REVIEW OF INDUSTRIAL MENTORING IN SCHOOLS

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CONTENTS

ACKNOWLEDGEMENTS	i
1. INTRODUCTION	1
1.1 Background	1
1.2 Research Aims	
1.3 Research Methodology	3
1.4 Structure of the Report	4
2. RANGE AND FUNDING OF MENTORING SCHEMES	5
2.1 Range of Schemes	5
2.2 Funding	6
3. ORGANISATION AND OPERATION OF MENTORING SCHEMES	8
3.1 Type of Schemes	
3.2 Age Groups of Students	9
3.3 Individuals Targeted	10
3.4 Recruitment Methods	12
3.5 Recruitment Difficulties	13
3.6 Training	
3.7 Evaluation	17
3.8 Evaluation Challenges	18
3.9 Review and Development	18
4. OUTCOMES AND BENEFITS	20
4.1 Scheme Objectives	
4.2 Benefits to Students	
4.3 School Perspectives	
4.4 Benefits to Mentors	
4.5 Strengths and Limitations	24
5. KEY MESSAGES AND ISSUES	26
5.1 Role of Industrial Mentoring in Schools	
5.2 Main Models	
5.3 Effects	27
5.4 Characteristics of a Successful Mentoring Scheme	27
REFERENCES	30

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1. INTRODUCTION

1.1 Background

Many people could identify an individual who has profoundly influenced their personal development, perhaps during an important or difficult phase of growing up. Mentoring is an attempt to formalise such a relationship (Monaghan and Lunt 1992) and is a way of introducing a potential mentor to a young person who might not otherwise meet one.

Mentoring has been particularly popular in America but has become increasingly used in Britain, where it is put into practice in a variety of situations: within companies, in teacher training, for undergraduates in universities, between school students and students in higher education and between adults in employment and school students.

There has been a growth in the use of mentoring among this last group in recent years. It is often used as a tool in addressing underachievement among students and in preparing them for the world of work and, as such, is one of a range of business—education links which are taking on increasing importance. Mentoring schemes in Britain are frequently administered through Education Business Partnerships (EBPs) and Compacts and are sometimes actively related to achievement of Compact goals (Sims, 1994).

Hillage et al. (1995) found that while not many companies were currently involved in mentoring, those that were perceived 'visible' outcomes and were positive about the scheme (ibid., p. 36). Similarly, mentoring was 'singled out for special praise' when business—education links were evaluated in Scotland (Training and Employment Research Unit, 1996, p. 39). A study evaluating the impact of mentoring on young people in the USA (Tierney et al., 1995) compared a group who had mentors and a group who did not and found that mentored young people were less likely to use alcohol or drugs. In terms of relationships with adults, they were more trusting but were as likely to be angry, alienated and uncommunicative. The mentored young people did not develop higher self-worth than the control group but they did achieve higher grades and felt more confident about school work. In all, these findings indicate that mentoring is valued and has potential for growth.

While mentoring is usually defined as a one-to-one relationship, there is evidence that a variety of business-education links are given the title of mentoring (Collins, 1994) and it is quite common for group mentoring to be offered. This could be because of limited resources (Gibb, 1994) or to enable mentoring to be offered to a large number of students and, perhaps then, to select some to move on to one-to-one provision as appropriate (Beattie and Holden, 1994). It should be noted that the dynamics of group mentoring are inevitably different from those established through a one-to-one relationship, and some would dispute whether group mentoring really is mentoring at all (Gay, 1994).

The objectives of industrial mentoring fall into three broad categories:

- to enhance students' personal development;
- · to support and improve students' school achievement;
- to provide benefits to mentors and the company.

In terms of personal development, students can improve their self-confidence, build awareness of the world of work, and benefit from someone taking an interest in them. In relation to their school achievement, students' attendance and punctuality can be encouraged and their application to study improved as they begin to appreciate its relevance to their future. Finally, through mentoring, companies can learn about young people and the education system and are able to show students what employers may expect of them, thus influencing potential recruits. Furthermore, companies' human resource development may be enhanced through staff who become mentors augmenting their range of skills.

The growing interest in, and use of, mentoring, evinced by the development of a National Mentoring Network, show that it is gaining prominence and recognition as an education-industry link. Whilst the outcomes and benefits of many schemes are assessed at a local level, there is no national picture. The aims of this research project, which was funded by the National Foundation for Educational Research (NFER) to help address this deficit, are set out below.

1.2 Research Aims

The focus of the project, which was carried out between March and May 1996, was on schemes in which students aged between 11 and 16 are mentored by people in commerce and industry. The research aimed to draw together the experiences of those involved in mentoring across Britain in order to contribute to an understanding

of the main models of industrial mentoring in schools and to establish its value as perceived by participants. The specific aims of the project were:

- to map out the range and main models of school-industry mentoring, by examining their objectives, organisation, funding and evaluation;
- to ascertain, from the perceptions of key players, the main benefits and disadvantages for schools, students and employers of industrial mentoring schemes;
- to identify examples of good practice in this type of mentoring.

The research methods used to carry out the project are described in the next section.

1.3 Research Methodology

The project used a combination of face-to-face interviews and discussions, telephone interviews and a postal survey to collect data from mentoring scheme coordinators and participants in the mentoring process.

A total of 94 mentoring schemes which fulfilled the criteria identified above, of placing adults from industry and commerce in schools with students aged 11 to 16, were identified in the National Mentoring Network Directory. A subset of 26 were then selected to be contacted by telephone. A brief postal pro forma¹ was sent to the named contact in the Directory for the remaining 72 schemes, together with a request for any written information on the scheme, including evaluation reports. A total of 52 scheme coordinators returned completed pro formas which were used for analysis.

A programme of telephone interviews was undertaken with scheme coordinators to explore delivery issues and the impact of mentoring. Following a telephone interview pilot, the named contacts at 25 schemes were contacted by telephone and asked the questions on the postal pro forma and additional open-ended questions regarding the organisation of their scheme. A total of 20 interviews were successfully completed.

