Dissemination

An account of this research will shortly be available in the journal *Managing Schools Today*. It will also appear in the Berkshire LEA *Bridgebuilder* series. A research paper is currently being prepared for publication in an academic journal. The authors will be visiting schools around Berkshire to lead sessions based on this research. They welcome enquiries about their work.

I would like to thank Professor Keith Postlethwaite of the University of the West of England.

Further reading

It has been difficult to identify research in this field since most work has focused on different aspects of mentoring.

American research has concentrated on older students working with younger peers. The works of Allen and Reisner show that the process can lead to academic gains; they also identify the skills necessary for tutoring.

An overview of the position in the UK can be found in Mentoring and Tutoring. The two articles cited below also highlight improvements in students' school work or motivation. However, the schemes described do not involve a teacher as tutor, and they lack quantitative information on improvements in students' performance, especially in terms of examination results. The first of these two issues is addressed by Betterton and Nash who report on activities in Sutton that were similar to this study. They comment, "We have not cited any supporting literature for two reasons: there isn't very much; and what there is, isn't of practical value." Action planning is the key to the process they describe, and Tony Watts highlights its likely benefits, such as the development of skills and accepting responsibility for learning, as well as the skills required by staff, including communication, negotiation and monitoring.

Allen (ed), *Children as Teachers*, Academic Press, 1976.

Betterton and Nash, *Academic Tutoring – Developing The Process*, Sutton Inspectorate, 1996.

Hughes, J., "Student Tutoring and Student Mentoring" in *Mentoring and Tutoring*, volume 2, number 2, 1994.

Reisner et al., *A Review of Programs*..., Policy Studies Institute, Washington, 1990.

Suterwalla, R., "Mentoring at Tower Hamlets", in *Mentoring and Tutoring*, volume 2, number 3, 1995.

Watts, Tony, "Planning For Action", in *Education*, volume 181, number 24.

Contact

Ian Hylan, Deputy Headteacher, Newlands School, Farm Road, Maidenhead, Berks SL6 5JB Tel: 01628 25068 Fax: 01628 75352 Email: ian@hylan.ftech.co.uk
Professor Keith Postlethwaite, Head of Research and Staff Development, University of the West of England, Redland Hill, Bristol BS67 6UZ
Tel: 0117 965 6261 Fax: 0117 976 2146 Email: KC-POSTLETHWAITE@wpg.uwe.ac.uk

How mentoring can raise standards of achievement

IAN HYLAN, NEWLANDS SCHOOL, MAIDENHEAD, BERKS

AIM

To increase the level of achievement among Year 7 and Year 12 pupils in a girls' comprehensive school through regular mentoring interviews between pupils and teachers.

SUMMARY OF FINDINGS FOR THIS CASE STUDY

★ Pupils at the school routinely gain good examination results. However, there was an increase in motivation to learn for all mentored pupils and a measurable increase in attainment for some ages and ability groups.

★ Both Year 7 and Year 12 groups showed an enhanced attitude towards work. Most pupils reported positively of their experiences.

★ The key change is described in terms of increased motivation to improve. Year 12 students also describe the benefits of help being available, particularly with issues that would not otherwise have arisen.

★ Year 12 students, following a GNVQ programme, were particularly positive. They valued the target-setting elements.

★ At the end of the first year there was no detectable evidence that mentoring is associated with higher attainment for Year 7 pupils. One possible exception is above-average students' ability to read graphs and tables.

★ There was significant evidence that mentoring is associated with higher attainment on the part of Year 12 students. This amounts to almost an additional UCAS point for an average student following a programme of three A levels.

A research project commissioned by the Teacher Training Agency as part of the Teacher Research Grant Scheme 1996/97

What is mentoring?

There are multiple meanings of mentoring. In this project it is used to describe a process of academic interviews whose focus is:

- ★ recognition of progress;
- ★ appreciation of pupils' work;
- ★ an opportunity to discuss work and concerns;
 ★ the identification of targets for action in the immediate future.

How it works

The pilot involved more than 20 volunteer teachers who mentored individual pupils in one Year 7 form and all of Year 12. Meetings were held half-termly and lasted about 15 minutes. Pupils were withdrawn from lessons to allow this.

"Year 12 students described mentoring interviews as positive and adult. They found discussion of their work and associate problems to be belpful." During the meetings pupils discussed their work from the preceding half-term. They brought examples of work they were particularly pleased with and discussed where they wanted to improve. Staff helped pupils apply actionplanning techniques to their routine work.

