding of multimodal processes employed by contemporary artists, as well as their preference for conceptual practices, can be a barrier to people who expect visual forms of semiosis to be privileged in art, particularly the genre of mimetic pictorialism exemplified by traditional painting and photography. In the statement below the student makes reference to gesture as a semiotic process, one that s/he is already adept at reading through the medium of film. Thus the performative element that she not only witnessed but participated in through Critical Minds, is acceptable to her because this because she recognises this type of communicative act as a valid form of popular expression.

> *2/live-wire:* Well, like, if you look at a piece of art or whatever, it's 'oh yeah, yeah, that's art', then someone says to you 'why is it art?' or 'what do you like about it?' And if you just said: 'this is a piece of art', they wouldn't understand why you liked it and, if you liked it or you didn't like it, what you thought of it. Because… the use of words… you know in a film… is like the use of body language, how that shows, represents something. So you have to describe it and use language to show you understand what's going on.

Reflection/Evaluation (Level 2)

Throughout schooling students are subjected to a regime of assessment through which their 'progress' or 'development' is measured against normative criteria enshrined as 'standards'. As has been suggested, the whole premise of Critical Minds, like any action research, is that something needs to change. The discursive and collaborative programmes of the Critical Minds projects were designed to demonstrate how engaging with contemporary practices might question and challenge orthodoxies in school where making and

insularity characterise practice. On numerous occasions students were invited to discuss artwork, their own and others, and in some instances to consider their own learning. This officially sanctioned reflection took the form more of an evaluation (seeking the value of some phenomenon) rather than an assessment (measuring some phenomenon in relation to agreed criteria). As is evident from the comments below many students were surprised by what they perceived as the openness of contemporary art, the lack of right or wrong answers, or indeed the inversion of normal standards.

> *1/resistant:* Well it's like [pause] you know, like some people, [pause] they don't do very much but they say it is art. Like, I've seen just a line or just an object, they haven't even done it themselves, but they say it is art. So, like, in this project walking is art because you say it is, or film, or anything. You don't have to be good at art; it doesn't matter.

Three of the twelve student interviewees remained sceptical about aspects of contemporary art, particularly the perceived lack of skill in the way conceptual art is produced. Because the curriculum valorises, skill, expressivity and verisimilitude, they found it difficult to understand how the processes of appropriation, recontextualisation and performance, alluded to in the above statement, could be recognised as forms of expressive, representational action. However, a later statement indicates that the same student was moving towards an understanding of contemporary art highlighting the importance of sustaining engagement with such practices.

The artists presence, their credibility as professionals in the field and willingness to engage students in dialogue, was, in some instances, a means to persuade students of the validity of different ways of working. This is evidenced in the way that some students began to use and take ownership of the artists' language:

> *2/resistant:* … before, everything I had to do really, really neat. I used to rub it out and do it neat again, but they [the artists] say in every mistake there's something new or something, yeah? So it looks better with the mistakes. Without the mistakes it's too neat and then it's a bit dead. Like, you know, when you sketch, those lines make it look nice. Those lines that come out, yeah, they make it look lively, without the lines it looks a bit dead, you see?

This taking on of new ideas and practices embedded in the artists' discourse displays the growing respect many of the students developed for the artists and the way they challenged school orthodoxy.

> *4/resistant:* The challenging thing about it was that I was trying hard to come up with something very funny. Then I just relaxed and I thought I'd come up with anything. It ended up stifling the flow, stopping me from coming up with something. And then eventually I just relaxed and that's come up (pointing to artwork).

Here the student takes on board metaphors used by the artist to describe the creative process and locates them within his own practice demonstrating a

growing awareness of the conditions under which he is able to work and a sense of himself as a learner. However, other students are more circumspect:

> *4/resistant:* I am not sure the thing changed how I thought or did anything like that. I think, I don't know actually. Maybe it hadn't changed me at all. It was me then, and it's still me now; subdued or not subdued. I am not quite sure; a bit confusing.

Elsewhere this student suggested that the project had enabled him to work to his own strengths. However, he anticipated that the normalising regime of the classroom would mean that the difference the project had promised would not be maintained and he sensed that he might not have the power himself to sustain it. This leaves him here feeling somewhat disappointed and highlights the need for follow up.

Both the students cited below reflect on the degree to which they felt they had ownership of the project. Both are concerned with the authenticity of their experience: the first in relation to the way the experience is communicated to others through exhibition and the second in relation to the potential of a pedagogic situation to enable a sort of raptness.

> *2/live-wire:* I think the only way they're [audience to exhibition] going to see it [students' investigations/making] is through the photos, they won't actually be able to experience it, which is why we wanted to take control of our art, arranging our photos, and make it into a piece so that people might be able to actually experience what we learnt through the project.

> *1/resistant:* Every time I do art I've been thinking if the circle is perfect or stuff like that. But when I stop thinking about that and when I'm drawing, I let like my mind and my body become like a tool in my art, right? Okay, this is as basic and plain as it is. When I'm drawing I concentrate on only what I'm supposed to be doing. My mind is focused on it and you just, you just don't think about making mistakes. If you do make mistakes gradually and gradually the next time you draw, you'll change that mistakes.

This student realises that making can be a totally absorbing, mental and somatic process in which the regulating function of the ego is suppressed in favour of semi-automatic, unconscious processes. She notes that a concern for correctness gives way to a holistic, syncretistic approach (Ehrenzweig 1967). However, in the final sentence she also indicates that she understands how learning can be incremental, that in reflecting on her work she is able to learn from 'mistakes' and effect change, an activity that occurs after or perhaps during her making and that corresponds to Donald Schon's notion of 'reflection in action' (1987), an idea that characterises how analytical processes can be reconciled with intuitive and creative ones (Prentice 2000).