In the analysis of the postal pro forma questions, which were also answered by the telephone respondents, 72 mentoring schemes in England, Scotland and Wales are represented, or 77 per cent of the 94 schemes who met the sample criteria.

Research instruments are available from the NFER on request.

The project also included visits to schemes in order to gain more in-depth insights into the mentoring process. After discussions with the telephone interviewees, schools were identified in the following four regions for case-study visits: the East, North West, South East, and London. Fieldwork visits were made to one school in each region and semi-structured interviews were held with students, teachers and mentors. Where the school had one-to-one mentoring, the students were interviewed individually, and where they had group mentoring, the students were interviewed in a group. In the course of this research, interviews were conducted with the following:

- · four school mentoring teacher-coordinators
- eight industrial mentors
- · eight individual mentees
- · one group of six mentees.

1.4 Structure of the Report

Chapter 2 of the report describes the range of mentoring programmes being offered in Britain in terms of the numbers involved and the sources of funding received. Chapter 3 investigates the organisation of mentoring schemes with particular reference to the focus of the scheme, recruitment and training of mentors and the type of evaluation undertaken. Chapter 4 examines the benefits of such schemes to those involved. Finally, Chapter 5 presents the key messages and developments and identifies areas of good practice.

2. RANGE AND FUNDING OF MENTORING SCHEMES

This project found clear evidence that there has been a growth in industry-school mentoring schemes during the 1990s. From initial baselines of four in 1991 and ten in 1992, there has been a marked expansion with an average of 19 schemes starting each year between 1993 and 1995. This growth indicates that mentoring is becoming increasingly valued by schools and employers. The resulting benefits are discussed in Chapter 4 of the report.

2.1 Range of Schemes

The research found that a total of 16,834 student mentees and 4,527 mentors, from at least 518 schools and 1,978 companies, were involved in the 72 schemes surveyed. Further details of the schemes are provided in Table 1.

Table 1: Profile of mentoring schemes

Type of scheme	Percentage of schemes	Percentage of mentors	Percentage of mentees
One-to-one mentoring	60	49	13
Group mentoring	10	11	21
A combination of one-to-one and group	30	40	66
Total	100	100	100
N=	72	4527	16834

⁷² coordinators answered this question

The table shows that one-to-one mentoring, which is the most resource-intensive, was the most common type of mentoring amongst the schemes surveyed. A combination of this and group mentoring was available in nearly a third of schemes. These figures are broadly similar to those of Collins (1994), who identified 95 mentoring programmes, 59 per cent of which were one-to-one, 19 per cent working in small groups and 22 per cent using a mix.

As Table 2 illustrates, three main types of organisation were involved in supporting mentoring schemes: EBPs, Training and Enterprise Councils (TECs) and Local Enterprise Companies (LECs) and Compacts.

A single-response question

Table 2: Organisations involved in supporting the mentoring scheme

Organisation	Number of schemes	
EBP	57	
TEC/LEC	44	
Compact	39	
LEA	28	
TVEI	8	
Other	2	

⁷¹ coordinators answered this question

Here, it is worth noting that Compacts are a Government-funded initiative designed to improve students' attendance, motivation, progress and performance at school through increasing their access to a range of activities and support involving employers (Saunders et al., 1995). Support also came from local education authorities (LEAs) which allowed their schools to participate in the schemes. The shared involvement in mentoring schemes was summed up by one respondent who commented that the 'EBP runs [the mentoring scheme] supported by the local TEC and LEA jointly'.

Scheme coordinators sought additional support in the form of funding from other sources. The details are outlined in the section below.

2.2 Funding

As many mentoring schemes were based within EBPs, TECs/LECs and Compacts, it is unsurprising that they were also among the main sources of funding, as demonstrated in Table 3. The research found that a variety of other sources of funding were used to support the mentoring schemes, including contributions from industry and the schools themselves.

The table shows that public finance is the main source of funding for mentoring schemes. Although private sector finance is still a relatively small funding source, it should be remembered that provision in kind – men and women prepared to fulfil the role of mentor – is the main contribution provided by companies. Interestingly, the funding provided through the Single Regeneration Budget (SRB) and City Challenge, Government programmes introduced to revitalise deprived communities through stimulating local business growth, skills development and infrastructure, indicates that mentoring is making a contribution to this renewal process in some areas.

A multiple-response question

Table 3: Sources of funding for mentoring schemes

Source of funding	Number of respondents
TEC/LEC	23
Single Regeneration Budget (SRB)	12
EBP	12
Compact	11
Private sector	9
Local government	7
School budgets	4
Government bodies	4
City Challenge	2
None	7
Other	8

⁷² coordinators responded to this question

Evidence gathered in this research suggests that mentoring is probably being used to enhance students' motivation to act positively and to improve their preparation for adult life by gaining requisite skills and qualifications.

It is interesting to note that a number of organisations were adopting group mentoring. This suggests that the 'pure' model of one-to-one mentoring is being adapted to meet the needs of schools. The factors influencing the choice of one-to-one or group mentoring, together with the organisation and operation of mentoring schemes, are examined in the next chapter.

A multiple-response question

3. ORGANISATION AND OPERATION OF MENTORING SCHEMES

3.1 Type of Schemes

As mentioned in Chapter 2, the majority of schemes were offering individual mentoring, a minority were offering group sessions and nearly a third of schemes provided both individual and group mentoring. There is some debate about whether a relationship which is not one-to-one can be said to be mentoring, as some of the characteristics such as confidentiality, and having a person who is interested in, and focused on, you alone, are not present in a group situation. While a one-to-one relationship is accepted as an ideal by most, some suggest that a group programme can offer many of the benefits of mentoring to more students. These issues were investigated through a question asking the respondents to give their reasons for offering the type of mentoring they provided.

