

Enquiring Minds

Reports & papers: Project update (January 2007)

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1. Introduction

Since September 2006 two schools in Bristol have been piloting a new approach to curriculum that has been designed to explore how teachers can support and develop children to act as researchers and knowledge-creators. This report is an update on what teachers and children have been doing in the classroom during the first two terms of the school year, September–December 2006. It is a descriptive rather than analytical update on classroom activities and should be read as a report on 'work in progress'; the project is continuing in schools. For more detail on the background, philosophy and context of the project, see: www.enquiringminds.org.uk/programme.

The report has six parts:

- revisiting the aims of the project
- how Futurelab has worked with teachers to develop this approach
- description of the Enquiring Minds 'curriculum'
- accounts of classroom activities
- what children told us about the Enquiring Minds activities
- discussion.

2. Revisiting the aims of Enquiring Minds

In England, the UK government has an ambitious agenda to improve schools, accelerate pupils' learning and develop creative approaches to the curriculum. Enquiring Minds is an attempt to innovate and experiment with the school curriculum at a time when policy makers, head teachers and teachers are expressing concern that the National Curriculum is too rigid, too full of content, and out of line with the skills that young people will require for the 21st century. This concern is supported by evidence that many students themselves are dissatisfied by their experience at school. In this context, many schools are looking to make fundamental changes to their curriculum, and some are searching for models that may allow them to 'personalise' learning.

All this is encouraging. However, there are serious questions about how fundamental curriculum change might be imagined, planned, implemented and evaluated. These are the questions that Enquiring Minds is addressing. The work undertaken to date is based on an extensive review of developments in curriculum and teaching and learning, involves intensive work with teachers and students in two schools, and is making links with a network of schools seeking to develop enquiry approaches to teaching and learning. The unique contribution of the Enquiring Minds project is to provide evidence of how genuine student participation can be made a reality in classrooms, and how that may be used to inform future policies.

3. How Futurelab worked with teachers to develop this approach

During the period September 2005 to July 2006 we worked with nine teachers in two partner schools to develop the idea of Enquiring Minds and to explore ways of developing approaches to teaching and learning with children's ideas, interests and experiences at their centre. We brought the teachers together for meetings and workshops at Futurelab, and visited individual teachers in schools, including spending time in their subject classrooms.

We believed that teachers are more likely to develop new and different ways of working successfully if they have the time and space to discuss and share ideas about children and learning. We tried to find ways for the teachers to take part in the debates that inform Enquiring Minds. This included:

- providing teachers with written materials to prompt discussion on 'enquiry'
- a series of structured activities designed to help teachers think about the organisation of the curriculum at their schools (for example, see: www.enquiringminds.org.uk/resources/exemplar_activities)
- sharing with teachers the results of things we had read (for example, see: www.enquiringminds.org.uk/programme/guidebook/page20.html)
- observing lessons, writing detailed fieldnotes, and talking with teachers
- setting up two 'collapsed days' where a team of teachers from each school planned and taught a programme of student enquiry
- organising a 'conference' which allowed the teachers to join policy makers, academics, educational consultants, and other teachers to share their work.

This is a necessarily brief account, which supplies only a flavour of the work that took place over the year. Overall, we attempted to give teachers a genuine 'voice' in rethinking their approaches to teaching and learning, rather than imposing on them a pre-determined model to be tried out and 'road tested'. The outcome of this programme of activity was the development of an Enquiring Minds curriculum 'model' which was to be trialled in the two schools for one school year from September 2006 (see: www.enquiringminds.org.uk/programme/guidebook/page12.html). As researchers on the project, we took responsibility for writing this curriculum model based on the year's development work with the teachers. This report describes how the model has been developed through practice in the two schools.

4. Describing the Enquiring Minds curriculum

The Enquiring Minds approach starts from the advice that is made to all teachers during their training: "start from where the children are at". It assumes that children have valid experiences and personal biographies that should be the starting point for curriculum planning. Deciding what and how to study should be negotiated and agreed by teachers and students, and this is the unique contribution of Enquiring Minds at this time.

