



Evaluation of Future Blogs

Final Report

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1. Background and introduction

This report presents the findings of a qualitative evaluation of the Future Blogs scheme undertaken by the National Foundation of Educational Research (NFER) between February 2008 and July 2008.

The aims of the evaluation were to develop a greater understanding of the views of the pupils and teachers who had participated in the scheme and to assess their opinions on the relative success of the scheme.

1.1 Introduction to Future Blogs

Future Blogs was developed through collaboration between the Royal Society of Chemistry and The Brightside Trust. It is an innovative e-mentoring scheme that links pupils¹ studying chemistry with mentors from universities or industry and is based on the Bright Journals e-mentoring programme (an e-mentoring scheme targeted at 14-18 year olds interested in health care and medicine). The role of the mentor is to develop a supportive relationship with their mentee and to help their mentee become more aware of their potential to succeed through providing support and guidance in understanding the range of educational and career choices open to them.

The scheme is aimed at pupils from years 9-13, particularly those from a widening participation background. It targets pupils with an interest in science who are considering furthering their chemical knowledge, be it to GCSE, A-level or degree level.

As well as e-mentoring, the scheme also provides an extensive website with information relevant to pupils studying science or chemistry, or considering future science or chemistry related careers.

1.2 Methodology and sample

This qualitative evaluation of Future Blogs involved the undertaking of case study visits to three schools and interviews with teachers at three additional schools. The case study visits included both interviews with the teacher who had been the lead on

¹ Pupils in this study refers both to pupils in schools and students in colleges.

Future Blogs and interviews with a selection of pupils who had participated in the scheme. At each school, the NFER researcher asked to speak to up to three pupils who had posted questions on the website for their mentor and up to three pupils who had been recruited onto the scheme but had not posted to their mentor. The additional teachers consulted outside of the case study schools were selected from schools that had experienced a relatively low pupil engagement in the mentoring scheme. In total, seventeen pupils and six teachers were interviewed as part of the evaluation.

The pupils and teachers were asked a series of questions to explore their views and attitudes towards, and experiences of, the Future Blogs scheme. Pupils were asked questions relating to the following general themes:

- their academic background including their interest and aptitude towards chemistry
- the training and support they had received to use Future Blogs
- their use of the Future Blogs website and opinions on the different features
- their use of, and opinions on, the e-mentoring scheme
- the impact of participating in the scheme on their attitudes towards chemistry and their future career plans
- recommendations for future use.

Teachers involved in the case studies and the telephone interviews were all asked the same questions which related to the following general themes:

- how they were introduced to the scheme, including reasons for participating
- how they were trained
- their opinions on pupil usage of the Future Blogs site and the training pupils received
- the support they had provided to pupils
- lessons learnt and recommendations.

The three schools visited for the case studies were secondary schools in Nottingham and London (two of the schools were in London). Additionally, the three teachers interviewed by telephone were from colleges in Brighton and Lincoln (two colleges were in Lincoln).

To develop a clear understanding of Future Blogs project management and whether the scheme had met its proposed targets and goals, interviews were also conducted

with the Future Blogs project manager at The Brightside Trust and with the RSC project manager.

The interviews provided rich qualitative data on pupils' and teachers' perceptions of the effectiveness and impacts of Future Blogs.

1.3 Structure of report

This report follows the structure outlined below:

- a review of the project management and delivery of Future Blogs
- the views of teachers
- the views of pupils
- conclusions and recommendations

2. Project management and delivery

Key findings

- The project has been jointly managed by the RSC and The Brightside Trust. This split of responsibilities has meant that neither of these organisations has had an overview of the progress of the project and it has led to issues of communication both between the project managers and with universities and schools.
- Ten universities have engaged with the scheme, 276 mentors have been recruited, 31 schools have participated and 301 mentees have been recruited. The number of mentees recruited is under the 360 target as a result of some universities experiencing difficulties in engaging schools. In addition, due to the scheme's difficulties in year one, it was decided to limit the number of mentees and mentors recruited in year two.
- The role of the volunteer coordinator is to take responsibility for the organisation of the recruitment and training of mentors and teachers, matching mentors and mentees and overseeing the relationship. In some cases, this role has proved too much for already over-stretched staff, some of whom face job uncertainty, which led to the bulk of these responsibilities being transferred to the RSC.
- The quality of mentors has varied with some responding quickly and providing detailed replies and others taking some time to reply and providing brief responses. Of the 276 mentors recruited, 46 per cent posted two or more messages to their mentees, which was a lower proportion than expected.
- The CRB checking process took longer than was expected (three to four months on average and longer in some cases) and this led to a delay in matching mentors, who had already been trained, to mentees who wanted to start posting. In some cases, this led to a loss of momentum and enthusiasm amongst mentors and mentees as well as impacting on the enthusiasm of some university coordinators.
- Although 301 pupils were recruited as mentees, 61 per cent did not participate in the scheme. The majority of these pupils were recruited in year one and either did not receive training and/or were not matched to a mentor (the latter was, in some cases, an impact of the CRB delays). Of those mentees who were trained and matched to a mentor, 27 per cent posted only once or made no posting. Regular (weekly) follow-up of teachers, mentors and mentees has been shown to increase postings but this is very time intensive.

2.1 Introduction

This section provides details on the management of the project and how it has been delivered, including the processes used for engaging and training university coordinators, mentors, schools, teachers and mentees.

2.2 Project management

The Future Blogs project started in January 2007 and has been jointly managed by The Brightside Trust and the RSC. The overall budget for Future Blogs was £179,000 and the project has been run within this budget.

Interviews with the RSC and The Brightside Trust suggest that the joint management of the project has led to some issues. Initially, responsibility for liaising with, and supporting, the ten universities engaging in the scheme was split between the two organisations with the RSC being responsible for working with five universities and The Brightside Trust with the other five. The RSC were also responsible for supporting the professional mentors recruited who were assigned a university link. This split of responsibilities led to neither organisation having an overview of the running of the scheme. In addition, issues of communication arose both between the project managers and with universities and schools. As a result of these difficulties, the management of the scheme was reviewed in August 2007. At this point, the RSC took responsibility for liaising with the university coordinators and schools and The Brightside Trust took responsibility for working directly with mentors and mentees, sending reminders when mentees had not posted for a while or mentors had not responded.

2.3 Engagement of universities, coordinators and mentors

In the first year of the project, the project management team spent time engaging universities with the project and developing relationships with designated project ‘coordinators’. The role of the volunteer coordinator was primarily to take responsibility for the organisation of the recruitment and training of mentors and teachers/mentees, matching mentors and mentees and overseeing the relationship.

To recruit universities to the scheme, contacts with universities were made through the widening participation coordinator, the Chemistry: The Next

Generation (CTNG) coordinator and staff within chemistry departments. Once coordinators had been identified, they were provided with training which included a CD Rom of information and talking through their roles and responsibilities with a member of staff from the RSC or The Brightside Trust on the telephone.

It was originally intended that twelve universities would participate in the scheme. Due to the time taken to gain the commitment of universities, a total of ten HEIs participated in Future Blogs. It was hoped that universities already participating in CTNG would automatically become involved in Future Blogs but this was not always the case and more persuasion was needed than was originally envisaged. The ten universities recruited to the scheme were:

- Imperial College, University of London
- Kingston University
- University of Nottingham
- University of Sussex
- Loughborough University
- University of Leicester
- University of Liverpool
- Liverpool John Moore's University
- University of Manchester
- University of Newcastle.

Within each university, undergraduates, graduates and academics from chemistry departments were recruited as mentors. An estimated target for the number of university mentors that would be recruited to participate in the scheme was up to 360; the actual number of mentors recruited was 276. The RSC also recruited professionals from chemical science companies as 'industrial mentors' and a total of 40 were recruited.