Among the scheme coordinators offering **individual mentoring**, the main reason for doing so was that they felt it was the best way to improve students self-esteem, help them reach their potential, and address other needs. Further comments revealed that it allowed a more personal relationship to develop and that mentoring was, by definition, a one-to-one relationship. It was suggested by one respondent that peer pressure would interfere in a group situation, while another indicated the need for the mentor to be an 'uncritical friend'. The schools' preference for individual mentoring was mentioned as was the suggestion that it suited the mentor and made managing and attracting mentors easier because they would not be having to deal with a group, which might be daunting for them. The preference for individual schemes can be summed up in the comment of one teacher-coordinator that it was 'better to be small, but effective'.

Of the five schemes surveyed who offered **group mentoring**, two indicated that the ratio was one mentor to two mentees, whilst a third indicated that a group consisted of six or ten mentees, illustrating the variation within group mentoring. Three mentioned providing greater coverage as a reason for adopting this approach, and two indicated that it was decided by the school. One respondent indicated that the school requested one-to-two meetings for safety reasons. Schools' concern for the safety of their pupils meant that, where they had individual mentoring, they had to find a room which was 'private yet public'. Maximising the use of the number of mentors available was raised by one respondent as was reducing the risk of wasted mentor visits by ensuring that at least one of the group of mentees would be there. While advocates of individual mentoring were concerned about peer pressure in a group

situation, the potential support that other members of the group could give was identified as a benefit of group work.

Where the scheme coordinators offered both individual and group schemes, 13 mentioned that they used the appropriate method to suit needs. These needs were influenced by the employers' requirement for flexibility, the availability of mentors, and the need to offer opportunities for students who might 'feel threatened' by one-to-one interaction. Four of the respondents explained where they would use one-to-one or group mentoring. Group sessions were used to offer equality of opportunity: more students could benefit and they focused more on raising achievement and going on to further education, or on careers and preparation for the world of work. One-to-one mentoring was used more for personal development, setting or discussing Compact goals and presenting the opportunity for personal and confidential support.

In a number of the schemes, it was the school's choice to adopt individual or group mentoring and two coordinators mentioned that, although they recommended one-to-one mentoring, the school chose to use group sessions. Where both types of mentoring were offered, the coordinator commented that the group approach was working 'exceptionally well', while one-to-one mentoring was suffering because of problems with attendance. One respondent mentioned that the group sessions were a temporary arrangement until more mentors could be recruited and the police clearance procedure had been completed. A second respondent explained that he had started a one-to-one scheme but funding cutbacks had meant that a switch to group mentoring was necessary. This evidence suggests that to some extent pragmatic considerations influence the type of mentoring undertaken in schools.

Data on the age and type of students included in mentoring schemes are presented in the following two sections.

3.2 Age Groups of Students

This study focused on mentoring schemes in schools for students in Years 7 to 11. As was expected, the majority of schemes were targeted at students in Years 10 and 11 (see Table 4). The focus on Year 10 and 11 students could be because it is in these years that the benefits which mentoring affords, such as preparation for the world of work and having someone to listen to you when important decisions have to be made, are particularly pertinent. It is interesting to note that two of the schools visited in the course of the research were considering expanding mentoring to Year 7

to support students at another point of transition, the beginning of their secondary education.

Table 4: School years of students involved

Year	Number of schemes
7	3
8	3
9	11
10	63
11	63
other	14

⁷² scheme coordinators responded to this question

The 'other' category referred to schemes in Year 12 in all but one case where it referred to a scheme for GNVQ students post-16.

3.3 Individuals Targeted

It was anticipated that, given the limited pool of mentors, most schemes would adopt some form of targeting procedure. The survey revealed that about four-fifths (81 per cent) of schemes targeted specific groups of students, whilst the remainder did not. Sometimes respondents remarked that it was the schools who identified the students, not the scheme coordinators.

The 58 schemes which did target students were asked to indicate what types of students they aimed to include. A clear majority (84 per cent) targeted 'underachievers', while 12 per cent focused on students with special educational needs, five per cent on ethnic minorities, two per cent on boys and two per cent on girls. Local concerns, such as underachievement among girls or boys, or the needs of young black people, were the reasons underlying targeting. These findings correspond with research conducted by the National Mentoring Network (1996), which found that the three main characteristics of students targeted, which are not mutually exclusive, were:

- those who were identified as underachievers;
- those lacking confidence;
- those having potential to develop.

A multiple-response question

It is worth noting that the National Mentoring Network survey and much of the mentoring literature indicate that underachievers will benefit most from being involved in a mentoring relationship.

While some would argue that any young person could benefit from a mentor, it was suggested during the fieldwork that the reported lack of identifiable benefits in a grammar school mentoring scheme might be because 'there isn't the need there'. However, there is a danger that if only one group of young people is targeted for involvement, students may begin to associate the scheme with 'people who can't read', as one student interviewee put it. Whilst mentoring can be used as part of a broad strategy to raise achievement, it requires careful management in order to ensure that it is perceived by students as an opportunity which will help them to realise their full potential.

Teacher-coordinators interviewed were addressing this issue by taking care to present the scheme positively to students. At the schools visited, the selection of the students was undertaken by the school coordinator, sometimes with the help of the Year Head. All of the students who were interviewed for this research were selected for the scheme by the teacher, although some were given the opportunity to agree to their participation. None of the mentors interviewed played any role in the selection of their mentee and all were content with this approach. One remarked that if mentors were involved in the selection, they might choose the student they liked rather than the one who needed them most.

Just over a quarter (26 per cent) of those who targeted individual students indicated 'other' types of students. These included those with low self-esteem, but with potential, those who were 'disaffected' or whose performance had 'significantly changed' and students with a borderline GCSE Grade C/D forecast. Students whom it was thought would react positively were selected by two schemes and another selected those who were not candidates for further education. One scheme targeted students who had English as a second language and another targeted high flyers. A scheme organiser perceived a particular role for mentoring in addressing low ambition among girls by presenting them with positive role models from outside the school. This variation in target groups demonstrates the flexibility which mentoring can offer.

A number of respondents mentioned that they did not involve students who had already 'dropped out' as they would be unlikely to turn up for the mentoring sessions.