In developing the curriculum, the teachers argued that children were unlikely to simply come up with fully formed questions and ideas for enquiry and that some might question the idea that teachers are allowing them to choose their objects of study. In addition, it was recognised that there may be challenges in classroom management. To overcome this, teachers set up a series of structured activities designed to elicit and make visible aspects of children's lives and interests.

The knowledge and understanding gained from these activities should form the basis for further enquiry. The logical next stage is to study these things in depth. However, it cannot be assumed that students have the skills of enquiry or research to carry out such investigations. Teachers need to 'model' these.

The degree to which all of the participating teachers took 'ownership' of the project is debatable. Some were more enthusiastic about it than others. There are also some questions about how they 'interpreted' the aims of the project; for example, whether they saw it as an attempt to develop a more social educational space in an impersonal curriculum, or whether they saw it in terms of developing children's '21st century skills'. These issues of ownership and interpretation have obvious implications for how the project might evolve, and these are touched on in this report. However, it should be stated that all of the participating staff were willing to have a go at putting the theory into practice; a brave and risky move that they all thought well worthwhile in the context of their concerns about the capacity of traditional curricula and pedagogy to educate children fully.

5. Accounts of Enquiring Minds classroom activities

This 'curriculum' is being piloted in two schools – Ashton Park in Bristol and Gordano in Portishead (about 10 miles from Bristol). Approximately 120 children in Years 7 and 8 (aged from 11-13 years) have been involved in this pilot stage of the project, comprising of two classes of around 30 pupils in each school. All Enquiring Minds sessions, which the two schools have added to their timetables for these groups, take place in double periods of one hour and 40 minutes in length, almost all of them in the afternoons. Teachers have been planning and teaching in pairs, in the belief that they would bring different perspectives to the work and offer support to each other. Both schools elected to work with children from Key Stage 3, on the basis, in part, of the impending KS3 review, as well as on more local concerns.

This section contains descriptive accounts of the activities we have observed in two classrooms during the two terms spanning September–December 2006. They are based on our detailed field notes (as researchers we attended every session), conversations with the teachers, and their own written reviews of the term's work. In both classes, the teachers and children ended the second term with a focus on mobile phones, which had been discussed as a possible focus area by all the participating teachers and researchers during a review and planning meeting in November 2006.

Case study 1: Robert and Ian

September–October 2006

Robert and Ian are working with a group of 30 Year 8 students (aged 12-13 years) at Ashton Park School. They introduced the project to children as an opportunity for them to enjoy more responsibility for their own learning. "We want you to become confident enough to have your own thoughts," Robert said. "I haven't got a big syllabus that tells me what I'm going to teach; your thoughts and opinions are going to be the syllabus for these lessons."

Throughout the first few sessions, Robert reiterated that children should be reflecting on the conventional ways in which lessons operate. The very first task was for children to draw an 'analogy for school' that expressed the way they felt about the usual operation of school. Children's analogies included:

- a snooker table, with teachers as cues potting children into the pockets
- a large pit with sheep falling off the edge and to the bottom
- a building site with a bulldozer loading debris into trucks
- a football match, with pupils being kicked by teachers towards learning goals
- hell, with the headteacher as the devil, teachers as his assistants, and children as slaves
- a home for naughty children where they are guarded by teacher-wardens
- a half-written script, of which half has already been written by teachers and half is completed by children during the school day.

Another introductory activity was 'Beat the Teacher', with Robert and Ian defying the children to ask them questions they could not answer. When children could ask lots of questions the teachers knew nothing about, they were reminded by Robert that they "bring to the classroom a load of stuff that teachers don't know... some of it is very valuable... you're bringing an awful lot of knowledge into the classroom." Robert explained that, "What we're trying to demonstrate is that you already come to school with lots of valuable information and what happens when you come into lessons is that the teachers ignore this."