Mentor training, which lasted between one and three hours depending on the deliverer, was developed in partnership by The Brightside Trust and the RSC and delivered by these two partners and universities themselves. The training included areas such as: listening skills, closed and open questions, child protection, confidentiality, boundaries of e-mentoring, how to get information

on qualification routes, how to use the website and the mentor profile. Mentors were also provided with a guidebook.

Of the 276 mentors recruited, 126 (46 per cent) posted 2 or more messages to their mentees. This was lower than The Brightside Trust had expected from previous e-mentoring schemes and they suggest that this was primarily due to delays caused by the CRB checking process. All mentors were required to undergo a CRB check which was organised through the sub-regional STEMPOINTS. Some STEMPOINTS were more efficient than others but, in general, it could take three to four months for the checks to be processed, and in one case it took eight months. Some of the first mentors were trained in February 2007 but, due to waiting for their CRB clearance, they could not start their mentoring role until May/June. In some cases, this led to mentors dropping out of the scheme or a loss of initial enthusiasm.

The evaluation evidence suggests that the quality of mentors has varied with some mentors responding very quickly to mentees and providing in-depth responses and others providing brief responses or not responding so quickly. There has also been a small degree of drop out from mentors after the first year of the scheme due to the pressure of their main workload and they have been replaced where the mentee has been in agreement to developing another mentor relationship.

As the project has progressed, issues have also emerged in relation to the coordinator role, which was a role that was piloted as part of the scheme. Many members of staff performing this role had other existing and pressing responsibilities and, being already over-stretched, found it difficult to find the time for the extra responsibilities required by Future Blogs. Additionally, staff within the widening participation role can often face issues in relation to job uncertainty. These issues, in addition to the negative impact of the CRB delays on coordinators' enthusiasm for the scheme and issues related to the change in project management responsibilities of the RSC and The Brightside Trust, led to three coordinators withdrawing from the scheme at the end of year one. This has all been useful learning and has resulted in the role being scrapped and, as mentioned previously, the RSC taking over the bulk of the coordinators' responsibilities in August 2007 with The Brightside Trust liaising directly with mentors and mentees.

2.4 Recruitment of schools and mentees

CTNG lists of schools were used to recruit schools onto the scheme and some universities also recruited their own schools through existing links or new approaches. The original target was to recruit 30 schools to participate in Future Blogs and 31 schools participated.

Once a school had agreed to take part in the scheme, training was delivered to teachers. This training was jointly developed by the RSC and The Brightside Trust and delivered by these two organisations, and also by universities initially, both within schools and universities. Using universities to deliver the training was piloted in the initial stages but this training route was then dropped due to the fact that university coordinators could generally not commit the time to training mentees.

In some cases, teachers and mentees were trained at the same time. Training for teachers generally lasted from twenty minutes to one hour depending on the deliverer and the teacher's requirements. The training included: the aims of the scheme; how to use the website and how it could be used in lessons; and the support and benefits that mentees receive. Teachers were also provided with a booklet about the scheme. Most of the teachers involved in the programme received training. It seems that training has been particularly effective where it has been linked with a university visit by teachers and their pupils or where teachers and pupils have been trained together. This was the recommended method of delivering training taking into account prior learning from other e-mentoring schemes managed by The Brightside Trust.

Schools were responsible for recruiting mentees in years 9 to 13 with the proviso that they be pupils with an existing interest or potential interest in science. Those pupils in years 12 and 13 were targeted for their more specific interest in chemistry. Mentees were trained by university coordinators, The Brightside Trust and the RSC alongside teachers, or were trained by teachers themselves.

The aim was to recruit 360 school pupils as mentees and, over the two years of the scheme, 301 mentees were recruited. Some universities faced difficulties in recruiting sufficient mentees despite considerable attempts to promote the scheme to local schools. Significant time is required up-front to recruit schools and issues to overcome relate to teachers' concerns about pupil safety and the

fact that the scheme does not directly relate to the curriculum. The scheme is also not always perceived to be as attractive as a school STEM day or practical science activity. However, evidence from other e-mentoring schemes suggests that once schools are engaged they tend to remain engaged.

Although 301 pupils were recruited to the scheme, 61 per cent (185 pupils) did not participate. The majority of those pupils who did not participate were recruited in year one and, as a consequence, were impacted by the CRB delays. Those 116 pupils who did participate (i.e. those mentees who posted more than twice or spent more than an hour on the website or logged on more than 10 times) remained engaged for four months or more, with 45 mentees continuing with the Future Blogs e-mentoring programme for over two years. Of these 45 mentees, 2 mentees are still involved in their third academic year.

In the first year, 255 pupils were recruited and, of these, just under a third, 81 pupils, participated in the scheme. 140 pupils were never trained and/or matched to a mentor. An additional 34 did not engage in the scheme. The Brightside Trust and RSC suggest that this lack of engagement in year one was closely related to the CRB delays. As a result of the CRB delays, mentors were not able to start working with mentees before May/June and, by this time, many pupils were either doing exams or had left school and, as a consequence, never participated in the scheme. Non-engagement was also caused by other reasons such as: computer technical failures; mentees' limited access to computers; poor training; matched mentors not posting an introductory or responding message (exacerbated by the CRB delay); or mentees realising that e-mentoring was not for them. Non-engagement of 30 per cent is usually expected.

The Brightside Trust online data also suggests that another issue for year one was the fact that many of the mentees recruited did not fall within the disadvantaged target group which the scheme aimed to engage.² In their online reports, The Brightside Trust collected data from 26 mentees in year one. 65

² Disadvantaged pupils were classified as those who were: first in their generation to consider going to university; living in areas that are ranked below the national average for levels of deprivation; in receipt of free school meals or an Educational Maintenance Allowance (EMA). Parental profession was also considered but, from the responses given to this question in year one, it was difficult to classify the level of disadvantage precisely, therefore this information was not collected in year two.

per cent of these (17 out of 26) could be classified as disadvantaged in so far as they were the first generation in their families to consider going to university. However, the group overall could not be considered disadvantaged since only 19 per cent (5 out of 26) were in receipt of free school meals and only 38 per cent (10 out of 26) lived in areas that were ranked below the national average for levels of deprivation.

In year two, pupils were not impacted by the CRB delays and, as a result, the participation rate was eight percentage points higher. Of those 45 pupils who were recruited in year two (not including the 1 ghost mentee), 78 per cent (35) went on to participate in the scheme. Due to the scheme's difficulties in year one, it was decided to limit the number of mentees (and mentors) recruited in year two. Since a big recruitment drive, such as had taken place in year one, did not take place, opportunities to link Future Blogs with other enrichment activities, which might have made recruitment easier, were not investigated.

However, on a positive note, The Brightside Trust were more successful in engaging pupils from schools in more disadvantaged areas in year two. In year two, data was analysed from online reports in respect of 17 mentees. Overall, all of these could be considered disadvantaged by one or more classification criteria. 65 per cent (11 out of 17) were the first in their generation to consider going to university. In addition, 59 per cent (10 out of 17) lived in areas that were ranged below the national average for levels of deprivation. Of these 10 mentees, 7 lived in areas that were ranked in the top 20 per cent of the most deprived and 3 ranked in the top one per cent. 29 per cent (5 out of 17) were in receipt of free school meals and/or an Educational Maintenance Allowance (EMA).

Table 1 over the page provides details on the numbers of mentees who engaged and did not engage in the scheme over its two years' duration.