One stated that they did not put students with severe family problems forward for mentoring as it would not be fair on the mentors to have to deal with issues that required professional support. It would appear, therefore, that while the majority of schemes follow the model of supporting underachievers through mentoring, its flexibility allows it to adapt to a variety of needs, with each mentoring partnership building a relationship to meet the aims of different individuals. The research showed that mentoring was not perceived as a panacea for all ills and its limits were recognised by those involved. A common theme linking those who were selected for mentoring was that the individuals had the potential to do better than they were, with the right support and encouragement.

3.4 Recruitment Methods

One of the functions of the scheme coordinators is to recruit mentors whom they then link with schools. The respondents were asked to indicate by what means they recruited mentors. The responses of telephone and postal respondents are presented separately because those who were telephoned were just asked to say how they recruited and were not given the pre-defined list as the postal respondents were.

As Table 5 shows, among the postal respondents, most coordinators used direct recruitment methods which entailed approaching companies directly and asking for their cooperation; in a similar vein, personal contacts were used by more than half.

Table 5: Methods used to recruit mentors

Method used	Number of schemes
Direct recruitment	36
Personal contacts	29
EBP	29
Compact	21
Parents/guardians	15
Professional associations	12
TEC/LEC	10
Chamber of Commerce	8
Other	16

⁵¹ scheme coordinators responded to this question (postal respondents only) A multiple-response question

It is worth noting that 52 of all the scheme coordinators were based in EBPs or Compacts. Of the 16 respondents who indicated other methods of recruiting mentors,

six of these were making use of school contacts and two used advertising. Other methods included setting up their own database, contacting local business clubs and the Rotary and Business in the Community.

A slightly different picture emerged from the telephone survey. Again, the most popular method was direct recruitment, which was used by just over half of the telephone respondents. The two other main approaches were personal contacts and through EBPs. Of the ten respondents who indicated that they used other methods, these included seven using advertising and two having their own database.

The evidence appears to indicate that the scheme organisers were not just using the same contacts but were developing new ones. This is important because if the same companies are always used in school-business links, then there is a risk of fatigue among those companies and there is the possibility that some valuable people in other organisations are not being contacted.

The scheme organisers who were contacted by telephone were asked what types of people they selected as mentors. Nearly three-quarters said that they would have anyone from any job role who volunteered. A fifth mentioned a requirement for the mentors to be in work or to have experience of employment, and an understanding of young people was also referred to by a fifth. Interestingly, one respondent made the point that a mentor is not a counsellor, a comment supported by the view of one of the mentors interviewed who did not believe that it was the mentor's role to 'stray on to personal issues'. Other observations were that personalities matter in this relationship and that people who wanted to give something back to society had the right motivation to become mentors. The objectives of the individual scheme influenced the selection of mentors. Some used people with a background in personnel or training if their scheme was more careers-based, as such people could help with advice about application forms and interviews; and where a scheme focused on ethnic minorities, it was necessary to use mentors who were black in order to present a positive role model with whom students could identify.

3.5 Recruitment Difficulties

It is sometimes suggested that the use of group mentoring, or a mix of group and individual, is due to the difficulty in finding mentors. This research found that 40 of the schemes surveyed were experiencing difficulty in recruiting mentors. Respondents' comments indicate the type of problems they were experiencing. One comment, that there were 'simply not enough to fulfil the need', was supported by

others who mentioned that they used as many as were available and needed ten times as many. However, as one respondent noted, the extent of any difficulty depended on the level of expectation: 'If one wants one mentor per Year 11 student, yes, [there is difficulty] otherwise not really.' It is interesting to note that two of the school coordinators interviewed commented that they would not want to have a large number of mentors in the school because the coordination would then 'become a full-time job'.

Respondents to the postal and telephone survey were aware of the danger of overstretching companies and of the time commitment they were requiring of mentors, an issue with particular relevance to small companies. Two of the respondents commented that recruitment of mentors was time-consuming for scheme coordinators. Attention was drawn to the number of mentoring programmes in one area, which made recruitment difficult. Three respondents made reference to difficulties experienced in 'recruiting suitable mentors', one of whom explained that she contacted the appropriate person in a company, who then put names forward, which meant that she only received the names of some of the potential mentors in the company. The recruitment problem was addressed in one scheme through promoting the opportunity for personal development which mentoring offered company staff.

The personal commitment and interest of the individual emerged as the main reason for people becoming mentors. Most of the mentors interviewed indicated that they had heard that a mentoring scheme existed and put themselves forward for consideration. They were largely motivated by a desire to help young people through sharing their experiences and knowledge and, in some cases, commented that they would have appreciated a mentor at the same age. Mentors also hoped to gain from the relationship, and saw mentoring as a way of developing their own skills and experiences while helping others. This was illustrated by the comment that it was 'so little to give, for what you can achieve'.

The research found that, whilst most scheme coordinators had not faced mentor retention problems, nearly one-third said that they had experienced difficulties in retaining mentors. Some reasons for this were given, the most common being that some mentors changed jobs and moved away, or that their job specification changed and they could no longer afford the time. This raised the possibility that the students might think the mentor would not continue because of something the mentee had done. Consequently, teacher-coordinators took pains to explain to the student the reasons for a mentor's departure. Some mentioned that mentors changing jobs was

more of a problem with employees in large companies and one respondent was addressing this issue by targeting smaller, established companies in the town who, it was felt, would be more stable.

3.6 Training

The importance of training for mentors is stressed by Gray (1989), who asserts that it is essential that the mentors know what their role entails if they are to carry it out successfully. He goes on to state that 'not training participants is the primary cause of unsuccessful mentoring' (Gray, 1989, p. 21). This need is clearly recognised by the participants in this research because all the schemes offered some form of mentor training, as Table 6 illustrates.

Table 6: Mentor training offered

Type of training	Number of respondents
Induction to the scheme	69
Written guidance pack	63
Mentor profile sheet	41
Listening skills training	39
Role play	29
Counselling skills training	24

⁷⁰ respondents answered this question

The value of investing in mentor training can be summed up in the comment of one respondent that 'a reasonable amount of training is essential, especially if you want people to carry on for a number of years'. Some of the mentors interviewed felt that because mentoring was to do with building a relationship, there was a limit to the amount of training that could be undertaken. Nevertheless, most valued the training that they had received.