Meaning making as a social process (level 3)

The individualistic, expressive paradigm of school art, complementing the perceptual/mimetic model, limits the extent to which students conceive collaboration as either feasible or ethical and also encourages them to neglect the idea of audience. This inward, solipsistic orientation negates any consideration of the ways in which art is viewed, interpreted and disseminated as a discourse, so that students' expressive work is presented as a closed declaration rather than a communicative statement or open question. Because most of the artists working on Critical Minds value socially engaged practices, audience participation and collaboration figured prominently in their discussions. It is particularly notable how some students began to engage with these ideas and take into consideration the ways in which audiences might be encouraged to interact with their work. In this first statement, the interaction is not an afterthought but an integral part of the conception of the work. In this respect students can be said to be re-fashioning the tradition of school art to accommodate the socially engaged practices of participation and 'undecidability' (here, troubling the public/private dichotomy).

> *4/enthusiastic:* We wanted people to think what could be inside a house. Because mine and Rosie's idea was to be, a thinking house… would be private… We could stick on the walls things we liked and no one else could see this. We knew it was our private little area. But we wanted people to think 'what was inside there?' What could there be? What are their private thoughts? … We were gonna get a little post box and people could put in the post box what they thought was in the house.

In the following statement a resistant student articulates an understanding of the work Francis Alys (a contemporary artist whose video installations they had visited) in terms of process rather than outcome, a way of working in interaction with a local environment that s/he recognises as a resource to be adapted and used for meaning making.

> *1/resistant:* He (Francis Alys, contemporary artist) does like lots of walks and videos them, but he uses like rules and things that tell him how to go and where to walk…He maps out like walks that he takes and he uses either string, or a map and he marks out and he walks, like he has a certain pattern to his walk, so like he'll stay on the left side of the road, or like he'll walk and when he reaches a bridge he'll cross the bridge and keep walking, things like that… That's what we did. We all like had our own routes and ways to walk and then it was videoed, but we linked up as well, like when we met other people walking, so they changed our walk.

S/he also recognises here, that although the film s/he made with her peers in collaboration with the Critical Minds artist is somewhat imitative of Alys, it is, nonetheless, an appropriation of a way of thinking and mode of practice (establishing rules etc.) that affords them the opportunity to express something about their subject positions within the school environment. The work they saw by Alys suggested how everyday street paraphernalia can be utilised to construct an alternative soundscape, a sign of resistance to

regulated behaviours (he taps objects as he passes them). In response, the students developed rules to condition the trajectory of their walk which took them to peripheral parts of the school grounds, territory about which they feel some ownership. At this significant moment they signal this sense of ownership by setting up a barrier between themselves and viewers who are positioned on the other side of the school railings. This marks a hiatus in an otherwise regimented performance before they eventually return to the predictable constraints of the school corridors.

Transformations

In this section students describe transformations in their attitudes and practices as a result of Critical Minds, sometimes providing an explanation about the source or trigger for change. The categories are not comprehensive but signal the most frequently mentioned changes. They relate strongly to the earlier sections but are included here because of the strength of the assertions; as such we leave them to speak for themselves.

Attitudes/values

> *2/disengaged*: It's actually made me enjoy art more… I wasn't interested in art before at all and now I'm actually starting to do my work, and even in the art gallery, I started to do my work and Miss was actually shocked! It is quite good.

> *2/live-wire:* I learnt to, like, just to make things without always being too concerned with the final thing, like having the freedom to try out things or to change your mind, like, as you do stuff.

Behaviour

2/good: …when I used to work under pressure I used to get all like 'agggh this is going to fall apart!' I used to get so angry, but now I've learned to control myself because I know that if I have a clear mind whilst I'm under pressure something good will come out of it, which is good.

Confidence

4/resistant: I wouldn't say I'm better. It's only up here it's changed (pointing at his head)…
(Do you think you more confident now in your art practice?)
Yeah… I don't ask for help that much. I have improved
(What do you think helped you be more confident?)
I think because of the boldness of this idea and everything that happened… The big imaginative things that we did and ideas and stuff.

3/good: I think what was new for me, is that I discovered a side of me, like in art, I thought like cos I'm not a good drawer and when it comes to doing art I thought 'oh no I just have to draw' but it was just a new thing like you get to do whatever you want like with paint and you like get to help other people but usually I'm just sitting there drawing and I just get a little bit confused and a bit agitated.

Information/skills acquisition

2/good: Also, I can speak about art more, like with the presentation. I like English so, yeah, I could write something to describe it. But more like [the artists] helped us to see other stuff in a work, so now I can say what things mean.

1/good: I gained a lot more information about what type of art she does [the artist] and about how you make a film…

Re–definitions

1/resistant: I think I learnt that art doesn't just have to be like drawing and painting, it can be lots of other things… Well, video and just everyday things. Walking can be art and just pointing a video camera, anything you film can be called 'art.'

3/unfathomable: I liked it because I realised that art is more than just a piece of like pictures and stuff that there is more to it, there can be videos, mail artists, loads of stuff.

4/good: Art is everything around us. Everything and anything is art. This is art, if you photograph it and put it on the video. Yeah.

4/enthusiastic: When a little group of us was looking through these books. We actually see things that art can be about. We actually discussed: it can be about the human body, a sticker on the table… anything.

Thinking other

2/disengaged: They [the artists] really make you think of other, just like beyond the painting, just not like it's a normal painting, but it's actually more than just a painting… They just tell you to think further, that's all they do, not much. Then you do actually do it and then realise what it is about.

4/good: It gives you another, like, way of looking at art. Or even if you haven't thought about art, it enhances your vision of art. So yeah…cool.

