

Raising Student Achievement Levels Through Target-setting and Academic Monitoring: A Case Study of Developments at Key Stage 3 in a Secondary School.

by

Jenny Berge¹ and Trevor Male²

Abstract

Evidence for the conclusions and recommendations are based on interviews with tutors and students from Year 8 conducted by the Head of Year, who then provides an overview from her perspective. The findings are contrasted against the examples of effective target-setting provided by the DfEE Standards and Effectiveness Unit (DfEE, 1998b) and the Office for Standards in Education (Ofsted, 1996). The new scheme is also reviewed in the light of the call for equal opportunities by, amongst others, the Department for Education and Employment (DfEE, 1998c) and against the body of evidence provided by the research on school improvement (e.g. Stoll and Mortimore, 1995; Creemers, 1997).]

BACKGROUND INFORMATION

Barber (DfEE, 1998a), in his role as Head of the Standards and Effectiveness Unit within the DfEE, highlights the determination of ministers to see schools setting specific measurable targets for student performance at least once a year as “a powerful lever for raising standards in schools”. The announcement of statutory target-setting in schools for the year 2000 comes on the back of a body of research on the efficacy of target-setting conducted by Ofsted (1996) and from the results of the subsequent consultation exercise by the Schools Curriculum and Assessment Authority (SCAA, 1997a). From the summer of the

¹ *Jenny Berge is a Head of Year at Therfield School, Leatherhead, Surrey.*

² *Trevor Male is a Senior Lecturer at the International Educational Leadership Centre in Lincoln.*

year 2000, all maintained schools will be obliged to set and publish their targets for National Curriculum Assessments in English and Mathematics for Key Stage 2 and for individual and average student scores on the General Certificate for Secondary Education (GCSE) at Key Stage 4. Such targets will be required to correspond to national targets at Key Stage 2 and Key Stage 4 and will be set in a framework of local circumstance for each school by a national system of benchmarking which is to be established by the newly formed Qualifications and Curriculum Authority (QCA), which has replaced SCAA.

To a large extent the appropriateness of these targets will be judged by use of the benchmarking data being produced by QCA, but will also be dependent upon the system of baseline assessment used by each school. From September, 1998, all baseline assessment systems used on entry to compulsory schooling at the age of five years must be licensed by the DfEE (SCAA, 1997b: 3). Baseline assessments used by secondary schools, however, are usually based on student performance on National Curriculum assessments at Key Stage 2 supplemented by a range of other data, such as standardised reading scores, cognitive ability tests (CATs), teacher assessments and behaviour comments from feeder schools.

The general expectation is that any targets set will be incrementally increased annually and will be set in the “challenging zone” (i.e. beyond the level that can be accomplished with minimal effort). Contemporary announcements from central government, however, are now expressing some welcome caution to the

initial demand for year on year improvements. It is now accepted (DfEE, 1998b) that:

Targets which do not improve on the previous year's performance could be justified when there is clear evidence that the new year group is markedly less able than the most recent one.

This concession recognises the dependency of schools on previous performance. SCAA's Value Added National Project [date], for example, found that at least 50 per cent of the difference in performance at any key stage is accounted for by differences in attainment at the end of the previous key stage. The consensus of opinion amongst researchers into school effectiveness is that the school can only marginally add to the level of performance predicted by baseline assessments and previous performance on standardised tests. Research studies demonstrate a range of improvement between schools of a similar nature: Creemers (1994) claims 12 to 18 per cent, Brown and Rutherford (1996) 10-15 per cent, while Daly (1991) suggests only 8 to 10 per cent. Sammons, Mortimore and Thomas (1997) translate this as the difference between six grade B's and six grade D's at GCSE.

Reaching government targets will require a concentrated effort, therefore, to not only maximise existing potential but to move beyond that rate of improvement and into the 'challenging zone' as it is referred to by Standards and Effectiveness Unit. This is the area where obvious targets, based on historic performance, are reviewed by the headteacher, governors and the LEA in order to provide an impetus to higher levels of attainment. Even so, there is still doubt that such an approach will lead to the levels of improvement required by central government. There are, perhaps, three reasons for this.