A wide range of other methods of training used were identified by about two-fifths of respondents. The most frequently mentioned of these were support sessions, which were considered to be particularly important because mentoring can be a lonely business and mentors may be unable to determine whether their mentee is making any progress until they discuss it with other mentors or staff from the school. The need for ongoing support was increasingly recognised by the mentors interviewed, some of whom had established a mentor support network where mentors could get together and discuss, while maintaining confidentiality, some of the issues and challenges they

A multiple-response question

were experiencing. A few schemes offered training in understanding the context in which young people grow up today. Other aspects covered by training included the following:

- an introduction to the school;
- receiving an overview of the mentee;
- training in action planning;
- training in interviewing skills;
- learning about preferred learning styles;
- learning how to motivate a 15-year-old.

It is interesting to note that the National Mentoring Network (1996) survey also found that the majority of schemes were offering some form of training to their mentors but that the range, duration and focus of the training varied.

Five of the respondents to the NFER survey mentioned that they were looking into some form of accreditation for their mentors through the use of National Vocational Qualifications (NVQs) or the School Associates Programme. NVQs offer the opportunity to accredit, as an individual unit of competence, the skills the mentor is already using, with the potential for this to contribute to a full NVQ. Two of the respondents saw promoting NVQ accreditation as a way of encouraging companies to get involved. The National School Associates Programme offers training and accreditation 'which fit within the framework of National Vocational Qualifications' (National School Associates Programme, 1995, p. 2), within a local support network. However, one respondent raised the point that there was a danger in 'attributing expected outcomes and quasi-professional requirements of mentors'. He felt that any tendency towards professionalisation of mentors would alter the nature of the mentoring relationship from one of 'working this out together' to 'him working on me'.

Mentors who were interviewed identified a need to have listening and communication skills in order to enable them to interpret and draw out what the young person said and '[make] them feel free to say anything'. They said that they needed to be able then to 'cajole politely' and offer guidance to the mentee without directing them. In addition to these skills, mentors noted the need for personal skills such as patience, which was widely mentioned, in addition to sympathy, understanding and honesty.

3.7 Evaluation

The research found that most mentoring scheme coordinators (81 per cent) evaluated progress and outcomes. Most of the other schemes indicated that they planned to evaluate in the future. These findings suggest that scheme coordinators realise the importance of evaluation.

The telephone survey revealed that half of the coordinators used questionnaires to evaluate the impact of their scheme. In the main these were completed by student mentees, mentors and teachers or teacher-coordinators. Two scheme organisers also asked parents to complete a questionnaire and one invited the employer, line manager and internal coordinator to do likewise. Additional evaluation methods included having review sessions with mentors and with the teacher-coordinators. Four schemes ascertained the views of the students verbally, two used discussion groups and two spoke to students individually. Two respondents remarked on the need to set goals if evaluation was to be meaningful. This approach is also discussed by Monaghan and Lunt (1992) who noted that, while goals such as punctuality and attendance are measurable, mentoring also aims to enhance personal development, which is less tangible. This issue is explored in more depth in Section 3.8. Two coordinators monitored the academic progress made by mentees through noting students' standard assessment tasks (SAT) results or predicted grades.

Scheme coordinators drew attention to the value of using anecdotal evidence in the evaluation process. For example, one commented that she knew the scheme was successful because participating schools wanted to keep it going. Another remarked that if a mentoring relationship ended early, the reasons for this were investigated. In conclusion, the evidence collected indicates that most mentoring schemes carry out evaluation through formal (questionnaires and discussions) and informal data collection.

The literature on mentoring suggests that record-keeping by the participants can be used to aid evaluation, at least in terms of monitoring the frequency of meetings. Half of the telephone respondents said that their participants did keep a record and a further quarter commented that they were encouraged to do this. The records included information on the times of meetings, a résumé of what was discussed and the targets and objectives set. Maintaining the confidentiality of any record kept was raised by nearly a third of respondents, who questioned whether the information could be used for evaluation purposes. Nevertheless one-third of scheme coordinators confirmed that records of meetings were used for evaluation.

3.8 Evaluation Challenges

When telephone respondents were asked what the challenges to evaluation were, eight noted the difficulty of attributing with certainty any change in student behaviour or performance directly to experience of mentoring. Furthermore, six remarked that the effects of mentoring were unquantifiable, claiming that most of the benefits, which relate to personal development, were intangible and difficult to measure. Comments were made that whilst it was possible to see a change in an individual mentee, it was difficult to distinguish the effect of mentoring from other influences, or from the natural maturation of the student.

The flexibility of mentoring presents another evaluation challenge. As mentoring can address different issues for different people, it is hard to give an overall assessment of its impact. In addition, there may be changes personal to the individual which *only* the mentee recognises. The teacher-coordinators interviewed stressed the importance of the student being able to identify how they have benefited. One scheme coordinator made the telling comment that a student may benefit from mentoring even where an evaluation is unable to demonstrate that this is the case.

From a more practical perspective, three scheme coordinators pointed out that the time required to collect evidence for an evaluation was a challenge. Three also identified a need to have clear evaluation forms which would enable an accessible analysis to be produced. Others remarked on the need to have an objective outsider do an evaluation, and one scheme organiser was pursuing this by commissioning an external evaluation for the first year of the scheme prior to adopting a self-evaluation approach in the future.

A further challenge to evaluation is the possibility that the effects of mentoring may not be immediately apparent. This was alluded to by one teacher-coordinator who pointed out that the effects of the mentoring scheme at her school would be evident once the pupils went for job interviews, rather than within the school environment, as the techniques they had learned were 'not to do with getting on in lessons'.