Conclusion: Partnerships and Collaboration

Critical minds has demonstrated that that conditions for enabling learning in the gallery context can be enhanced by collaborative partnerships between professionals from different institutions and fields. In particular, our research identifies that students have used critical skills throughout the project and that these were developed and extended due to changes in practice: interventions by artists, relocating sites for learning, collaborative activities, reflective practice. We argue that what is distinctive about Critical Minds revolves around the combination of intervention and collaboration, principles that are recognised as central to the idea of communities of practice (Lave and Wenger 1991). These communities are sites of shared experience that enable members to develop as critical thinkers through mutual engagement in common activities. In this section we draw on comments from all participants to highlight the way these principles are embedded within the project, albeit that both 'engaged pedagogy' and 'communities of practice' were not explicitly articulated as a theoretical framework for practice.

Communities, collaboration, mutuality

The social organisation of pedagogy is of particular significance to the ways in which learning can be developed within specific communities of practice. Through collaboration Critical Minds set up a new possibility for a pedagogy situated somewhere between and across the school and the art gallery, an in-between space extending both the role of gallery education and its sphere of influence. This role was first established in the 1970s and has continued to change in response to educational research and the new critical approaches demanded by developments in contemporary art practice. As we have noted, The Whitechapel Gallery, the lead gallery in Critical Minds, was one of the first art galleries to employ an education officer, promoting the importance of a

critical practice that is both socially engaged and located in contemporary practice. Social engagement relates to bell hooks' theory of 'engaged pedagogy' in which experiential and reflexive practice is fundamental to the development of a mutually supportive learning community, one that 'recognises each classroom as different, that strategies must constantly be changed, invented, reconceptualised to address each new teaching experience' (hooks 1994: 10). Her approach to pedagogy avoids authoritarian teacher-student models whilst recognising that the teacher/educator still has a responsibility to 'orchestrate' the learning; an approach based upon a commitment to continual shared investigation. Therefore, in communities of learning, relations are about 'we' and 'us' rather than 'me', 'you', them.

> *2/gallery educator:* [The] philosophy of everybody buying into something because they're interested in it and because they're interested in the people working in it, and they're feeling like they're getting something from it and that we learn from each other, has been really fundamental in keeping the momentum going throughout the eighteen months, which is a long project.

> *2/artist:* … the whole thing was so collaborative. I mean, a lot of it, I guess you could say, was the two artists and the art teacher working together… we all developed the lesson plans and we all developed where the day is going to go and we all worked on problem resolution together, and battled time restrictions.

> *3/teacher:* I felt supported. I wasn't on my own. It's a very solitary experience, teaching. In the classroom with loads of [young people] coming in and out. You don't talk to adults unless you seek them out! It's lonely! Sometimes a whole week of only speaking to children. Sometimes talking to adults is a most scary proposition because your vocabulary has been reduced to the level of 14-year olds. You lose social skills. (14.2.06)

> *3/good:* I think it is all good now because everyone is trying to blend in with everyone else, trying to help you and that.

Participants from each of the constituencies in Critical Minds recognised this mutuality as beneficial to learning and for teachers and students in particular that mutuality signals relations that are different to the norm. With respect to teachers, classrooms can be demanding, densely populated, complex social environments and, although under constant scrutiny, they remain psychologically 'alone'. Watkins (2005) points out 'if you examine images, prints, paintings and photographs of classrooms over the centuries, you will readily list observable similarities – classroom walls, rows of pupils, status gender and power… a social distance between pupils and teachers '(p.8). Over recent years this distance has been exacerbated by distant policy makers who prescribe strategies for improvement in ways which do not always afford with teachers' professional vision reducing their agency as well as their morale (Ball 2001).

For students the opportunity to work together was greatly appreciated. In their exit questionnaires they were asked to rate various skills in terms of how important they pereceived them to be within art and design. Chart 8 below illustrates that the students reported working with others to be an important skill (43 students, or 54.4% of all students, felt it was a 'very important' skill, whilst 18, 22.8% of all students, thought it was 'fairly important').

Chart 8
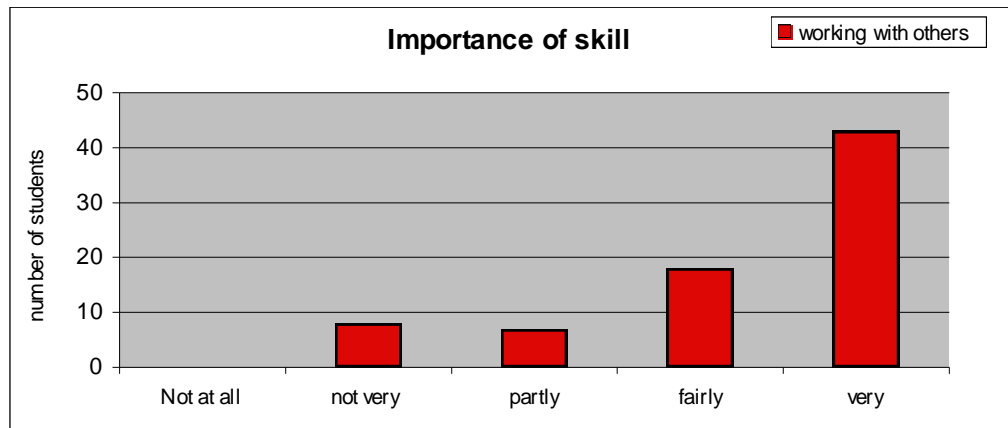
Students were also asked to rate the extent to which the project had enabled them to develop skills in a range of areas. In consideration of working with others, the majority of students 'agreed' that they had been enabled to develop skills in this area (32 students, or 40.5% of all students). An additional 26 students 'strongly agreed' with this statement (32.9% of all students). The ability to work with others was one of the main skills that students felt they had developed as a result of taking part in this project.