Other activities involved children making a presentation of 'What's Hot and What's Not', taking and classifying photographs of their typical evening after school, creating a photographic A-Z of the school environment, annotating a local map with memories and anecdotes, responding to a national survey of children's opinions, and making their own family trees.

Throughout many of these activities, Robert emphasised a number of emotional qualities about the way he wished the classroom to be and the attitudes for learning he wished the children to develop. There was lots of mention of 'trust', 'responsibility', 'sharing', 'talk' and 'attitudes', as well as a style of instruction that reinforced empathic dialogue between children, for example, "it is always nice to..." and "I would like it if..." Robert also announced in the first session that they would be using desks less ("the desks are gone") and that he and Ian would "sit with you". These appeals to equality seem to have continued throughout a lot of Robert's classroom talk and the way in which he was prepared to talk about his own family and background with the children publicly.

While Robert has appealed to children's social and emotional needs, Ian has emphasised Enquiring Minds as the positive alternative to a curriculum of 'science books', 'Shakespeare', 'writing' and 'French textbooks'. He said, "so isn't it about making lessons more interesting by bringing your own stuff?"

Both children and teachers found it difficult to make the next step to develop lines of enquiry from the initial activities, with the result that much of the term has appeared to involve the gathering of information from children with little sense of where this was leading. A recap session mid-way through the term allowed the teachers and students to discuss what had been achieved so far. Robert asked students what they thought the purpose was. There was some confusion. One child responded by asking, "Sir, why *are* we doing this?" One girl, when the aims of the sessions were explained to her in terms of students having a say in what they learn, replied, "Sir, teachers are supposed to help you, not let you do what you want". Other children, when asked what they thought the point of Enquiring Minds was, responded that "the government wanted you to try it out", that they thought it was "to find out how you learn", that it aimed "to test us like guinea pigs... see if we're smart", "to see how we're going to learn", to "express ourselves" and "to do things differently to other lessons".

The teachers themselves have reported that they found the Enquiring Minds sessions in the first term challenging, and have adopted critical perspectives on the approach. Robert has questioned whether children are interested in things from their own lives and familiar localities, or whether they "prefer to be introduced to things outside their own sphere of reference". He also feels that he and Ian have been unable to develop their usual rapport and relationships with the children, and attributes this in part to team teaching, which "seems to create a gap into which the students slip".

In terms of developing the project in this classroom in the second term, there were a number of potential barriers. One is that Robert reports not having a "real belief or concrete grip on what the 'curriculum' is", or on the specific skills of enquiry that children require.

November–December 2006

In Term 2, Robert and Ian chose to focus all activities on a project on mobile phones. They ran six sessions during this term, culminating with pupils planning and producing a TV news article on the subject of mobile phone bullying.

In the course of the six weeks the following activities took place:

- object analysis of a mobile phone in its material, social, global and historical contexts
- identification of current themes of concern regarding mobile phones
- writing and completion of questionnaires with five family members and peers
- collation and summary reporting of questionnaire data
- planning and production of TV news items.

Though the selection of the mobile phone activity was based not on the children's own preferences, Robert and Ian made it clear that they had chosen this topic as it was one that the students knew much more about than the teachers. Robert in particular claimed, "I am the height of ignorance" on this topic, and that "you quite easily know more than the teachers". Links were also made to the aims of the project as a whole, and to the idea of taking something very familiar to children from their own experiences and considering its "significance in society wider than you". The work involved in studying this topic included internet searching and conducting questionnaire research.

During the writing, collation and reporting of the questionnaire data, the teachers made increasing use of quite technical vocabulary of doing research. Mention was made of samples and data and of making inferences and hypotheses, as well as of tallying responses and calculating percentages. Later, in interview, one child claimed that some of this language was quite hard as he had not encountered it before. However, most pupils seemed motivated by these tasks, and were unfazed by the sudden presence of maths-type work in the EM context. These kinds of purposeful tasks, with children able to comprehend precisely what the output was that they were creating, seemed to work well.