3.9 Review and Development

Gray's findings (1989, p. 25), that school programmes in the USA take place 'without proper regard to selection, matching, training, monitoring, and evaluation of intended outcomes', cannot be said to be true of the schemes investigated here. The NFER study explored the extent to which evaluation was having an effect on actual

mentoring practice among telephone interviewees. The most mentioned development, by five scheme coordinators, was improving mentor support through group sessions with other mentors or ensuring they received feedback. Changes had been made to the recruitment of mentors in three cases, for example targeting smaller companies, or companies with established school–industry links, and widening the base of mentors. Elsewhere, a scheme was revised from a two-year to a one-year programme because of the difficulty in getting mentors. Training of mentors had also been changed: in two cases it had been shortened to avoid 'overkill' and, in one, it had been introduced. Schools were encouraged to become more involved and have some 'ownership' of the scheme in three cases. One scheme had involved mentors more in the selection of mentees and one was informing parents more about the scheme.

Other changes included improvements in administration, in literature and monitoring and evaluation and in the selection of mentees. The main development in the mentoring schemes surveyed was an increased focus on, and awareness of, the needs of mentors and the improvement of communication between the scheme participants. The importance of supporting the mentoring relationship adequately was pointed out by Tierney *et al.* (1995), who identified such support as a particular strength of the schemes they studied.

This chapter has presented findings which suggest that as schools become increasingly involved in mentoring, their influence may cause it to adapt. Firstly, the pragmatic considerations of operating a scheme within a school may lead to mentoring goals being made more specific and target-related. Secondly, having seen the benefits which mentoring can offer, schools may wish to expand the scheme, for example to Year 7 students. It may be possible to meet the needs of younger students, using the mentoring model, but recruiting mentors from sources other than industry.

The next chapter examines the outcomes and benefits from industrial mentoring in schools.

4. OUTCOMES AND BENEFITS

4.1 Scheme Objectives

The scheme coordinators who were interviewed on the telephone were asked to indicate what the objectives of their scheme were. The three main objectives to emerge, each mentioned by nearly a third of the respondents, were:

- · developing potential;
- raising awareness of post-16 opportunities;
- raising awareness of the world of work.

These objectives confirm that mentoring was aimed at helping young people to reach their full potential and at broadening their horizons for the future. Raising achievement was mentioned by five scheme coordinators, achieving Compact goals by four and developing social skills by three. Other objectives mentioned by two respondents each were to:

- raise aspirations;
- raise self-esteem:
- · enhance personal development;
- raise attendance;
- offer objective support and encouragement.

One scheme mentioned a specific focus on building the confidence of mentees as black people.

The mentees who were interviewed were aware of the purpose of their own meetings with mentors and, in some cases, this was negotiated by the students. In the main, the aims corresponded to those identified by the teacher-coordinators, while allowing the relationship to address individual concerns. The purposes identified by the students ranged from gaining help with work and exams and 'to do as you should do', to learning what life would be like after school. They also thought that mentoring was a way of gaining support with personal problems through having someone to talk to 'about things you wouldn't usually talk to an adult about'.

While it appears that the schemes do have defined objectives, the extent to which these are achieved merits investigation. All but one of the 20 scheme coordinators expressed general satisfaction with the achievement of objectives. In the one

exception, the coordinator perceived only a small effect on attendance and saw 'no drastic effect' on their knowledge and social skills. Other respondents noted that, if those who were most in need of mentoring were selected, they were likely to be the most unreliable and lacking in social skills, which might adversely affect mentoring arrangements. Nevertheless, one respondent remarked that even where the relationship did not continue to the anticipated end, the objectives were still achieved in some cases.

Six scheme coordinators, were able to provide statistics on outcomes in their schemes, which showed that objectives were achieved in between 60 and 90 per cent of mentoring relationships. In most cases this was measured by the percentage of mentees who said they had benefited. In the course of evaluation, one scheme found that whereas 65 per cent of students claimed to have benefited a lot, only half of the mentors perceived a benefit to the student. The coordinator of this scheme thought that this was probably because adults tend to be more critical than young people.

Some schemes have more tangible objectives relating to attendance and attainment. Four respondents specifically mentioned improvements in school work, including coursework and homework. One had seen improved GCSE results in a school which previously had poor results and two mentioned improved attendance among mentees. The value that the schools put on the mentoring scheme was raised by five respondents as evidence of achieving their objectives.

4.2 Benefits to Students

Scheme organisers were asked to identify how students benefited from mentoring. A wide range of benefits was identified; these are presented in Table 7, which shows that the most commonly mentioned benefit was having an adult, who was not a teacher or member of the family, who was interested in a particular student. This was said to be 'enough to make a difference'. Indeed, two respondents mentioned the value in mentoring making the student feel special. Improved self-confidence and self-esteem, which were identified as two of the main benefits, confirm that mentoring is primarily a way of supporting and enhancing personal development. The table also shows that raising awareness of the world of work and providing the mentee with a positive role model were frequently mentioned benefits.

Table 7: Perceived benefits to students

Benefits to students:	Number of respondents
Someone else to talk to, other than teacher or family	29
Self-confidence	26
Self-esteem	18
Awareness of the world of work	17
Positive role models	12
Increased motivation	12
Encouragement to achieve	11
Support and encouragement	8
Raised aspirations	8
Improved interpersonal skills	8
Enhanced responsibility for self	7
Broadened experience	5
Improved organisational skills	5
Provision of new perspectives	5
Careers choice	4
Improved attendance and punctuality	3

68 respondents answered this question

An open-ended, multiple-response question

Other main benefits listed in Table 7, such as increased motivation and encouragement to achieve, suggest how intangible yet worthwhile these can be. As discussed in the previous chapter, this can make the measurement of mentoring outcomes problematic.

4.3 School Perspectives

During the fieldwork interviews, teacher-coordinators were asked to identify the benefits of mentoring to the students. A key benefit identified was the opportunity to have contact with a non-confrontational adult who was from outside the school and therefore 'is perceived by the students as someone with status'. One school coordinator illustrated this by commenting that students expect teachers to tell them to work harder, but if another adult suggests that they should, the students are more likely to take notice. In some instances, the teacher-coordinators had seen a change in students' behaviour and attitude or in their school work, but were reluctant to infer a wider effect from a few cases.