Chart 9
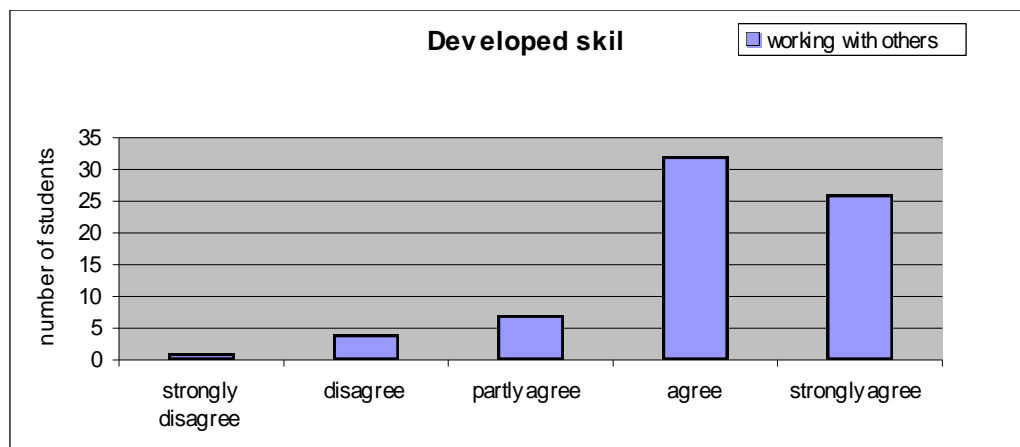
Classrooms not islands influenced by ethos and culture of the school – 2 of 4 schools designated community schools

Recognising learning as a dialogic, social process

Notions of constructivist and co-constructivist learning have been the focus of educational research in schools, galleries and museums for many years (Bruner 1977; Goodman 1984; Gergen 1985; Dierking 1996; Hein 2001; Watkins 2005). In Constructivist theory the learner is recognised as a knowledgeable resource, a person who brings to every learning situation her or his understandings of the world. In this way learning is conceived as a process of adaptation in which the learner's view of the world is constantly modified by new information and experience.

> *3/good:* But then I just learned that instead of doing paintings all by yourself, you can just like express yourself with different people like working together.

> (Do you think that you've learned anything from this project that you'll use in your art lessons?)
> *1/resistant:* Um, yeah, I'd say working as a group to form art, and yeah, taking in other people's ideas, as well, to use.

Building on constructivist theory, co-constructivism emphasises that such learning is necessarily a social process in which language and dialogue are primary (Watkins 2005). These dialogues take place between individuals who are socially situated within historically and culturally specific learning environments.

> *2/disengaged:* Say we're doing us and everything in our project, yeah, it's basically about what's in London and what's connected to us and everything.

In both formal and informal pedagogic situations the values accruing to these environments enact particular power relations, and for co-constructivists they have to be acknowledged before any mutuality can be developed.

> *2/artist:* One of the things I like about these groups is that they were groups. They were really not led by one girl and everyone sort of kowtowing to the dowager queen. They worked together and they argued the points and they talked about the materials to be used and not used and why, and worked as groups

> *2/gallery educator:* … people get the opportunity to actually speak to different people and have different perspectives, and actually talk through their ideas, talk aloud… It wasn't there at the start. It was definitely a progressive process. I mean, I don't actually think it started really, really properly until we were actually concentrated working in the gallery and at that time that was that point where I thought the girls were having really serious transformation, and that was the point where they were working in their groups, they were very definitely learning from each other, they were really talking about what they were doing and if you walked around the room and listened to them I was absolutely

amazed that none of them was off task at all. They were so focused on actually talking about why they were doing things and what they were using.

Dialogue and collaborative work are rarely seen in art and design, for, as we have suggested, pedagogic aims in the subject tend to valorise individual expression. Ironically, teachers realise these aims by directing students to reproduce stock signs of difference. In secondary schools, research has repeatedly shown that pedagogic power relations are predicated on the reproductive role of schooling (Bourdieu and Passerson 1970; Bernstein 2000) and in this scenario the teacher's task is to reinforce and perpetuate dominant cultural and social values so that they come to appear natural and inevitable (mutuality does not figure as an important principle in traditional pedagogies). In modernism, artists represent the antithesis of these normative values and it might be supposed that their interventions would disrupt and possibly contest the status quo (Taylor 1989). However, in the Critical Minds action research teams, although distinctive roles were retained, oppositional positions were rejected in favour of negotiated ones.

> *2/artist 1:* You have to be willing to not only collaborate but to compromise and to give up on every great idea being included. That's just not going to happen, but you subjugate to the greater good so you can create a seamless whole. That definitely could not have happened with the groups if they were not working together, working on problem resolution, being willing to say 'alright I think this is a great idea but the group as a whole want to go in a different direction, then I'll deal with that.' It's very mature… and it shows they did learn a number of the really salient lessons we were trying to get across.

This move towards negotiated decision-making led to increasing student collaboration and a realisation that the ideas of others are a valuable resource for learning. By engaging with different points of view students recognised that their own learning can be enriched and expanded, a process that builds an empathetic learning environment.

Empathy
Students were asked to rate how important they thought it was to display empathy, or 'be able to see things from others' point of view' within art and design. Only 3 students felt this skill was 'not very' important. More commonly, students felt it was 'very important' (given by 45 students, or 57% of all students) or 'fairly important' (given by 19 students, or 24% of all students).