Table 1: Number of mentees engaging/not engaging in Future Blogs n=301

Status	Never trained/ 'ghost mentees'	Non-engaged	Semi-engaged	Engaged	Total	Total engaged ³ excluding 'ghost mentees'	% who engaged ³ with programme by cohort excluding 'ghost mentees'
Year 1	140	34	32	49	255	115	70%
Year 2	1	10	11	24	46	45	78%
Total	141	44	43	73	301	160	73%

The Brightside Trust have also collected data on the *level* of engagement of those pupils who did engage in the scheme; this data is based on the number of times pupils have posted to their mentors and usage of the website. The findings suggest that there have been varying levels of pupil engagement with the scheme as shown in Table 2 below. Table 2 looks at levels of engagement excluding the 141 ghost mentees who never engaged in the scheme since they were not trained and/or matched to a mentor.

Table 2: Overall pupil engagement in Future Blogs n =160⁴

Number of postings to a mentor	Percentage of pupils		
	Year 1 n=115	Year 2 n=45	Year 1 and 2 n=160
0-1 postings (non-engaged)	34 (29%)	10 (22%)	44 (27%)
2-5 postings or 1-3 hrs on the website or logged in over 10 times (semi-engaged)	32 (28%)	11 (25%)	43 (27%)
>5 postings or > 3 hours on website or logged in over 20 times (engaged)	49 (43%)	24 (53%)	73 (46%)
	115 (100%)	45 (100%)	160 (100%)

³ Engaged' here includes semi-engaged mentees.

⁴ This table has excluded the 141 ghost mentees (140 of which were from year one) in order to be able to make a better comparison between levels of engagement in years one and two.

Just over a quarter of mentees (27 per cent) have posted to their mentors very infrequently (0-1 postings) and 27 per cent have posted 2-5 times. Just less than a half of mentees (46 per cent) have posted to their mentors more than 5 times. Non-engagement can be related to issues with initial training, technical failures, mentors not responding or mentees realising the scheme is not for them. The data from The Brightside Trust suggests that those pupils recruited in year two posted more frequently to their mentors (53 per cent of mentees in year two made more than 5 postings or spent more than 3 hours on the website or logged in over 20 times compared to 43% of mentees who fell into this category in year one).

Regular (weekly) follow-up of teachers, mentors and mentees can increase, and has increased, postings but this is very time intensive.

2.5 Development of the website

The interactive Future Blogs website was launched in April 2007 and it provides a range of additional resources as well as the e-mentoring facility. No targets were set for the number of resources on the website, although The Brightside Trust aimed to include 300 articles and news updates on the site by January 2008. By January 2008, The Brightside Trust had surpassed their target and had included 365 of these resources on the website.

The site includes:

- weblog-style journals
- polls, quizzes and news articles to stimulate discussion
- an extensive resource library
- online mentor training
- discussion forums for mentors and project coordinators.

3. Views of teachers

Key findings

- Teachers who received training specifically targeted at teachers and pupils delivered in school were more confident about the scheme than those teachers who had attended mentor training or had received no training.
- A number of the teachers consulted felt that they needed more support to understand the aims and objectives of the scheme and how to work with their pupils to ensure that they were engaged and maintained their engagement in Future Blogs.
- There was not a common approach regarding the type of pupils that were targeted and selected to participate in Future Blogs and teachers generally felt that they needed more guidance as to the type of pupils they should recruit and who would benefit most.
- The pupils consulted who were engaged with the scheme tended to be those who were already enthusiastic about chemistry and who had made considerable progress in deciding on their future study and career plans.
- The schools with the lowest pupil drop-out rates had received pupil training from The Brightside Trust as opposed to the teachers delivering the training themselves.
- Reasons for pupils dropping out of Future Blogs included: difficulties in building a relationship or making contact with mentors; no recommended structure for teachers to deliver scheme; pupils not having the initiative or enthusiasm to engage on their own with the scheme; and exam and school pressures on pupils' time.
- A number of teachers suggested that the scheme might have been more successful if pupils had met their mentors before they were asked to start posting questions. These meetings could have been combined with chemistry workshops/events, industrial visits etc.
- Future Blogs was not incorporated into either career or science lessons and the majority of pupils accessed the site from home. Some teachers reported that they could not incorporate Future Blogs in class time as only a few pupils from each year group were participating.
- Teachers suggested that they were not clear what their role was in supporting pupils to make use of Future Blogs and felt that it would have helped if there were examples of activities and tasks that they could complete with their pupils.
- Teachers were generally positive about the content and structure of the Future Blogs website. However, teachers did suggest that the site could be improved by including resources that were appropriate to each Key Stage and that the site could be made more interactive.

3.1 Introduction

This section explores the findings from the interviews completed with six teachers in relation to a number of areas including: reasons for participating in the scheme;

training and support received; criteria used for targeting and selecting pupils; recruitment and engagement of pupils; training of pupils; support and guidance provided to pupils; views on the Future Blogs site; views on the e-mentoring facility; and pupil usage of the site.

3.2 Reasons for participating in Future Blogs

The teachers consulted reported different reasons why they felt that it would be valuable for their pupils to participate in Future Blogs. These are detailed below.

- The teacher from school A reported that he chose to participate because his school often tries to become involved in schemes that are targeted at Aimhigher pupils.
- The teacher from school D reported that she hoped that pupils would develop a greater understanding of university, industry and careers and a broader understanding of science.
- The teacher from school C felt that participating in Future Blogs would be very beneficial for pupils as it would help them with their chemistry studies and would help pupils who had no other family experiences of university.
- The teacher at school F reported that she felt participation in Future Blogs would provide additional encouragement for pupils in science and, hopefully, promote greater university participation.
- The teacher from school E gave the following reason for deciding to participate in the scheme:

We decided it would be a good idea to give the children some options and widen their horizons a little bit and to try to enthuse them more about chemistry.

3.3 Training and support received

The teachers consulted reported different experiences of their induction and training for Future Blogs.

The schools with the highest pupil take-up and maintained use of the scheme had all attended a training day provided by The Brightside Trust at which teachers and pupils were trained at the same time. These teachers felt that the training that they and their pupils had received was well delivered and comprehensive:

I got enough support during the training and I have also maintained a useful contact with my regional coordinator.

The training was good and provided all the training required to use the site.

One of the teachers reported that, after this training, he was now confident to train pupils himself to use the site. Another teacher who received this training reported that, to do further training of pupils herself, she would like to receive a copy of the resources that Future Blogs used for the training. The teachers consulted from schools with high take-up of the scheme reported that they required no additional further support or training from The Brightside Trust or the RSC.

Of those teachers consulted from schools where pupil uptake and participation in the scheme was not so successful, two received training at a university and the other received no training.

The teachers who received training at universities both reported that the training was geared towards mentors and that they would have benefited from training that was specifically targeted at teachers. One of these teachers reported that, after the training, she did not know how to advise pupils to use the site and that she was not clear how, as a teacher, she was to encourage pupil engagement:

I could have done with a better understanding of what the pupils should be getting out of it. If I had had this understanding I could have encouraged further use of the site.

The other teacher who also received mentor training reported that:

The scheme needs a more defined goal. If a pupil asks me why they should get involved I need to be able to tell them why.

The teacher who reported that she had received no training learnt to use the site from reading a booklet about the site. She commented that she would have benefited from training specifically targeted at teachers as she was not clear what the goals and objectives of the scheme were and what her role should be:

If there had been clearer structure and objectives I might have been able to get them [her pupils] to use the site more.

She felt that she needed some guidelines, or training, on how to build a programme or work structure that would engage the pupils to continue to use the site:

They [pupils] need to see that they are progressing through it.