The first is that the focus of target-setting is the student, rather than the teacher (DfEE, 1996). This flies in the face of all we know about sustained, long term school improvement which is based as at least as much on an improvement in pedagogical skills as it is on raising expectations.

The second is that schools have tended to respond to the demand for improved outcomes by targeting students who are on the borderline of success, rather than undertake a fundamental review of support for student learning. Fitz-Gibbon (1996: 26), for example, points to the widespread practice in secondary schools which diverts disproportionate amounts of resource to the students in the C/D grade level of GCSE at the expense of students who are either outright passes or failures

The third is that, in the case of secondary schools in particular, there is evidence to suggest that the process of target-setting, and indeed the associated activity of targeting, happens too late in the student's academic career to make a real difference. This last point underpins the urgency to support students at Key Stage 3 in the case study school and matches the assessment made by Michael Barber (Pryke, 1996) while he was still in higher education. Citing work conducted on school improvement at Keele University, Barber identifies teaching at key stage 3 as one obvious target for secondary schools with an eye on the league tables:

A lot has been done on key stage 4, but the mine is largely used up. At key stage 3, however, there are an awful lot of students who aren't being

challenged. There needs to be a new focus on pedagogy at key stage 3, getting teaching and expectations sharper and more focused.

Certainly there is evidence to suggest that strategies adopted for raising achievement in the secondary sector have not resulted in the rate of improvement needed to reach declared national targets. Using the measure of the National Target for Education and Training, an examination of performance on Foundation Target 1 (80% of young people to attain 5 GCSEs at Grades A*-C or the equivalent by 1997; later updated to 85% by the year 2000), we can see a significant shortfall. The DfEE (1998c) claims that just over 70 per cent have now reached the target, although some doubt must be expressed on this figure as their statistics contradict those supplied by the National Advisory Council for Education and Training Targets in their report (NACETT, 1995). NACETT show national attainment at 63.4 per cent in Autumn, 1994 with the DfEE showing 66 per cent in Spring of the same year! More importantly, perhaps, is that NACETT show a decline in the *rate* of improvement which throws the potential for reaching the targets into serious doubt. They show the rate of improvement needed to reach the amended target for the year 2000 as being 3.6 per cent and contrast this to an average rate of improvement since 1991 of just 2.6 per cent. Even more frightening in this scenario is the stark evidence that in the 12 months leading up to Autumn, 1994 there was actually a decrease in the rate of improvement of -0.4 per cent! The implication is clear, there is no more to be gained from squeezing the middle band of students any further (Male, 1998). Alternative and additional approaches are needed for sustained, overall improvement.

THE MOVE TO ACADEMIC MONITORING

A sample of research into school improvement demonstrates the direct involvement of students in their own learning is a key factor in higher levels of attainment. Stoll and Mortimore (1995:5) list the following as important in complementary factors for school effectiveness and improvement:

- positive reinforcement in the form of feedback;
- monitoring and enquiry in the form of monitoring pupil performance and setting, monitoring and evaluating success criteria;
- high pupil self esteem by involving pupils in the management of learning;
- parental involvement.

Fullan (1991: 174) uses Goodlad's study in 1984 as an example of research which showed that:

Learning is enhanced when students understand what is expected of them, get recognition for their work, learn quickly about their errors and receive guidance in improving their performance.

Fullan (1991:177) also refers to the work of Mortimore et al (1988) which showed that emphasis on positive reinforcement and rewards, challenging, interesting work and maximum communication between teachers and students were some of the factors influencing student progress. Later research undertaken by Harris, Jamieson and Russ (1997:154) continues with a similar theme stating that students respond when they know where they are, how they are doing and what they need to do in order to improve.