Chart 10
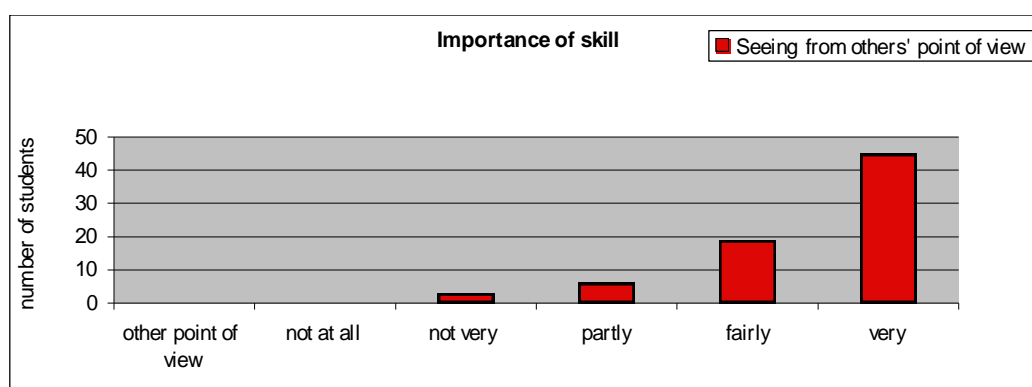
On completion of the project, students were asked to rate the extent to which the project had enabled them to develop empathetic skills. Chart 11 shows that only 1 student felt they did not develop skills that enabled them to see from others' point of view. 17 students (21.5% of all students) 'strongly agreed' that they had developed empathetic skills, while a further 43 students (54.4% of all students)'agreed' they had also developed skills in this area.

Chart 11
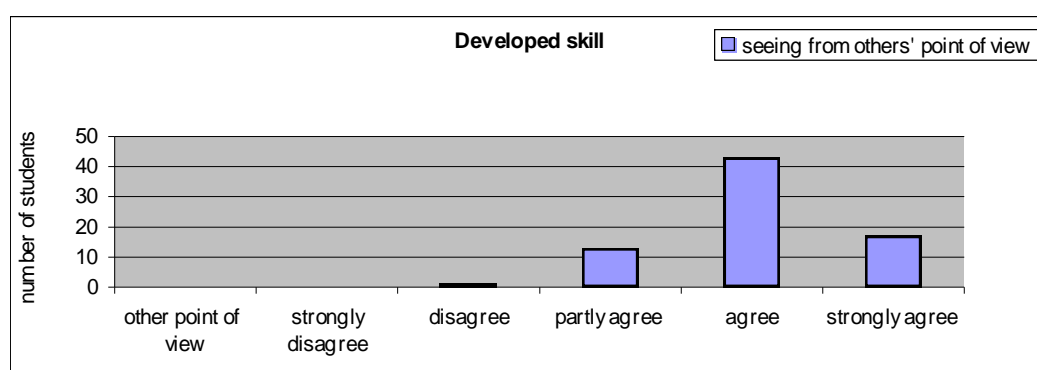
Time

> *2/good:* You have to attend every lesson because if you miss one lesson you're like behind and you need full hours to do all the stuff. You have to be determined and you have to be dedicated to your work. You have to have a clear mind and be able to work under pressure because we did have to in a matter of two days. But afterwards it's something to be proud of, what you've done in that short matter of time.

The fragmented nature of the school curriculum (on average art teachers only see KS3 pupils for 55 mins each week) is often cited as the reason why teachers find it difficult to establish continuity and build constructive relations with students.

> *2/disengaged:* It was a bit hard because you sort of forget what you did last lesson.

Such conditions are exacerbated in interventionist projects where 'strangers' enter an environment in which time is restricted and has to be necessarily condensed.

> *2/artist 1:* I think it worked really quite well. My only frustration was not having enough time with the girls and that was one of our big issues, certainly, both for me and for [artist 2]… One of the things we did a lot of wrestling with in our group to actually resolve, [was] we came up with taking the four sessions combined into the two days… which was really, really productive.

In those projects where sessions were organised in blocks of time, the action researchers noted their ability to develop constructive relations with students and colleagues. In this sustained environment the action research teams were able to plan a series of sequenced activities moving between discursive, investigative, creative and collaborative practices. This afforded students the opportunity to come to know one another through common endeavours.

Through their research into practices that have been part of the tradition of informal education, Lave and Wenger (1991) have developed an understanding of how communities of practice are developed and sustained. They explain that for a community of practice to function it needs to generate and engender a shared repertoire of ideas, commitments and memories and that it takes time for a shared sense of joint enterprise and identity to develop. As Hein (2001) insists, co-constructive pedagogy cannot be expected to take place on a three hour visit to the gallery.

There is a danger that projects such as Critical Minds serve to reinforce normative relations because they act as a one-off bubble where they are perceived as limited outsider interventions. Alan Kaprow (in Lacy 1995) warns of this effect when he claims:

> Almost anyone will seem to flower if unusual attention is paid to them. It's what happens over the long term that matters. Rephrasing the question to "What happened to the kids after they left us?" probably must be answered: "They returned to the way they were." And so, if sustained instruction and growth are necessary for lasting value, as I believe they are, the whole thing was an educational diversion. At best, they were entertained.
> (p. 156)

> *3/artist:* One problem is that we didn't get a chance to contexualise the project within the school. I was chatting at break and I asked one of the really able students 'are you going to take art next year?' She said 'No'. I said 'Why not? That's a shame'. She said 'Because I don't like drawing and painting.' And I said 'But, but, but, but what have you been doing !!!!' She said 'Ohhhh'. Is the workshop a bubble? Could this be art in school?

There is then a need not only to sustain partnerships, but to ensure that the wider school community are aware of the project, that management gives its support and that what is learned from the project is revisited, developed and embedded in the curriculum.