The mentor and pupil agreed targets which the pupil would work towards in the coming weeks, and the mentor suggested practical ways in which the targets might be achieved. The focus was to

identify specific, incremental steps that the pupil was happy to address. Progress on the targets was discussed at the start of the next meeting and both parties kept a record of the discussion.

Outline of the data collection

With both Year 7 and Year 12 it was possible to compare mentored groups with control groups that had been through the same school system but without the support of mentoring.

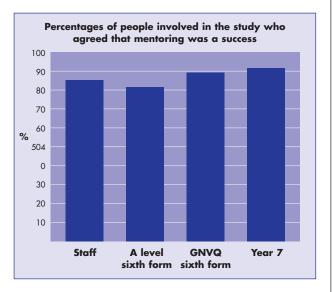
With Year 12 students the measures of prior attainment were students' average GCSE scores using methods developed by the A Level Information Service (ALIS). Performance at the end of the pilot year was measured by predicted average A level scores based on end-of-year examinations. We have shown that these scores are indicative of future A level performance.

All Year 7 pupils took the NFER Richmond Tests of Basic Skills. This was repeated at the end of the year. The performances of individuals in the mentored tutor group were then analysed for variations across the year in each of the 11 subcategories.

Questionnaires were completed by all pupils and staff involved in the project. Trends from these and from the quantitative data were tested through a limited number of semi-structured interviews.

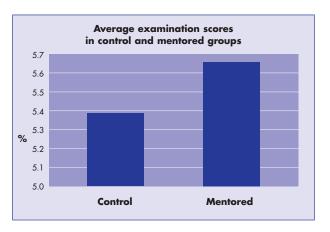
Results of the data collection

Year 12 students described mentoring interviews as positive and adult. They found discussion of their work and associated problems to be helpful. Targets for future work were often discussed, and the students described an increase in motivation and in their desire to improve.



Year Seven pupils were almost exclusively positive, as might be expected. These younger pupils felt able to respond to issues raised by staff but were reluctant to initiate conversation themselves.

Staff saw themselves as a sounding-board without actually providing solutions. They appreciated the objective information provided by the ALIS and NFER scores. They expressed some concerns over whether they had the skills necessary to work with pupils outside their own subject specialisms. Staff were convinced of the merits of the scheme with Year 12 students. They were divided over Year 7, recognising the practical difficulties of including the whole year group.



The graph above shows that the average ALIS score for the two unmentored Year 12 control groups was 5.39. For the mentored group it was 5.66. After allowing for differences in GCSE scores on entry to Year 12, the difference was statistically significant. The importance of this difference is underlined by two factors:

★ some staff were unable to follow the full mentoring scheme in their work with pupils, and yet effects were still noticed;

★ the main difference between the two year groups acting as controls was the transfer of one hour a week teaching time from the upper to the lower sixth year. This major change did not result in a significant difference in the ALIS scores between the two control groups. This reinforces the importance of the improvement found for the mentored group.

The average score across the NFER sub-categories showed a noticeable improvement for the whole year group, allowing for maturation. There was no detectable evidence of improvement in any individual sub-category for the mentored Year 7 tutor group. Staff discerned that pupils had an improved attitude to work as a result of mentoring. They were not surprised at the lack of measurable improvement, expecting a greater period of mentoring to be required. There is some indication that pupils of slightly above-average ability can make significant progress as a result of the mentoring process.

Implications for teachers

It should be remembered that the following points are based on research in a single school and that such a study has inherent limitations.

Are you using average GCSE scores to identify a student's likely A-level performance?

Our work supports that of others in showing that they are a good indicator.

Consider a similar exercise with examination results at the end of the lower sixth.

We found these also have a high correlation to ultimate performance.

Should resources be allocated to a mentoring process?

We have found that

"Staff discerned that pupils bad an improved attitude to work as a result of mentoring."

differences from one year to the next (for example, which teacher a group had) did not, in themselves, result in significant differences in A-level scores. Our results support the conclusion that mentoring in Year 12 is associated with a genuine improvement in the students' performance.

Are you helping other groups of pupils by mentoring? How do you know?

We were unable in the time available to detect effects for Year 7 pupils, except possibly for somewhat above average students in the one area of reading graphs and tables. A school with limited resources might concentrate its mentoring efforts on a particular group of pupils.

Further research

The factors that have led to a measurable improvement for Year 12 students merit further investigation as they raise important questions for teachers:

★ Can we help pupils to be more cognitively aware?
★ Can we help less able pupils to benefit from a process like the one described here?

The answers will indicate where it would be most effective to extend the mentoring scheme.