All but one of the mentees who were interviewed believed that mentoring had made a positive impact on their school work. Some mentees had received practical support

from their mentors, such as help with study skills, with identifying career choices and in recognising the relevance of school subjects to achieving this aim. The supportive role played by the mentor also had an influence on school work as students' confidence and determination grew. Some students said that they had received support from mentors in relation to their personal problems. Nearly all of the mentees believed that their experience of mentoring had changed them and were able to identify the way in which this had occurred. In their view, they were more organised and punctual, calmer and more inclined to work in class and more confident when talking to people.

The findings from the survey of scheme coordinators and the visits to schools demonstrate clearly that students were felt to have gained a range of benefits from participating in mentoring.

4.4 Benefits to Mentors

Given that mentoring is a relationship in which mentors invest their time, experience and expertise on a voluntary basis, it is important to identify how they benefit from their involvement. The scheme coordinators were asked to indicate what they perceived to be the benefits to mentors. The findings are presented in Table 8.

Table 8: Perceived benefits to mentors

Benefit to mentor	Number of respondents
Increased understanding of the educational system	30
Enhanced awareness and understanding of young people	21
Improved communication skills	19
Skills development, e.g. interpersonal and listening skills	16
Personal development	15
Personal satisfaction	14
Giving something back to local community	12
Understanding young people	8
Raised company profile	5
Mentor's career development	3

⁶⁸ respondents answered this question

An open-ended, multiple-response question

Clearly the main benefits are related to bridging the worlds of work and education. Mentors were said to gain insights into what students learn, how they learn and how they are assessed. Another benefit was finding out more about the challenges facing young people today and about their interests and concerns. The table also shows that mentors and their companies gained in terms of professional development and of being seen to make a contribution to the local community. Not surprisingly, such benefits are highlighted by many schemes when recruiting mentors.

The mentors who were interviewed confirmed that they valued the opportunity to develop interpersonal skills and to keep in touch with the community which their involvement in mentoring provided.

4.5 Strengths and Limitations

The telephone survey of scheme coordinators asked them to identify what they saw as the strengths and limitations of mentoring. The suggested strengths covered a broad spectrum. One of the main strengths was said to be that mentoring focused on the individual, in a way that may not happen at home and is not always possible in a school environment. One respondent commented that 'the bottom line is that if youngsters get just half an hour of quality adult conversation, it is a gain'. The fact that all the parties involved say they benefit was a strength mentioned by three respondents, illustrating the value of mentoring to more than just the mentee. It was suggested that both company and school value the continuity which mentoring permits, as opposed to merely having contact for two weeks of work experience a year. In addition, mentoring can lead to further links being established, such as the mentor's company becoming involved in school-industry days. The enthusiasm and energy of the mentors was highlighted as a strength of schemes. Other strengths mentioned included the value in having mentors from a wide range of occupations going into schools, giving students access to people whom they would not meet otherwise and enabling young people to see that 'not all adults are down on them'. One respondent commented that young people were less concerned about the confidentiality of the mentoring relationship than might be expected and were willing to discuss the sessions with their peers. It was felt that there would be a filter-down effect through this and that mentoring effects could be more far-reaching than one might think.

The main **limitations** identified were the number of mentors required and the time required of the organisers and the schools. Whilst some coordinators suggested that they would ideally like to have a mentor for every student, it was pointed out that this

would not be practical because there would be 'more mentors than teachers'. Furthermore, the organisation involved would require even more time on the part of the school coordinator and scheme organiser. The point was also made that not every student would necessarily benefit from having a mentor. Two respondents commented on the difficulty of finding the 'right people' to be mentors. The time required of mentors, most of whom had full-time jobs, was another of the limitations identified.

According to the scheme coordinators, there were limitations on companies' involvement in mentoring inasmuch as schools could not be totally flexible in their timing of mentoring meetings. They also observed that, compared with work experience or teacher placements, mentoring could not be so easily fitted into their work schedules. Occasional non-attendance by students was also mentioned as a limitation.

As far as students are concerned, the limitations mentioned included the fact that the mentoring may only be one hour a fortnight and that there are many other influences on them at other times. One respondent raised the issue of how the relationship is terminated. The coordinator questioned what would happen when the support was taken away, and to address this, she felt there was a need to look at building self-reliance into the relationship.

Overall, the evidence collected by this research indicated that the strengths which lie at the core of the mentoring process far outweigh any limitations. Key messages and issues emerging from the project are discussed in the final chapter.

5. KEY MESSAGES AND ISSUES

5.1 Role of Industrial Mentoring in Schools

Industrial mentoring is one of a range of links with industry which schools are currently developing and consolidating. Schools use such links to support both the academic and pastoral development of their students and to help them to make informed decisions about the future. The continued growth in industrial mentoring is a clear indication that schools value this type of liaison with employers. Mentoring offers a particular opportunity for individual students, especially those who are achieving below their potential, to be supported and guided through a challenging time by helping them to identify their own strengths and goals and to broaden their horizons.

Within the school, industrial mentoring can play a supportive role in a variety of ways. Firstly, through enhancing students' awareness of the world of work, mentoring contributes to the delivery of the work-related curriculum and may assist with work experience, either directly through offering placements, or indirectly through providing advice and help with applications and interviews. Secondly, the support and guidance which mentoring provides to pupils who are at risk of achieving below their potential may have a positive impact on schools' examination results. Thirdly, by focusing on the development of the individual, the use of industrial mentors in schools can contribute to the delivery of students' Personal and Social Education. Finally, while in many schools mentoring is focused on a small group of students, there is the potential for the experience of the few to have a wider effect on the school community as they pass on advice and information gained from the mentor to their peers.

Mentoring may also make an indirect contribution to the development of local economies by helping to increase young people's motivation and confidence to take advantage of training and employment opportunities. This is affirmed by the inclusion of mentoring in some bids for SRB and City Challenge funding.