> *3/gallery educator:* what was evident was that I needed to have a relationship with the rest of the staff and Head because I was unable to do anything about it… I hadn't met the Head of Art, hadn't spoken to him… I should have insisted from the start, I should have met with the Head and Head of Art. (14.2.06)

> *1/teacher:* I am going to have to then take it to the rest of the department in some sort of format where they can actually start putting some of this stuff into their classrooms because if they don't, for our school, then we've actually not developed at all. It needs to be developed for the rest of the team. There are four other art teachers who need to know what I've learned. (21.2.05)

Space

Spatial metaphors are often used to define pedagogic relations: 'open', 'situated', 'zone', 'scaffolding', 'border-crossing'. Despite this, the physical spaces in which teaching takes place in schools are rarely considered as a significant aspect of learning. This often results in the replication of hierarchised spaces predicated on power relations which are not conducive of collaborative or socially engaged practices. Outside the logocentric curriculum pedagogic spaces do differ, from the drama studio to the sports field, but these spaces are also predicated on ancient disciplinary structures that locate the body in regimented and predictable ways. This sense of routine and entrapment is well expressed in the following statements:

> *1/resistant:* For future teachers, all I want to say for future teachers is that whenever you first have a child come up to you and say that they're bored about the art, right? … Don't coop them up in the classroom with long debating about what you're going to do. Take them somewhere like the theatre, give them cameras, let them go around and take pictures of like basically, if you're going to do something about wildlife, then wildlife pictures. If you're going to do something about the school, then school pictures.

> *2/good:* No, I just think that doing this it's nice to get feedback from other people and to go out of school and explore, because being cooped up in a classroom you don't really learn that much but if you get to use different stuff and meet different people it will help you improve your abilities more.

> *2/live-wire:* I don't like art galleries because I don't like being closed in, in small spaces for a long time.

Critical Minds set up the possibility of an in-between space where students were encouraged to acknowledge their journey to and from the institutional sites of the project. Additionally fieldwork within community spaces were utilised for a number of sessions.

What was also noticeable was the way the institutional spaces themselves could be reconfigured to alter perceptions and possible ways of working.

> *4/good*: We did… put ideas on paper on how we wanted to change the room. And I thought that's kind of… cause we get our own views and see how they come out on paper. But we didn't actually do it. It was fun just to think about it.

Although the potential of the exercise was not realised in this instance, it was evident in this session that students were able to reflect on the ways different spaces condition their learning and that through processes of mapping and reconfiguration they can inform adults about what works for them. This exercise also demonstrates how visual practices can be propositional and predictive, attributes normally associated with language.

Recommendations

For artist/gallery/school partnerships

Conditions for learning

1. Deploy socially engaged artists as interventionists to challenge limiting and normative pedagogic patterns and encourage participants to think differently;

2. Use external spaces as sites for learning (e.g. the contemporary art gallery, its communities and environs) to encourage students and teachers to reconsider and reconceptualise the process of learning;

3. Develop communities of learning to:
   a. break away from the notion of the artist as an isolated creator;
   b. encourage dialogical practices to enable collaboration and mutuality;
   c. within the collaborative/facilitative paradigm, sustain the role of adults as experts within and across disciplines (students appreciate the knowledgeable support of adults as a means to develop peer-cooperation and autonomy);

4. Allow time
   Collaborative Projects require time to enable:
   a. Planning;
   b. implementation: those projects that were taught in blocks of time, ie. 2-4 consecutive days, enabled both more sustained participation and deeper learning *(student immersion, absorption, reflexivity);*
   c. reflection and revision;
   d. dissemination;

5. Sustain partnerships to ensure continuity and to embed benefits structurally within the curriculum;

6. Maintain equitable communications between all participants — recognising the importance of the gallery educator as broker: facilitator, mediator, negotiator, administrator/manager;

7. Target KS3 students as a way to intervene within and potentially change limiting orthodoxies;

8. Provide opportunities for student motivation and ownership through:
   a. acknowledging and valuing student 'voices';
   b. differentiating activities in recognition of students' preferred ways of learning and lived experience;
   c. allowing students to participate in public exhibitions of their work, e.g. as curators: selecting, organising and displaying work;

9. Value collaborative projects as a productive form of CPD: acknowledge that participation by NQTs within experienced teams can contribute positively to their Induction Programme.

Developing critical thinking

Provide opportunities for students to:

1. work discursively enabling them to:
   * be alert, attentive and listen to others;
   * consider different points of view;
   * analyse and debate opinions;
   * participate in collective meaning making;
   * acknowledge consensus and diversity;

2. evaluate their own learning discursively and in writing
   (Students' learning and understanding of learning is not dependent on their ability to explicate that learning. However, the interview process demonstrated that students who had been labelled as resistant etc. were, given an opportunity, adept at articulating such understandings);

3. use writing not only as an evaluative and explanatory tool (as in the annotation of sketchbooks) but as an investigative and creative tool (analysis and metaphor);

4. pose problems as well as solve them;

5. view and engage with contemporary art in galleries (many note how their learning is enabled and enhanced through first-hand experience of works of art rather than reproductions) and interpret artworks with artists and in relation to contexts;

6. participate in socially engaged artists' interventions as an alternative to normative and orthodox school/gallery practices so as to encourage students to questions expectations, assumptions and prejudices;

On Research Methods

a) Action research

1. ensure participation by all researchers (i.e. at least participant observation) so that planning and research design are mutually informing, collective and negotiated processes;

2. all participants (art teachers, artists, gallery educators, researchers) should be given the opportunity to attend continuing professional development;

3. participation provides:

    a) teachers with the opportunity to reflect on practice; develop
        alternative perspectives on learning; break the cycle of isolation
        they often experience in the classroom;
    b) artists with the opportunity to work within, around and beyond the
        constraints of school curricula and regimes;
    c) gallery educators the opportunity to build networks of educators
        from different sectors; to share and develop educational provision
        and strategies with each other to form local, regional and national
        partnerships;

b) For future research

In the context of working with gallery education and contemporary art/artists:

1. understand how critical thinking can be evidenced in making practices
    (as multimodal processes);

2. identify how particular spaces condition certain forms of pedagogic
    practice;

3. examine how collaborative and dialogical practices provide students
    with ownership and agency.