Another teacher reported that he would like more support and regular information on which of his pupils were posting, and how often, in order to effectively monitor his pupils' usage of the site:

I don't particularly want to monitor their use myself but if I had been sent a regular email outlining how many times pupils had accessed the site I could then have talked to them about issues.

3.4 Criteria used for targeting and selecting pupils

Amongst the schools consulted, there did not appear to be a common approach to recruiting pupils for the Future Blogs scheme. Schools used their own discretion in terms of which year groups and types of pupils to target.

One school selected 20 pupils across Key Stages 3, 4 and 5 and the majority of these pupils remained engaged in the scheme. This school used the following criteria to select pupils for the scheme:

- science teachers thought that they would benefit
- the pupils were potential sixth form pupils
- the pupils might meet Fischer Family Trust deprivation criteria
- their predicted grades were good enough for sixth form and potentially university
- some of the pupils came from families without a history of university attendance.

The other school interviewed that had achieved similar success in recruiting pupils and maintaining participation in the scheme mainly selected pupils who:

- were achieving in science
- had already shown an interest in attending higher education
- teachers felt would be keen and motivated to participate.

This school did not necessarily select pupils to participate from the Aimhigher group, although they did select some pupils who they knew did not have a family history of university participation. In general, pupils were selected who it was thought would participate and remain engaged in Future Blogs and, in some cases, being involved in Future Blogs was offered as a reward for pupils who were trying hard and achieving in science.

Amongst the schools that had achieved less success at maintaining prolonged pupil engagement in the scheme, one teacher reported that he had primarily selected pupils from the Aimhigher group. He reported that it would have been useful to have been given a steer on what sort of pupils to recruit to the scheme:

Should I have been selecting pupils with an interest in chemistry or science in general, was the scheme aimed at a certain demography?

Another teacher, from a school which had experienced quite a high drop-out of pupils from Future Blogs, reported that she had selected pupils who were keen on chemistry and that this criteria was based more on pupils' enthusiasm for the subject than their academic ability. She had tried to select pupils who she thought would be keen and would have the initiative to work on the scheme on their own. She commented that the high drop-out rate the school had experienced might have been due to the 'demography' of the pupil population and the lack of structure and guidance provided to teachers regarding the delivery of Future Blogs:

We had quite a high drop-out rate which was quite disappointing. This is perhaps where more of a structure to Future Blogs could have helped.

In all of the schools consulted, the pupils who were selected to participate attended an introductory talk from their chemistry teacher about the scheme and then they were asked to volunteer. All of the schools consulted, apart from one, ensured that there were participants from each year group. The school which did not select pupil participants from different year groups was a sixth form college which encouraged all six pupils who were taking A-level chemistry to participate in the scheme.

Those teachers who reported that participants were taken from each year group explained that, as a result of this approach, it was difficult to incorporate Future Blogs into their teaching as, in any class, there would only be a small number of pupils participating in the scheme. One teacher whose school had a high drop-out rate commented that, if her school was to try the scheme again next year, she would probably recruit one whole class. This would make supporting pupils, monitoring their usage of Future Blogs, and incorporating resources from the Future Blogs website into lessons, easier to manage. All of the schools which reported encountering difficulties working with pupils who were in different classes and different year groups would have benefited from recruiting a whole class to participate. Although one school did not experience a great success working with one class group, the teacher interviewed reported that this was because she needed more training to

successfully engage and support the class and not because she had recruited a whole class to participate.

Two of the teachers consulted mentioned that they would like to open up the scheme to more pupils. Both of these teachers requested that the RSC and The Brightside Trust help them run workshops at their school. In addition, one teacher felt that, if pupils could meet and talk to mentors, listen to presentations from people working in chemistry-related roles and take part in innovative and fun experiments, then this would be a good way to engage pupils to participate in the scheme. This idea of linking Future Blogs to other science activities has previously been shown to be effective in e-mentoring schemes⁵. A number of other teachers also reported that they felt that pupils would have engaged more fully in the scheme if they had previously met their mentors.

3.5 Recruitment and engagement of pupils

The teachers consulted as part of the evaluation had experienced varying degrees of success in recruiting pupils and maintaining their engagement in Future Blogs. Table 3 over the page shows the number of mentees from RSC records who were participating at each school compared with the number of mentees that the teachers reported were currently engaged with the scheme when they were consulted as part of the evaluation. Consistent with the data presented earlier in relation to the recruitment of pupils and their participation in Future Blogs, the information in Table 3 over the page shows that some schools faced difficulties in recruiting pupils and maintaining their engagement. Data collected from teacher interviews also confirmed this.

Schools A, E and F were less successful at recruiting pupils and maintaining their participation in the scheme. However, a high proportion of pupils initially recruited to Future Blogs in schools B, C and D participated in Future Blogs over the duration of the scheme.

⁵ In the Royal Academy of Engineering's London Engineering Project e-mentoring scheme, which is delivered by The Brightside Trust, pupils/students are introduced to the idea of e-mentoring following industrial visits and other enhancement and enrichment activities.

Table 3: Data on pupil usage of Future Blogs within schools consulted

School	Number of mentees participating in Future Blogs ⁶	Pupil usage of Future Blogs ⁷
School A	5	2 pupils used the site and contacted mentors
School B	8	7-8 pupils used the site and contacted mentors
School C	25	School recruited around 20 pupils and 18 used the site and contacted mentors
School D	12	The teacher reported that all of the 12 pupils that they had recruited had used the site and contacted mentors
School E	5	2 pupils used the site
School F	5	2 pupils used the site and contacted mentors

3.6 Training of pupils

As mentioned previously, within the schools that had achieved the most success in maintaining pupil engagement in the scheme, both teachers and pupils received training together which was specifically targeted at them. Teachers from these schools reported that this training was successful and that both they and their pupils were proficient at using the site after they had completed the training. Also useful was the fact that the training included discussions with pupils about the pupil-mentor relationship. A teacher from one of these schools reported that, following the training, her pupils became so proficient at using the site that, when a new pupil joined the scheme, they were able to undertake the training.

The other teachers consulted provided the pupils with training themselves. This training tended to be fairly informal and involved the teacher showing the pupils around the different sections of the website. One teacher also provided pupils with an additional booklet (that had come from Future Blogs) on how to use the site. One of these teachers reported that he did not have a good understanding of the site and its content and that he really only knew about the mentoring section. He also reported that he did not really have a clear understanding of what his pupils should be getting out of the scheme and, as a result, initial training and on-going support for pupils was difficult to provide. One teacher who had attended mentor training at a university and

⁶ RSC data.

⁷ Data collected from teachers.

had not received any specific teacher training herself said that training her pupils was a real problem, as the following quotation illustrates:

I showed them the site but I did not really know myself what was on the pupil areas of the site.

Another teacher who trained her own pupils commented that she had no difficulties showing the pupils how to use the website, she just needed advice from the RSC/The Brightside Trust on how to structure on-going support and how to work with her pupils to encourage their continued use the site.

3.7 Support and guidance provided to pupils

Teachers were asked if they had needed to provide any additional support to pupils who might be having technical issues using the site. The evaluation also explored how far teachers were providing on-going support and guidance to pupils who were using the site.

All of the teachers reported that their pupils were well able to use the website and that they had never had to provide any technical support. One teacher reported that a number of his pupils had forgotten passwords but that this was easily resolved.

In all schools, there was no specific time set aside in science or careers classes for pupils to use the site. In general, teachers did not use class time to discuss pupils' use of Future Blogs. Two main reasons for this emerged:

- pupils were selected from different year groups and so the majority of pupils in each class were not participating in the scheme
- during class time teachers needed to concentrate on meeting curriculum objectives.