During the later scripting of the TV news articles, most pupils were again enthused by the task of making an article to do with mobile phone bullying or happy slapping. Although this lesson involved lots of writing, for the most part the children completed all the writing activities as required with a high degree of apparent motivation.

Children had a lot of fun making their videos, and by the end of the session, most groups had completed their video, which they made both within the classroom with a high degree of teacher support and outside the classroom with very little teacher intervention. Although there was not time to view these videos prior to the end of the session, Robert promised to burn these to CD so they could watch them at the beginning of the new term in January.

Overall, most pupils in this class seemed motivated by the tasks during the term. The level of challenge was higher, with aspects of mathematics, English and media education included.

Case study 2: Ryan and Mark

September–October 2006

In their introductory session with Year 7 students at Gordano School, Ryan and Mark stressed how lucky the children were to be taking part in Enquiring Minds, which was presented as an important experiment that “has got a lot of people very interested”. They told the pupils that they as teachers had spent a year developing the approach and that they were very excited about it. They showed pupils a clip from the BBC’s report on personalisation the previous year which featured Ashton Park School.

In the first term children completed a number of activities. Most sessions began with ‘philosophy for children’ activities, with the teachers asking children to respond to abstract questions such as “What is the happiest colour?” and “If you went into a shop and read an article in a magazine without paying for it, is that stealing?” The children also completed a ‘Traces of Me’ collage using photos and objects from home to represent themselves, and a written reflection on why they selected the images and objects included on it. They took photographs around the school site to represent a particular set of words (eg happy, creativity, success) and described some of these photos as if through unfamiliar ‘alien’s eyes’. A few team-working exercises punctuated each of the sessions, although it was not clear that children knew how to work with others very effectively.

November–December 2006

In the second term the focus turned to children identifying areas of interest and posing questions based on these. They had watched a recent TDA TV advert and used this as a basis for their own questioning (with the promise that they would eventually create their own video). Using their Traces of Me documents, they cut up and stuck together their interests and ideas and then came up with themes and questions from those representations. Some of their questions included:

- Why are TVs necessities?
- Why do people have pets?
- Why are all boys interested in phones and gadgets and all girls into ponies?

Some other questions they had written down for homework were:

- Are adults just tall kids?
- How do you tell the future?
- Does space have a different time?
- Is the universe really big, or does it just look big because we’re really small?

They also reflected on the previous term's activities, where they stated that they thought they had "shown how we live our lives", "what personalities we have", used their "imagination", "creativity" and "feelings", and that they had been "thinking outside the box".

The last two sessions of the term involved a whole-class enquiry on the subject of mobile phones. This involved a structured activity called Growing Boxes in which children looked at phones in personal, local, global and historical context, and identified questions to investigate about mobile phones:

- Are phones taking over the world?
- Why do we have so many mobile phones?
- How do phones cause cancer?
- Why do people use phones as fashion accessories?
- Does advertising have any effect on sales of phones?
- Is the age group buying mobile phones expanding?

Throughout the two terms, Ryan and Mark emphasised the 'skills' aspect of Enquiring Minds. There was an emphasis, particularly through the philosophy exercises, on the children's reasoning skills, with both Ryan and Mark impressing on students that there's not a single right answer and that the purpose of these activities is to decide what you think "really important". The third session was entirely dedicated to exploring how to formulate good questions, and on beginning to "identify what makes a good question".

The sessions observed were characterised by high levels of pupil participation and pace. Ryan and Mark are skilled at setting tasks and ensuring that pupils carry them out. This means that tasks are finished. It also means that the routines of the classroom are highly teacher-directed. There has been a very positive atmosphere in the sessions, with teachers and pupils regularly sharing a joke and seemingly enjoying the experience. In question and answer sessions, there have been high levels of pupil response, with Ryan and Mark using questioning techniques to good effect. There were very few instances of pupils' misbehaving in these sessions, with Mark and Ryan quick to establish and reinforce their expectations.