Bibliography

Abbs, P. (ed.) (1987) *Living Powers: the arts and education.* London: Falmer Press.

Addison, N.; Asbury, M.; Chittenden, T.; De Souza, P.; Georgaki, M.; Hulks, D.; Papazafiriou, G.; Perret, C.; Trowell, J. (2003) *Art Critics and Art Historians in Schools: A Synoptic Report of an Interdisciplinary Research Project.* London: Institute of Education.

Allison, B. (1972) *Art Education and Teaching about Arts of Africa, Asia and Latin America.* The Voluntary Committee for Overseas Aid and Development.

Atkinson, D. (2002) *Art in Education: Identity and Practice.* Dordrecht, Boston, London: Kluwer Academic Publishers.

Ball, S. (2001) 'Better read: theorizing the teacher'. In: J. Dillon and M. Maguire (eds) *Becoming a teacher in Secondary* School. OU Press.

Barker, C. and Galasinski, D. (2001) *Cultural Studies and Discourse Analysis: a dialogue on language and identity.* London: Sage.

Barnett, R. (1997) *Higher Education: A Critical Business.* Buckingham: SRHE and Open University Press.

Benson, B. (1997) *Scaffolding.* (http://www.galileo.peachnet.edu/ accessed on 8 May 2006).

BERA (2004) *Revised Ethical Guidelines for Educational Research* Southwell: BERA

Bernstein, B. (2000) *Pedagogy, Symbolic Control and Identity*. Oxford: Rowan and Littlefield.

Bourdieu, P. (1984) *Distinction: A Social Critique of the Judgement of Taste.* London: Routledge and Kegan Paul Ltd.

Bourdieu, P. and Passeron, J-C. (1970) *Reproduction in Education, Society and Culture.* Trans R. Nice, London: Sage.

Bruner, J. (1960) (1977 edition) *The Process of Education.* Cambridge, MA and London: Harvard University Press.

Buckingham, D. (2005) *Schooling the Digital Generation: popular culture, the new media and the future of education.* London: Institute of Education, University of London.

Burgess, L. (2003) 'Monsters in the Playground'. In: N. Addison and L. Burgess (eds) *Issues in Art and Design Teaching.* London: Routledge, Falmer.

Burgess, L. and Addison, N. (2004) 'Contemporary Art: Why Bother?'. In: R. Hickman (ed.) *Meanings, Purpose and Directions.* London: Cassell.

Carrington, S. and Hope, S. (2004) *A report on the Whitechapel Art Gallery's artist-in-school residency project, 2002-04.* London: Whitechapel Art Gallery.

Croce, B. (1901) *The aesthetic as the science of expression and of the linguistic in general.* Trans. C. Lyas. Cambridge; New York: Cambridge University Press.

Davies, T. (1995) *Playing the System*. Birmingham: UCE.

Dawe-Lane, L. (1995) 'Using Contemporary Art'. In: R. Prentice (ed.) *Teaching art and design: addressing issues and identifying directions.* London: Cassell.

Dawtrey, L., Jackson, T., Masterson, M., Meecham, P. (eds) (1996) *Critical Studies and Modern Art.* Milton Keynes: Open University Press.

DCMS, (2000) *Centres for Social change: Museums, Galleries and Archives for all.* London: DCMS.

DCMS, (2001) *Culture and Creativity: The next ten years.* London: DCMS.

DFE (1991) *National Curriculum Art Order*. London: HMSO.

DfEE (1999) *The National Curriculum: Handbook for Secondary Teachers in England KS3 and KS4.* London: HMSO.

Dierking, L. (1996) 'Contemporary theories of learning', *Group for Education in Museums. Developing Museum Exhibitions for Lifelong Learning.* London: The Stationery Office.

Downing, D. and Watson, R. (2004) *School Art: what's in it?: exploring visual arts in secondary schools.* Slough: NFER.

Dubuffet, J. (1948) In: C. Harrison and P. Wood (eds) (1992) *Art in Theory 1900-1990.* Oxford: Blackwell.

Edexcel (2003) 'Specification for GCSE Art & Design', accessed 8 May 2006 www.edexcel.org.uk/quals/gcse/art/gcse/1027/

Eisner, E. (1972) *Educating Artistic Vision*. New York: Macmillan.

Ehrenzweig, A. (1967) *The Hidden Order of Art.* 1993 edition London: Weidenfeld and Nicolson.

Fairclough, N. and Wodak, R. (1997) 'Critical Discourse Analysis'. In: Teun Van Dijk (ed.) *Dis-course as Social Interaction. A Multidisciplinary Introduction Vol 2.* London, 258-284

Field, D. (1970) *Change in Art Education*. New York: Routledge and Kegan Paul and Humanities Press.

Freire, P. (1990) *Pedagogy of the Oppressed.* New York: Continuum.

Fry, R. (1909) 'An Essay in Aesthetics'. In: F. Frascina and C. Harrison (eds) (1982) *Art and Modernism.* London: Paul Chapman in association with Open University Press.

Gergen, K. (1985) 'The Social Constructivist Movement in Social Psychology', *American Psychology 40*: 266-275.

Goodman, N. (1984) *Of Mind and Other Matters.* Cambridge, Mass.; London: Harvard University Press.

Harding, A. (ed.) (2005) *Magic Moments: collaboration between artists and young people.* London: Black Dog Publishing.