Of the teachers who had successfully maintained pupil engagement in the scheme, one had promoted some discussions regarding Future Blogs during chemistry classes. He reported that, by discussing Future Blogs in class, pupils not using it could also benefit from the experiences of their peers who were participating. This teacher also reported that he would see the pupils who were taking part in the scheme informally but on a regular basis to check what they had been using the Future Blogs website for. A teacher from another school, where pupils did continue to participate in the scheme, reported that she provided little on-going support or guidance. This teacher

commented that she asked pupils how it was going and if they had been using the site as and when she saw them outside of the classroom environment. These findings suggest that a common approach is not being used by teachers in terms of providing on-going support to pupils using Future Blogs and in monitoring their participation.

One teacher in a school which struggled to maintain pupils' on-going interest in the Future Blogs scheme talked to pupils informally at the start of their participation in Future Blogs but then stopped making contact after pupils had started using the site. Another teacher from a school with a high drop-out rate of pupils participating in the Future Blogs scheme, who had targeted pupils from different year groups, had initiated regular (around monthly) meetings to provide pupils with on-going support and encouragement. She had hoped that the pupils from the different year groups would be using the site for different purposes and, as such, that discussions between the pupils would act to stimulate interest and further use of the site. She reported that the meetings did not really work because:

The pupils did not bring much to the meetings; this was probably because they were not using the site that much.

She also thought that the regular meetings did not work because pupils were from different year groups. As a result of this, pupils did not know each other and some lacked confidence in discussing their use of the site with others. In the future, she proposes to select a whole class to participate in Future Blogs as it will then be easier to engage pupils during lesson time and to promote more useful discussions between pupils. This teacher also commented that teachers would benefit from examples of activities or tasks they could work through with pupils related to Future Blogs⁸ which would help to retain pupil engagement and interest in the scheme:

I know the whole aim was not to treat it as more school work but if there had been some small objectives that they needed to meet, or something to do each month it would have given me something specific to discuss with them.

In all but one school, the pupils were expected to primarily access the Future Blogs site from home. This was mainly because pupils were not accessing Future Blogs during lesson times and there was often limited access to PCs during their break and lunch times. The school where pupils mainly accessed the site from school was a sixth form college and, here, the pupils were able to access PCs during their study periods. It is worth considering whether encouraging pupils to use Future Blogs predominantly

⁸ This finding is supported by findings from The Brightside Trust's implementation of other e-mentoring schemes such as Big Deal Blogs, where e-mentoring was combined with a business enterprise competition.

from home enables schools to target the type of pupils that would most benefit from participating in the Future Blogs scheme. This approach could potentially disadvantage pupils with less parental support or no access to a PC at home.

3.8 Views on the Future Blogs site

In general, teachers' feedback regarding the Future Blogs website was very positive as the quotations below illustrate:

The site was fine to use. The content was good and nicely presented. It is a really nice website.

The site is quite useful and the information is very easy to retrieve.

The site is easy to navigate and has some useful articles for A-level students.

However, a number of the teachers who were positive about the site suggested that it could be improved even further by having some more resources that were specifically linked to the national curriculum and to each Key Stage. A number of other suggestions were made from teachers regarding improvements to the website, which included:

- mini forums linked to current issues
- virtual experiments
- short tasks and interactive exercises
- articles that are linked to what the pupils are studying
- activities that change on a regular basis.

3.9 Views on the e-mentoring facility

All teachers consulted were more familiar with the e-mentoring facility of Future Blogs as opposed to the other resources on the website. A teacher from a school that was successful at maintaining pupils' engagement with the scheme reported that pupils had discussed a number of different topics with their mentors including: ideas for the science case studies; career choices; general information about university life; university choices; and UCAS application procedures. This teacher reported that:

Pupils always give positive feedback about the mentoring, the mentors are keen to hear what the students have to say and they respond to the students effectively.

This teacher also commented:

I also like it that follow-up is short lived, mentors will chase the pupils and get in contact with them regularly.

In another school where only two pupils continued to participate in the scheme, the teacher reported that one had discussed with their mentor general science questions and the other had been asking questions about higher education and college life. These two pupils had both been positive about the responses that they had received from their mentors.

Although some of the teachers commented that mentors gave speedy responses, others mentioned that some pupils had to wait some time for a response. In a school that had a high pupil drop-out rate from the scheme, the teacher commented that one pupil had contacted her mentor and was pleased with the response but that others had not received a quick reply:

One pupil discussed chemistry with her mentor and was definitely pleased with the response she got. Some of the other students were disappointed about how long it took for the mentors to get back.

Another teacher, again from a school that had experienced difficulties in maintaining pupil engagement with the scheme, reported that his pupils did not always receive a timely response from their mentors:

I put in a query to Future Blogs about this [slow response time from mentors] but the response took a long time, Future Blogs thinks that there is a mentor but the pupil thinks that this is not the case.

3.10 Pupil usage of the site

Teachers were asked how they thought pupils had been using the site and what they felt the pupils had learned from their Future Blogs experience. All of the teachers consulted had received some feedback from pupils on their use of the mentoring part of the site but did not generally know how pupils were using the other resources on the site.

In all but one of the schools contacted, the teachers reported that some of their pupils recruited to the scheme had either used the site to a very limited extent or had stopped using the site altogether. In the schools where the majority of pupils had stopped

using the site, the following reasons were given by teachers for pupils' low rates of participation:

- some pupils found it difficult to initiate and build relationships with their mentors. This was linked to the fact that, for some pupils, it took a while to make initial contact with their mentors and, because of this, they lost momentum with the scheme (this may be partly linked to the CRB delays mentioned earlier)
- some pupils were not clear what they could talk to their mentors about and did not know what support to use the site for
- some pupils just never bothered using the site after they had been trained and others looked at the site initially but did not find it engaging so they did not continue to participate in the scheme
- some pupils had problems logging on to Future Blogs, often due to them losing or forgetting their passwords, but teachers were able to resolve this issue
- some pupils lacked enthusiasm and commitment to the project
- some teachers felt that they did not select the pupils to participate carefully enough
- there was no clear structure and objectives for teachers to deliver the scheme and, as a result, it was difficult to maintain pupil interest.

In one of the schools consulted, the teacher commented that only two out of 20 of the pupils had stopped using Future Blogs. These were both sixth form pupils. One had stopped using the site because he had stopped studying chemistry. The teacher thought that the other pupil, a first year sixth form pupil, had only temporarily stopped using the site due to time pressures from all her subject and exam commitments.

4. Views of pupils

Key findings

- Regardless of whether pupils had received training from their teacher or from The Brightside Trust, they felt that they had been provided with all the information they required to use the Future Blogs site and many commented on how easy the site was to use.
- Pupils mainly accessed the site from home.
- The most commonly used feature on the Future Blogs website was the mentoring facility.
- Many pupils also looked at the articles and other resources on the site but not all felt that this information was relevant to their studies.
- The most common reason to recommend the site to a friend was so that they could benefit from having a mentor.
- Pupils reported that posting to their mentor was like having a discussion with a friend.
- Pupils discussed both chemistry-related questions and career and higher education issues with their mentors.
- On the whole, pupils were happy with the time it took for the mentors to respond to them. However, two pupils reported ending contact with their mentor after not receiving a response.
- All of the pupils who had made contact with their mentors were positive about the responses they had received. Many commented on how useful it was to talk to someone who does not know you. One pupil even reported that he felt that he would have failed his GCSE chemistry if he had not received support from his mentor.
- Pupils reported that their teacher provided very little additional support but most of them were pleased that it was something that they could do by themselves.
- Future Blogs has positively impacted on pupils' understanding of the relevance and usefulness of chemistry. Many have also gained a greater awareness of chemistry careers, higher education and further study related to chemistry. However, findings from the pupil interviews suggest that Future Blogs has generally not made pupils more likely to go to university. This is mainly due to the fact that many of the pupils selected to participate in the scheme were already interested, motivated and able at studying chemistry and had made career and university decisions. It is worth considering whether these were the most suitable target group of pupils to select to participate in Future Blogs.
- Linked to the point above, Future Blogs has, in general, achieved a greater impact on 14-15 year old pupils compared to older pupils. This is because their study and career choices are often not clearly formed and there is, therefore, more potential to support and guide them.
- Pupils' recommendations for improvements to Future Blogs have included: to add more articles that are chemistry specific or related to their studies; for the site to be more interactive; and for a forum to be included for all users.