Ryan and Mark are both positive about the experience so far. Ryan noted that he felt that there was increased participation and enjoyment as the term has developed. There were more hands up and more creative questions. He felt there is a "huge sense of ownership from the students; we are in this together". He noted that ICT issues are evident – there is a lack of time to set things up. Enquiring Minds sessions, he says, have been very different to normal lessons since "we are constantly pursuing a long-term goal rather than deliver small 'chunks' of content". Ryan says that he's been surprised by the variety of aspects of pupils' lives, and believes "they are keen to share and listen". He says this means he is more able to get to know these children than when he is teaching maths: "I don't just see them in terms of their mathematical ability". In addition, team teaching has "been great as it's good to bounce ideas off a partner". For his part, Mark has been encouraged by pupils' enthusiasm to ask difficult questions and notes that "our students are a lot more rich than I imagined – both with money and also a diverse range of experiences".

6. What the children said

In this section we report on some of the feedback on the sessions reported to us during interviews with participating children in December 2006. Ten children

attended interview, six boys and four girls. They were selected on the basis of our former observations: they seemed to us to be students who had had strong reactions to the lessons. There were three main areas of questioning:

- understanding of the programme and what they thought they had learned
- teaching, lesson arrangement and assessment
- attitudes, engagement and behaviour.

Ashton Park students

Four students (two girls, two boys) from Robert and Ian's Year 8 class attended interviews. All of them were positive about the Enquiring Minds lessons. They were not, however, able to articulate very clearly what they thought was its purpose or what they would get out of it by the end of the school year. None of them, when asked, remembered what the teachers had said Enquiring Minds was specifically setting out to help them learn. One thought it was "a bit confusing", while another said it was "about all different things; you don't just stick to one subject". Two of them claimed it was about "reality" and "stuff that will happen to you"; another that it was about "other people's point of view" and "what other people do". One of the girls remarked that it reminded her of PSHE: "it's like more to do with life". These were, though, all things they liked about it.

Despite having little long-term understanding of the programme, the children all reported high engagement with Enquiring Minds. They all rated it more highly than most of the rest of school, and claimed Enquiring Minds lessons were "fun", "more chilled out than other lessons" and "less pressured". They liked the fact that it was less routine than other subjects, "because it gets boring if you just keep going to the same lessons and learn the same things". On the downside, two of them thought there had been too much teacher talk at times, even though at others they thought it more active and engaging than most other subjects.

When it came to the question of assessment, they thought it was positive that they were not being graded or marked constantly. Lianne, a bright and able student, claimed, "I think it's why it's relaxed because we... we get graded a lot and that's good, but still - they tell you if your work's good or if it's... how you can improve". What they particularly liked was that both Robert and Ian would spend time during each lesson speaking with the students and helping them to think more carefully about the issues under discussion.

Overall, they all reported positively on the way that the teachers engaged with them, and thought that the atmosphere in the lessons had contributed to better behaviour.

Gordano students

Three students in Ryan and Mark's Year 7 class were interviewed (two boys, one girl). Again, all were positive about their experience so far. One boy claimed, "you go to all these lessons and you think 'Oh, I really want to learn about that subject', and then they're giving you the chance to do that stuff". One girl said, "it's really good 'cause when you're working like stuff you want to do I think you enjoy it more so you think more, and so I think it's really good". They seemed to have developed a clear sense that the lessons were about finding things out and learning how to answer questions. They also reported a positive social element of the lessons: working together and finding out about other people had allowed them to bond more.

The children thought the lessons were quite active and varied. One girl said she thought it made her think more, which made it challenging, but that it was still fun. They all thought behaviour was good, and attributed this to the way the teachers varied the lessons and acted firmly on any misbehaviour.

7. Discussion

Throughout this document we have not attempted to present an analytical discussion; only at this point a descriptive account of what we have observed taking place. Clearly, there is a lot of analysis of the programme to complete once we have been able to observe Enquiring Minds in practice for a full school year, spent more time interviewing children and staff, and completed collection of the data.