Effective target-setting and monitoring should address many of the issues mentioned above. However, in order for targets to be realistic and achievable good record keeping is essential, as it is to have an overview of students' strengths and weaknesses in all subject areas. Harris, Jamieson and Russ (1997: 152) point out that good documentation and an awareness of individual students' capabilities can only enhance the monitoring and evaluating process and also indicate that schools where effective improvement has been shown have policies which emphasise the importance of rewarding positive behaviour and a wide range of achievements (p 150). The use of rewards rather than punishments to change behaviour was considered to be important in raising motivation.

The DfEE report (1996:6) indicates in its main findings that:

- schools who use target-setting effectively allow individuals to articulate clearly what is being aimed at and have a clearer overview of the schools aims;
- target-setting was successful when carefully planned and precise, when focused on improving attainment and the results were measurable. It was also noted that it was more effective when particular teachers took responsibility for setting and achieving the targets.

Indications were made that many schools used data to monitor and review past performance whilst others went a stage further and used past and current data to predict potential performance. This is seen to be particularly effective, in that it allows effort and resources to be focused on students who are under

achieving or being insufficiently challenged. Best practice in target-setting was shown to stem from self critical reflection and analysis of performance, taking both students' strengths and weaknesses into account. It is in this context that we will now examine the efforts of the case study school to incorporate academic monitoring and target-setting into Key Stage 3 through the tutor system in Year 8.

THE CASE STUDY SCHOOL

Therfield school is a mixed comprehensive school serving a diverse community in an urban setting in the county of Surrey. It caters for students aged 11 to 18 and has just over 1300 students on roll. Student recruitment is buoyant with an annual intake of 230 for which the school is over subscribed, a position which has forced the County authorities to draw up catchment areas and waiting lists.

In keeping with most secondary schools, target-setting and monitoring was first introduced at Therfield School at Key Stage 4, in this instance during the academic year 1994/95. Teaching staff were given the results of standardised tests of general reasoning developed by the National Foundation for Educational Research [AH2 scores] as a baseline at the outset of Year 10. They were then asked to give predicted and target GCSE grades in the January of Year 10, again in July and after the mock examinations in the January of Year 11. The deputy head of Key Stage 4, the Head of Year, Heads of Departments and personal tutors all had access to the predicted grades for students across all subjects. Personal tutors were responsible for the monitoring of their tutees, however, with some under-achievers or C/D

borderline cases also being counselled by the relevant Head of Year or Deputy Head. Heads of Departments also had access to the information so that they were aware of under-achievers in their subject area. This system is still in use with some modification - point scores are now used instead of grades and a predicted grade is not expected at the beginning of Year 10, as the teaching staff agreed this could be demoralising in some cases.

In the bid to raise achievement levels for all students, it was then decided to introduce a system of target-setting and monitoring at Key Stage 3, focusing initially on Years 8 and 9. This was introduced in September 1995. The aim of this being:

- to improve achievement where possible at Key Stage 3 and hopefully, building a better foundation for Key Stage 4;
- to identify pupils' strengths and weaknesses;
- to encourage self evaluation;
- to develop the ability to become reflective learners.

The target-setting and monitoring of the 221 students in Year 8 was to be undertaken by tutors. Baseline information available to tutors to assist them with the process included:

- SATs results from key stage 2;
- AH2 scores (carried out in the autumn term of Year 7);
- Reading quotient.

In addition, information is drawn from the sets established in each curriculum subject during Year 7. Students positions in each set were graded using a 1 -

5 scale, 1 indicating the highest position in a set, 5 indicating that a student is at the lower end of a set. This information was extracted from the students' annual report. (One incidental criticism of this approach is that information from the sets is not updated if, for example, a student changes sets or positions within a set during the course of the year.) This information was new to tutors at the beginning of the year and rather than being used as a baseline, was used to detect any anomalies e.g. high AH2 numerical score / low maths set or, high reading quotient and verbal AH2 score / low English set.