4.1 Introduction

This section explores the findings of the interviews with pupils in relation to a number of areas including: pupils consulted; training and support received; usage of Future Blogs; usage of the e-mentoring facility; and impact of Future Blogs.

4.2 Pupils consulted

The seventeen pupils who took part in the qualitative evaluation came from three different schools (schools identified as B, C & D in the previous section). At each school, the plan was to speak to up to three pupils who had posted to their mentor and up to three pupils who had not posted. In reality, the majority of pupils who were available for interview were pupils who had posted to their mentors.

At school D, the six pupils consulted included one who was just completing his A-levels, three pupils who were taking AS exams and two pupils who were in their final year of their GCSEs. All of the pupils consulted from this school reported that they had posted to their mentors. The two GCSE pupils both enjoyed chemistry and were planning to take it at A-level. These pupils wanted to go university but were unsure as to what subjects they might take, although they did mention that they might go on to study medicine or dentistry. The A-level and AS level pupils were also all planning to continue with their studies at university, three pupils wished to study science-related degrees (medicine and natural sciences) and one was planning to study economics.

At school C, seven pupils were consulted, five aged 14 or 15 who had posted to their mentor and two sixth form pupils who had not posted to their mentor. Those pupils who had posted were all enjoying and doing well in science (and chemistry) and they were all thinking of studying chemistry A-level and possibly going on to science-related study at university. The two A-level pupils consulted who had not posted had not really used the Future Blogs site at all after attending training. One had not looked at the site because he had stopped studying chemistry and was planning to start on a music technology course after his AS-level exams. The other pupil who had not posted was still studying chemistry and she was hoping to study medicine at university. She reported that, to date, she had not posted because she had not had time due to school work and exam pressures. She added that she might contact her mentor when she started work on her university application.

At school B, four pupils were interviewed, two of these pupils were in the last year of their A-levels and the other two pupils were just coming to the end of their first year

of A-levels. All of these pupils reported that they had used the Future Blogs website and the mentoring facility frequently. One pupil had used the site during the final year of his GCSEs but had now stopped using the site as he had not selected to study chemistry A-level. The other three pupils consulted were all taking A-level chemistry and had continued to access the site throughout their studies. All four pupils had already decided that they would be pursuing a university education before taking part in Future Blogs. One was undecided about what subject she would study and the other three were all intending to study non-chemistry related degrees.

4.3 Training and support received

Some of the pupils consulted had received training from their chemistry teachers and the majority had received training from The Brightside Trust. The pupils who were trained by their teacher told us that the training involved a PowerPoint presentation and some time spent looking at the site with the teacher. These pupils also received a booklet from their teachers outlining how to use the site. All of the pupils who received this training told us that the training was sufficient and that they had not encountered any problems using the site, as the following quotation illustrates:

The site is quite easy to use but I do think the training was needed.

The pupils who received training from The Brightside Trust were all positive about this experience as the quotations below show:

After the training I was able to understand what to do.

The training was fine because the site is easy to use.

The training was useful and no other support was needed after training.

The training from Future Blogs was useful as I now know how to get around the site.

The training was very informative.

One pupil reported that the site was easy to use and, as a result, website training may not be required. This pupil did, though, feel that the training on how to communicate with your mentor and use the site safely was very valuable.

All of the pupils interviewed reported that they required no further support or training from their teachers to use the site. The pupils also reported that they had encountered no technical issues in using the site.

4.4 Usage of Future Blogs

Pupils mainly accessed Future Blogs from computers at home rather than at schools. Pupils rarely accessed the site from school due to the following reasons: there was no time available at school; it was difficult to access computers at school in your own time; there was no chance to access the site during science or careers lessons; and it was more relaxing to look at the site at home. One pupil did report that he had been able to access the site at school during an after school science club. It was also reported that some A-level pupils were able to use Future Blogs on PCs in schools during their study periods.

The most common use of Future Blogs was to contact a mentor, but also a large proportion of pupils reported that they often looked at the articles and at the news section. Of those pupils who looked at the articles, a number voiced concerns regarding whether the information was relevant to their studies. Pupils were also asked which parts of the website they found most and least useful and their responses to this question are outlined in Table 4 below.

Table 4: What pupils find most and least useful about Future Blogs

Most useful	Least useful
<i>e-mentoring is the only part I use.</i>	<i>I don't look at chemistry information on the site as I can get this from text books and I don't know if it is relevant for my exam board.</i>
<i>I have found some interesting medical-related articles.</i>	<i>I would not use the voting part.</i>
<i>Articles are very informative.</i>	<i>I want to say that blogging was the most useful activity for me but it has not been. My mentor did not respond very much.</i>
<i>Articles are useful for course work/school work.</i>	<i>I don't look at quizzes and questionnaires.</i>
<i>There are a lot of different resources.</i>	

It is, though, important to note that the most common response from pupils was that they found the e-mentoring facility the most useful part of the site and a few pupils reported that this was the only facility they used on the site.

Pupils were asked if they would recommend the scheme to their friends and what they would suggest that they use it for. The responses to this question shed light on the specific activities that pupils have found to be the most valuable. All of the pupils consulted said that they would recommend the site to their friends and the most common reason was that they felt their friends would benefit from having a mentor for support with university and career choices. The quotations from pupils shown below include some of the benefits of using Future Blogs:

It is good to have a mentor as they have no opinions about you and what you should do.

It is useful to talk to someone who understands things like UCAS and it is good to talk to someone who has been through it all.

I have some friends who are talented in science and I think it would help my friends find out more about studying chemistry further and what their career options could be.

Some pupils also reported that they would recommend Future Blogs to their friends so that they could discuss chemistry and science issues with a mentor, as the quotation below illustrates:

It is good to discuss the wider issues in science with someone else.

Some pupils also reported that they felt the articles and news reviews on the site were interesting and that their friends would benefit from these to develop a greater understanding of chemistry and science in general.

About a third of the pupils reported that they thought the site was useful as it was and that they would not recommend any changes. The majority of recommendations for improvement to the site related to the articles and these suggestions included:

- more firsthand information and a greater range of information in the library
- the articles could be a bit more relevant to today
- more articles that are more clearly specifically about chemistry
- information that is more specific to their studies.

Other recommendations from pupils included:

- the site to be more interactive

- including a spell check
- adding a facility for pupils to scan articles or other information to send to their mentor so that they are able to discuss issues or their work in more detail
- developing a forum for all users and mini forums related to specific issues
- receiving fewer reminder text messages from The Brightside Trust about not going on the site frequently.

4.5 Usage of the e-mentoring facility

This section includes data on the frequency in which pupils reported contacting their mentor, topics discussed with mentors, pupils' opinions regarding responses from their mentors and the speed of responses from mentors to pupils' postings.