Hargreaves, D. H. (1983) 'The Teaching of Art and the Art of Teaching: towards an alternative view of aesthetic learning'. In: M. Hammersley and A. Hargreaves (eds) *Curriculum Practice.* London: Falmer.

Hein, G. (2001) 'The Museum and How People Learn' paper given at CECA (International committee of museum educators) Jerusalem 15 Oct.

hooks, b. (1994) *Teaching to Transgress.* London: Routledge.

Hughes, A. (1989) 'The Copy, the Parody and the Pastiche: Observations on Practical Approaches to Critical Studies'. In: D. Thistlewood (ed.) *Critical Studies in Art and Design Education.* Burnt Mill, Harlow: Longman.

Hughes, A. (1998) 'Reconceptualising the art curriculum', *International Journal of Art & Design Education*, 17 (1). Oxford: Blackwell Publishing.

Kandinsky, W. (1911) (edition 1977) *Concerning the Spiritual in Art.* New York: Dover Publications; London: Constable.

Kress, G. and Leeuwen, T. (2001) *Multimodal Discourses.* London: Arnold.

Kyriacou, C. (2001) *Effective Teaching in Schools.* Nelson Thornes.

Lave, J. and Wenger, E. (1991) *Situated Learning: legitimate peripheral participation.* Cambridge: Cambridge University Press.

Lacy, S. (ed.) (1995) *Mapping the Terrain: New Genre Public Art.* Seattle: Bay Press.

Lynton, N. (1992) 'Harry Thubron: Teacher and Artist' In: D. Thistlewood (ed.) *Histories of Art and Design Education.* Burnt Mill, Harlow: Longman.

Mason, R. (2005) 'The meaning and value of home-based craft', *International Journal of Art & Design Education*, 24 (3). Oxford: Blackwell Publishing.

McRobbie, A. (2000) (2nd Edition) *Feminism and Youth Culture.* Basingstoke: Macmillan.

MLA (2004) *Inspiring Learning for All.* www.inspiringlearningforall.gov.uk

Morris, W. (1883) 'Art under Plutocracy'. In: G. Zabel (ed.) (1993) *Art and Society: Lectures and Essays by William Morris.* Boston: Georgeís Hill.

NACCCE (1999) *All Our Futures: Creativity, Culture and Education.* The report from the National Advisory Committee on Creative and Cultural Education. London: DfEE.

Ofsted, HMI 1986 (2004) *Ofsted Subject Reports 2002/3: Art and design in Secondary Schools.* London: Ofsted.

Paley, N. (1994) *Finding Art's Place.* London and New York: Routledge.

Prentice, R. (2000) 'Making connections between subject knowledge and pedagogy: the role of workshops'. In: N. Addison and L. Burgess (eds) *Learning to Teach Art and Design in the Secondary School.* London; New York: Routledge.

QCA (1998) 'A Survey of Artists, Craftspeople and Designers Used in Teaching Art Research.' In: *Analysis of Educational Resources in 1997/98, research coordinated by Clements, R.* (1996-97) CENSAPE: University of Plymouth.

Read, H. (1943) *Education Through Art.* London: Faber and Faber.

Richardson, M. (1948) *Art and the Child.* London: London University Press.

Ross, M. (1984) *The Aesthetic Impulse.* London: Pergamon Press.

Ruskin, J. (1840-) *The Lamp of Beauty: writings on art by John Ruskin.* This collection (1959). Oxford: Phaidon Press Ltd.

Schon, D. (1987) *Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning in the Professions.* San Francisco: Jossey-Bass.

Schon, D. (1992) 'The Theory of Inquiry: Dewey's Legacy to Education', *Curriculum Inquiry, 22 (2):* 119-139.

Stallabrass, J. (1999) *High Art Lite.* London: Verso.

Steers, J. (2003) 'Art and design in the UK: The theory gap'. In: N. Addison and L. Burgess (eds) *Issues in Art and Design Teaching*. London: Routledge/Falmer.

Taylor, B. (1989) 'Art History in the Classroom: a Plea for Caution'. In: D. Thistlewood *Critical Studies in Art and Design Education*. Burnt Mill, Harlow: Longman.

Taylor, R. (1986) *Educating for Art*. Burnt Mill: Longman.

Thistlewood, D. (1989) *Critical Studies in Art and Design Education*. Burnt Mill, Harlow: Longman.

Trend, D. (1997) 'The Fine Art of Teaching'. In: H. Giroux and P. Shannon (eds) *Education and Cultural Studies: Toward a Performative Practice.* New York; London: Routledge.

Vygotsky, L. S. (1978) *Mind in Society*. Cambridge MA: Harvard University Press.

Watkins, C. (2005) *Classrooms as Learning Communities: What's in it for schools?* London: Routledge.

Willis, P. (1990) *Moving Culture.* London: Calouste Gulbenkian Foundation.

Witkin, R. (1974) *The Intelligence of Feeling.* London: Heinemann.
Wood, L.A. and Kroger, R.O. (2000) *Doing Discourse Analysis: methods for studying action in talk and text*. Thousand Oaks, Calf.; London: Sage.

Wood, D., Bruner, J.S., & Ross, G. (1976) 'The role of tutoring in problem solving', *Journal of Psychology and Psychiatry, 17*.

Websites

About Learning www.demos.co.uk

Benson, B. (1997) *Scaffolding.* (http://www.galileo.peachnet.edu/ accessed on 8 May 2006).

www.creative-partnerships.com

engage projects: Envision, www.engage.org/projects/en-vision.aspx and Collect and Share, www.collectandshare.eu.com/

MLA (2004) www.inspiringlearningforall.gov.uk

(www.whitechapel.org/content.php?page_id=1905 n.d. retrieved 23.3.06)