5.2 Main Models

This research has found that while individual mentoring schemes adapt to suit local needs, a common pattern of approach has emerged. The characteristics of a typical mentoring scheme are that it has started since 1993, is supported by an EBP, TEC/LEC or Compact scheme, both financially and in kind, and provides one-to-one

mentoring for the young people involved. A typical scheme also targets students in Years 10 and 11 who are regarded as underachievers with potential and who are considered as likely to benefit from the support that a mentoring relationship brings.

Scheme organisers generally recruit mentors from a range of industrial, commercial and public sectors and strive to develop new contacts with companies, in addition to building on existing relationships. Recruiting and maintaining committed mentors presents some scheme coordinators with challenges. Having recruited suitable mentors, the typical scheme provides at least a basic induction training and a resource pack and may develop ongoing support sessions for mentors. Most schemes carry out some form of evaluation and review which is used to inform future developments. As has been noted, the full effects of mentoring on an individual may take time to become apparent. Issues discussed between a mentor and mentee may be drawn on later in the mentee's life and there is a need to consider evaluating the longer-term effects of mentoring.

5.3 Effects

Advocates of mentoring argue that it can help young people in their personal development and with their school achievement. In addition, mentors are said to benefit through gaining insights into education and young people and from having the opportunity to develop skills which may benefit their company.

In practice, this research found that the distinctive factor about mentoring – having an adult other than a family member or teacher who is interested in an individual student – had a positive impact on the young persons' self-esteem and their awareness of the world of work. The most compelling evidence came from the mentees who were able to identify benefits to themselves and who felt that there had been a positive impact on their school work. Despite this, the intangible nature of some of the benefits of mentoring continue to present a challenge to scheme evaluation. This is an issue which requires further examination and exploration so that the full effects of mentoring are identified and documented.

5.4 Characteristics of a Successful Mentoring Scheme

Whilst mentoring schemes differ in their focus and approach, the following common characteristics of a successful scheme can be identified.

Setting up a mentoring scheme

At the outset, a successful mentoring scheme identifies and defines objectives which are negotiated with the key parties involved and which are achievable. These objectives will then inform the choice of the appropriate type of mentoring. For example, one-to-one mentoring could meet the objective of improving students' self-esteem while group mentoring could fulfil the aim of raising students' awareness of the world of work. Having determined the objectives, the scheme coordinators may identify if there is to be a target group of students, and if so, what the criteria for selection are. A good scheme will avoid targeting complete non-attenders as mentees and accept the limitations of mentoring in that it cannot be a panacea for all problems. When students are approached to become mentees, it is important to explain carefully the aims of the mentoring scheme and the reason for selection to ensure that they understand its purpose and how it relates to their general education and to minimise stigma.

During the initial stage, a good scheme will set clear terms of reference and roles for those involved, in terms of what mentoring is and what it is not, while maintaining flexibility for each partnership to develop in response to local need.

• Running a mentoring scheme

Once the focus of the scheme has been identified, coordinators may want to consider recruiting mentors from a range of occupations and sizes of company and from different ethnic communities, referring, where appropriate, to the identified objectives. Training should be offered to the mentors which is carefully targeted to meet their needs without demanding too much of their time.

In setting up and running a mentoring scheme, coordinators may wish to draw on the experiences of other mentoring schemes and schools in order to avoid pitfalls and build on successes.

· Evaluating a mentoring scheme

Running a successful mentoring scheme will include monitoring, evaluation and review which has fitness for purpose, is targeted and is not burdensome for the participants involved. A key purpose of scheme evaluation will be to enhance the quality of the mentoring experience by reviewing progress and outcomes. This can be achieved through using the identified scheme objectives to focus the evaluation and, where appropriate, by making comparisons with the experiences and successes of other mentoring schemes. Scheme evaluation will benefit from the collection of data on participants' experiences, views and gains by using a variety of methods, including interviews (face-to-face and/or telephone), group discussions and questionnaires. Monitoring and evaluation data help to inform the review process and identify where further developments are required.

· Support within a mentoring scheme

All the parties involved in a mentoring scheme will require support of some form, although it will come from different sources. Support for the schools, particularly in the early stages of the scheme, in terms of recruiting mentors and guiding teachers in identifying achievable objectives, can be provided by the mentoring scheme coordinator and other schools who have a scheme. The mentees need support from teachers and scheme coordinators in the form of a clear purpose for their involvement and the promotion of mentoring as a positive opportunity.

Support for the mentors will come through initial training from the scheme coordinators and from other mentors via support groups where they can come together and share experiences and exchange practice. In addition, coordinators should try to ensure that mentors are committed and can devote sufficient time to the mentoring relationship and that teachers support mentees if the relationship terminates earlier than anticipated. Accessible communication channels are necessary for identifying and delivering the level and type of support needed.

This study found that mentoring is a learning process for both parties and that the success of the relationship depends ultimately on the interaction between the individuals involved. The potential of industrial mentoring schemes to form part of school strategies designed to improve student motivation and achievement and to raise attainment may explain their growing popularity. This study reflects current practice in such schemes and has demonstrated the prevailing view that mentoring is beneficial for students. Finally, the research has revealed that there is a need to carry out further research into the long-term effects of mentoring on young people's personal development and on their educational and occupational progression and achievements.

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Review of industrial mentoring in schools

Industrial mentoring is increasingly used as part of a range of links with industry which schools are currently developing. Schools use such links to support both the academic and pastoral development of their students and to help them make decisions about the future.

This report presents the findings of a national study of the role played by industrial mentoring in schools. Using survey and in-depth interview data, it illustrates the value of mentoring in the school environment as a means of enabling some students to gain confidence, develop skills and improve motivation through interaction with interested adults. The main models of mentoring schemes adopted and the challenges involved are discussed, together with the characteristics of a successful mentoring scheme.

This report will be of interest to people who are involved in setting up or running a mentoring scheme, those who are involved in working with young people, and businesses who are considering expanding their involvement in education—business links.