4.5.1 How often pupils have used the e-mentoring facility

At School D, pupils reported that they were encouraged to contact their mentor on a weekly basis. Most of the pupils at this school reported that they tried to keep in regular contact with their mentor, but often it was not weekly as they liked to make contact when they had specific issues they wished to discuss. The pupil at this school who had posted the least was taking her lower sixth exams and she reported that she felt that, due to other school pressures, she did not have the time to post questions to her mentor. She added that, when she had more time, she would like to discuss her career and university choices with her mentor.

At School C, only one of the pupils reported that he had not used the mentoring facility very often; the others had used this facility frequently. Of those who reported using the site frequently, this ranged from five to six times, to weekly and one pupil reported that he had posted 30 times. The pupil that had used the mentoring facility the least said that this was because he had not received a reply when he posted a chemistry question:

I have not posted that much as when I posted an actual chemistry question I did not get a reply, they simply told me that they had not done this for a while.

When they are trained, mentees and mentors are told that the role of the mentor is not to help mentees with their school work and this lack of response from a mentor may be related to this guidance. However, a more satisfactory reply for the mentee would have been expected. This example also suggests that, in some cases, pupils may not

have been given sufficient guidance within their training as to what they should use the e-mentoring facility for.

The frequency with which the A-level pupils at school B contacted their mentors differed and they maintained this relationship for different periods of time. One pupil had contacted his mentor for specific advice and assistance with his chemistry during the last year of his GCSEs. He reported that, during a 6-8 month period, he contacted his mentor almost every other school day. After he completed his GCSEs, he chose not to continue with chemistry study to A-level and he stopped using Future Blogs and contacting his mentor. Another pupil reported that she had contacted her mentor on a weekly basis during her first year of A-level study but, during her second year, after she had tried to contact her mentor a few times with no response, she stopped posting. This pupil recommended that mentors are contacted at the start of each new academic year to ensure that they continue to participate with the scheme. This was the process that The Brightside Trust followed and this comment suggests that, even with this process in place, some mentors will still fail to respond. The two other pupils who were consulted contacted their mentors less frequently, either monthly or when they felt that they had something to discuss.

4.5.2 What pupils discuss with mentors

Pupils reported discussing a range of topics with their mentors. The following list highlights these topics in descending order of popularity:

- chemistry questions related to their studies
- the mentor's career
- university life in general
- the university application process
- subject choice for university or sixth form
- current science related issues e.g. global warming, gene therapy
- career choices
- reasons to choose specific universities
- school life
- the value of work experience
- articles on the Future Blogs website.

Many pupils reported that they did not post specific questions to their mentors. These pupils reported that contacting their mentors was more like having discussions rather than posting a series of questions. As one pupil commented:

It is more a general conversation like how you would speak to a friend.

4.5.3 Response from mentors

All of the pupils consulted who had made contact with their mentors were positive about the responses that they had received and the discussions that they had been involved in. Some quotations from pupils are included below:

Sometimes people want to talk to someone about chemistry but there is no-one there, this is like a service that provides this for you.

He writes in detail and it is relevant and he makes me understand things.

You can actually talk to someone who has studied it [chemistry] and it is easier to understand than just going on the internet.

The replies are really long and they are detailed.

My questions are answered fully.

I can compare her [mentor] views with mine to help me make decisions.

My mentor is honest if he doesn't know something but he is still happy to discuss the issue.

The mentor's responses were a form of guidance; it was more a discussion. I was not trying to get specific answers.

Even if it does not directly answer my question, I see things in a new light.

It is good to talk to someone who doesn't know me to get an outside opinion.

One pupil commented that he had been confused about what subject to study at university and that his mentor had been very understanding. His mentor had explained to him that he should consider what his strongest subjects were and this had really helped the pupil in his decision making. Another pupil, who also reported that she had mainly contacted her mentor regarding university choices, mentioned that this had not been very useful for her. She added that many of her family members had been to university so she could talk to them about university choices and she queried if a different pupil might have found the mentoring more useful.

One pupil reported that the discussions and support that he had received had helped him with his GCSE chemistry. He reported that he was struggling with certain aspects of chemistry, particularly in relation to plastic sciences. His mentor worked in the plastics industry and was able to give him specific support on the areas of chemistry that he was struggling with. This pupil commented:

Without the support of my mentor I would have flunked chemistry.

The speed of the responses that pupils received from their mentors did vary but very few pupils reported any problems with the time it took to receive a response. Most pupils reported that they received a response from between one to three days, although some did report that it could take up to two weeks. The only pupil who reported that speed of response had been an issue reported that she could wait for up to a month to get a reply from her mentor. Two pupils reported that, due to the lack of a response from their mentors, they had stopped using Future Blogs.

4.5.4 Support received from teachers

One pupil reported that he initially discussed the questions that he might ask his mentor with his chemistry teacher but that he soon started doing this by himself. All of the other pupils consulted reported that they had received no support from, or had discussions with, their teachers regarding the contact that they had with their mentors. There was a feeling amongst pupils that contacting their mentor was something that they should be able to do by themselves without involving their teachers and they were happy doing this independently. However, in some cases, pupils talked about the discussions that they were having with their mentors with other pupils.

4.6 Impact of Future Blogs

Pupils were asked a range of questions to assess the impact that using Future Blogs had had on them in terms of:

- their study, understanding and enjoyment of chemistry as a subject
- their awareness of chemistry careers and higher education
- their career and university choices.

Table 5 on page 35 shows the percentage of pupils from each school who reported that Future Blogs had impacted on them in a positive manner in relation to each of the

different impact questions. Two pupils did not answer these questions due to their limited involvement in Future Blogs. It should be noted that a small number of pupils in each school were consulted and, as a result, the data outlined in this table may not be representative of the views of all pupils in the school, or of pupils participating in Future Blogs more generally. In addition, the percentages represent very small numbers of pupils. However, the findings provide an indication as to how the scheme is impacting on pupils and how impacts can differ by school.

Table 5: Impacts of Future Blogs on pupils (n=15)

Study, understanding and enjoyment of chemistry	School D*	School C*	School B*
Has using Future Blogs affected your chemistry knowledge and skills in any way?	17%	40%	50%
Has using Future Blogs influenced your enjoyment of chemistry at school?	17%	80%	25%
Has using Future Blogs helped to improve how you're doing in chemistry at school?	17%	60%	50%
Has using Future Blogs affected your understanding about the relevance and usefulness of chemistry?	50%	80%	100%
Awareness of chemistry careers and higher education			
Has using Future Blogs affected your awareness and understanding of chemistry careers/what chemists do?	83%	100%	100%
Has using Future Blogs affected your awareness and understanding of higher education generally?	67%	60%	75%
Has using Future Blogs affected your awareness and understanding of chemistry courses in HE?	50%	80%	75%
Changes in career and university choices			
Has using Future Blogs made you more likely to take chemistry further as a subject?	33%	80%	25%
Has using Future Blogs made you more likely to take chemistry as a career?	0%	100%	0%
Has using Future Blogs made you more likely to go to university?	17%	40%	0%
Number of pupils who responded to these questions	6	5	4

** The figures in the table represent the percentage of pupils who responded in a positive way to each of the statements.*

In relation to the subject-related impacts, it was more common for Future Blogs to have had a positive impact on pupils' understanding of the relevance and usefulness of chemistry rather than on their chemistry knowledge and skills or how they were

doing in their chemistry studies. Pupils reported that they gained this broader understanding of the relevance and usefulness of chemistry both from the resources on the website and from discussions with their mentor. However, there were examples of pupils gaining skills and knowledge as a result of the support they received from their mentor – as mentioned previously, one pupil reported that he would have ‘flunked’ chemistry if it had not been for his mentor. Pupils from school D compared to schools B and C appeared to experience less positive impacts on their study of chemistry. It is suggested that the reason for this was that the majority of pupils from school D were not using Future Blogs for chemistry subject-related questions and issues but were more commonly using it to discuss higher education and careers more generally.