At this point, we hope that it is apparent that the teachers involved in the Enquiring Minds project are engaged in a challenging task. Despite the rhetoric in recent educational policy that surrounds ideas about creative teaching and 'excellence and enjoyment', much of the normal work of teachers in schools is based on models of good teaching that focus on objectives, 'four-part lessons', content tightly defined by teachers, and a subject-defined curriculum. This is what pupils and teachers are accustomed to, and seeking to unsettle this model involves risks and different ways of working in classrooms.

It is also important to emphasise that the teachers involved in the project are attempting to develop different approaches over the course of a long school year. If some of what we have described above stresses the issues and problems that teachers have faced in the early stages of Enquiring Minds, we should bear in mind the contexts in which they work. We want to record our utmost respect for the work these teachers are doing. It is far too early to begin to make judgements about the 'success' or 'failure' of the work taking place in schools, even if we were able to define simply what those terms mean.

However, it is worth noting that at this point a number of issues and points of interest are emerging. For clarity's sake, we will deal with these under two headings. The first concerns the concept of Enquiring Minds as it has developed to date, whilst the second focuses on classroom relations.

The concept of Enquiring Minds

As we stated earlier in this report, Enquiring Minds starts from the assumption that children bring to school experiences, knowledge and ideas that tend to get ignored in the 'traditional' subject-based curriculum. The challenge for any 'Enquiring Minds' curriculum would be to encourage pupils to bring these experiences to the classroom, be prepared to share them and make them visible, and use them as the basis for curriculum-construction. This has, so far, proved very difficult. Teachers have found it hard to elicit these experiences, knowledge and ideas, despite attempts to develop different teaching approaches. In those cases where teachers have had some success in eliciting or making visible aspects of children's lives, the next challenge has been to find ways to take this knowledge further or to develop these into meaningful questions for further study.

There may also be differences in how teachers and pupils interpret the notion of 'enquiry'. This is not necessarily a problem, since enquiry is likely to mean different things in different contexts. In one of the case studies described above – Robert and Ian – the model of enquiry adopted is one based on a person-centred

view, where children are encouraged to talk about and reflect on their own experience of 'growing up'. In the other case study, the view of enquiry seems to be based on a 'scientific' view, which an emphasis on 'evidence', 'proof' and 'rigour'. Both of these interpretations of enquiry are valid, and have different implications for the types of knowledge that are produced in the classroom.

Teacher-child relationships

One of the common themes raised in the case studies is how teachers report that they feel less in control of the teaching situation – they are not sure where things are going next. This is in contrast to their own subject teaching where they feel in control of the process and direction of the learning. There is no doubt that some of what we have seen in classrooms has seemed a little 'unfocused' in comparison with the type of 'architectures of learning' in which pupils are told what to do, for how long, and for the audience of the teacher. Teachers and pupils are attempting to develop different kinds of educational experiences that should be evaluated in different ways.

In the two case studies we have reported, there have been different levels of teacher regulation. What we mean by this is that Robert and Ian have tended to allow children to decide and influence the direction of classroom talk, while Ryan and Mark have retained more control and authority over what is permitted to be said in the classroom. We should bear in mind that Robert and Ian have had twice as much contact with their class, and that their class is in Year 8 while the other class is in Year 7. The focus of the lessons in Robert and Ian's lessons is on content and subject matter, whilst Ryan and Mark tend to focus more on the procedures and language of investigation. This is reflected in the ways the children talk about their experience of the project: at Ashton Park children see it as being about their own lives, social relations and realities; at Gordano they see it is more as about questioning and finding out.

At a time when educational policy encourages schools and teachers to innovate, develop creativity, and allow student voice, there is a real need to explore how teachers might develop approaches to allow this in their classrooms. The case studies reported here demonstrate teachers in two schools attempting to grapple with this problem.