Table 5 also shows that, in general, pupils have gained a further awareness of chemistry careers, higher education generally and chemistry courses in higher education through their use of Future Blogs. The majority of pupils reported that they had gained this understanding from their mentors.

The majority of pupils interviewed at school C felt that using Future Blogs had made them more likely to take chemistry as a subject and pursue chemistry as a career. This impact was not reported as positively by pupils at schools B and D. It is suggested that the differences in these reported impacts between pupils at different schools is related to the fact that the pupils at schools B and D were older pupils than those at C and they already had strong views on their career and subject choices prior to participating in Future Blogs. This finding suggests that, if the scheme is to have a greater impact on pupils’ career and subject choices, in the future it should be introduced to pupils early on in their secondary school career.

In general, pupils’ participation in Future Blogs does not seem to have made them more likely to go to university. However, this is likely to be related to the type of pupils who had been selected to participate in the scheme rather than to the delivery of Future Blogs. The pupils who were taking part in Future Blogs were generally enthusiastic and interested in chemistry and had already decided that they wanted to attend university prior to participating in Future Blogs. It is interesting to note, however, that a number of these pupils still discussed issues around higher education with their mentors.

5. Conclusions and recommendations

5.1 Concluding comments

The Future Blogs scheme has faced a number of issues in relation to recruiting schools and mentees and maintaining mentees' engagement in the scheme and the workload of the coordinator role. The delays incurred by the CRB checking process have also impacted on the engagement of mentors and mentees.

Despite this, it is clear from the consultations with pupils in the three schools visited that they have enjoyed and benefited from participating in Future Blogs. Sometimes, the benefits to pupils are very tangible in terms of: support with understanding chemistry; developing a greater understanding of higher education; and promoting a greater appreciation of chemistry in the wider world. In addition, some pupils are clearly benefiting from having a different 'role model' or someone (the mentor) who does not know or have an opinion of them that they are able to have discussions with.

This study involved speaking to six teachers at different schools who had all had different experiences and levels of success in leading Future Blogs in their schools. It is clear from all these schools that the scheme is being run with little involvement from the teachers. On the whole, the pupils consulted felt that they did not require additional support to participate in the scheme but it is unfortunate that we were predominantly only able to talk to those pupils who had remained engaged in the scheme.

There are a range of issues that have emerged through the evaluation that are worth noting in relation to why some pupils may not have engaged or maintained their engagement in Future Blogs. These issues are discussed in the following recommendations section within the following sub-sections:

- project management and delivery
- the organisation and structure of Future Blogs
- pupil selection and promotion to new participants
- website development.

5.2 Recommendations

5.2.1 Project management and delivery

Should the project continue, a number of alterations should be made to the management and delivery of the project which would increase its effectiveness and, ultimately, its impact on pupils. Some of these are detailed below and others can be found in later sections.

Recommendations to improve project management and delivery

- To improve school and mentee recruitment and engagement, consideration should be given to **e-mentoring being introduced as part of other outreach activities** rather than it being a stand-alone intervention.
- Teachers benefit from being provided with regular monitoring data regarding their pupils' usage of Future Blogs. However, to reduce the burden on the project management team, **agreement could be sought from schools as to how often they need this monitoring data and what form it should take.**
- **To avoid delays in matching, when recruiting mentors and mentees thought should be given to the time it takes for CRB clearance.** Ideally, mentors should be recruited in the summer term and mentees in the autumn term allowing time for the CRB process to be completed during the summer break.
- **If the role of coordinator is to continue, then consideration should be given to providing the staff fulfilling this role with some financial recompense** to allow for time off other duties. Or, additionally, a signed contractual agreement in relation to their participation in Future Blogs could be used.

5.2.2 The organisation and structure of Future Blogs

A number of teachers reported that they were not clear as to the goals and objectives of Future Blogs and that additional clarity regarding these would have enabled them to better promote the scheme to their pupils.

Teachers from schools which struggled to maintain pupils' engagement with the scheme also reported that they needed more guidance from the RSC or The Brightside Trust as to how they could develop a structured programme of tasks which they could work through with pupils. These teachers reported that, without a clear structure outlining how pupils should use and move through the site, it was very difficult to maintain pupil interest.

The extent of most teachers' involvement in Future Blogs was informally chatting with pupils when they saw them to encourage them to continue to use the site. Some teachers reported that their understanding of the scheme was that it should not be treated like school work and that pupils should be left to use Future Blogs fairly independently. Although this level of teacher intervention was successful with pupils who were already motivated and engaged, it did not work for all pupils.

Recommendations to improve the structure and organisation of Future Blogs

- **All teachers should receive training** specifically targeted at them. This should clearly outline the goals and objectives of Future Blogs and how it should be promoted to pupils. It would also be useful if examples of good practice in relation to engaging and supporting pupils could be shared between schools participating in the scheme.
- **Guidance should be provided to teachers outlining their role** in relation to engaging pupils and providing on-going support and guidance.
- **A series of tasks** should be developed on the website that pupils can be encouraged to work through independently or with their teacher's support. This would provide some structure to pupils' usage of the website.⁹
- Teachers would also benefit **from sample lessons plans** outlining how Future Blogs can be incorporated into either science and/or careers classes.

5.2.3 Pupil selection and the promotion of Future Blogs to new participants

There does not appear to be a common understanding as to the type of pupils who should be recruited to Future Blogs and a number of teachers questioned whether they had been selecting the right pupils for the scheme and would have liked to have received more advice on this. A proportion of pupils selected by schools have been AS or A-level pupils who are already enthusiastic about science/chemistry and have already decided to attend university and to study a science-related degree. Although these pupils have benefited from their involvement in the scheme, younger pupils who need more encouragement with chemistry and who, as yet, have unclear career plans, are likely to benefit more from their involvement in relation to the opening up their career and study choices. In addition, clear guidance has not been provided to teachers

⁹ The Brightside Trust are already developing tasks for pupils as part of the Royal Academy of Engineering's London Engineering Project e-mentoring scheme. Evaluation findings will be available in July 2009.

regarding whether e-mentoring works better with class groups or pupils chosen from a range of year groups.

Two of the teachers consulted reported that they would have benefited from more support from the RSC/The Brightside Trust in recruiting pupils onto the scheme. They also suggested that linking Future Blogs to other chemistry activities and events would be an effective way to recruit pupils. Linking e-mentoring to other science activities has been shown to be effective in the London Engineering Project scheme where students have met their mentors whilst undertaking practical activities and then posted to them afterwards. A number of other teachers also reported that they felt that pupils would have engaged more fully in the scheme if they had met their mentors in person prior to embarking on an e-mentoring relationship.

Recommendations on pupil selection and the promotion of Future Blogs

- **Teachers would benefit from clear guidance on targeting and selecting pupils** who are most likely to benefit from the scheme.
- **Teachers would also benefit from advice on whether they should select whole class groups or pupils from different year groups and the pros and cons of each approach.** Teachers might find it easier to incorporate Future Blogs into lessons and encourage greater pupil engagement with the scheme if whole class groups are engaged.
- Future developments of the scheme should include events where **pupils can meet their mentors and where Future Blogs is linked to other science activities.**

5.2.4 Website development

There were a number of developments suggested both by teachers and pupils that may lead to greater usage of the website in the future.

Recommendations to improve the website

- There should be **more interactive facilities on the website**; these could include mini forums relating to current topics, virtual experiments and more quizzes (or other activities with rewards).
- Resources on the website should include more **Key Stage specific information** which could be used by teachers during lessons and by pupils outside of the classroom.