The target-setting process for key stage 3 is carried out during the tutorial period. Some work is carried out with the tutor group as a whole during their programme of Personal and Social Education - one 20 minute period each week. Group activities include the explanation and relevance of the process, the importance of SMART targets, with both good and bad examples being given. The reviewing of targets is also sometimes done in groups, particularly the discussion of the effectiveness of targets set and what improvements could be made.

Each tutor aims to have a personal interview with each student in the tutor group every term but should always schedule seeing them a minimum of twice during the academic year. These interviews take place when the remainder of the tutor group are in assembly and the tutor usually keeps back two students for each 20 minute session. For under-achievers or students giving cause for concern, this may be reduced to one student per session. With each tutor having one 20 minute period each week for this monitoring, therefore, there is a

possibility of seeing a maximum of two students per week. In a fourteen week term, without interruptions, this means that 28 students could be seen, which is the average number of students in a tutor group in Year 8. Ideally, after the initial group input, students should arrive at the interview with some idea of a target or targets. Tutors should also have looked at the statistics available and picked up any items for discussion. The interview should therefore formalise the target(s), discuss strategies and note how and when these will be reviewed.

At the beginning of each term, students record in their homework diary one or two targets that they will be working on during the course of that term. They also record in their homework diaries an effort grade every term using the grades A - E. One grade is given for each subject by the student and then a grade is entered by the relevant member of staff. Both grades are used as a tool for discussion at the tutor interview. Contact with parents is kept using the homework diary, with parents asked to sign their agreement to the targets set. The Head of Year oversees the whole process, particularly with a view to monitoring and setting targets with students who have behavioural difficulties or are underachieving. The aim is to review these students' targets on a half termly basis and to liaise accordingly with their tutors.

FINDINGS

Results of interviews with tutors

Tutors were questioned about the existing procedure. An examination of their comments revealed that they generally found the procedure of target-setting and monitoring to be valuable. They felt that communication between student

and tutor is enhanced and there is greater opportunity for the tutor to find out more about individual students and to get to know them better. Conversely they sometimes found the use of effort grades to be unhelpful - subject staff sometimes agreed with the student's attainment grade and often automatically gave more able students an A, when perhaps they were not always making maximum effort and working to their full potential.

Time was a limiting factor for all tutors who indicated that the opportunity to complete this task in a lesson was often minimal with the consequence that little emphasis was placed on reviewing. Very often there was a long time gap between interviews with targets set at the beginning of a term, for example, and students not being seen until nearer the end of a term. It was also clear that some students were not committed to the process, whilst others found it difficult to set targets. There was also some difficulty in knowing whether targets had been achieved because of lack of communication between subject staff, tutors and students.

Comments by students

Students genuinely valued the fact that they were being monitored and that someone was taking an interest in their progress. None of the students viewed the process negatively and one student stated that he liked the idea of knowing exactly where he stood and having an accurate idea of what needed improving on a regular basis. The large majority of all those monitored also liked the fact that parents were kept informed of the half termly meetings, whether good or bad. Two students expressed the feeling that because their progress was

being monitored and it was fed back to parents, they could not get away with things that they might have done before. The students indicated they valued rewards, including the use of merit marks that were given if successful (linked into the schools system of rewards/praise) and for some the monitoring process was linked to some kind of reward at home

At each meeting a time would be agreed for the next review. This was often referred to by students nearer the time, who often checked to see if the Head of Year had remembered the appointment, or commented that they thought the date was near. This also seems to indicate that they feel positively about the monitoring process, as they could remember the approximate day set for the review, something they might be expected to forget.

Comments from Head of Year

The Head of Year emphasised the benefit of greater communication between tutor and student and indicated that students valued the time spent with them on an individual basis. Students had been made more aware of the concept of a SMART target and were consequently better equipped to prioritise and think about areas for improvement. Parents had been better informed of their child's progress via homework diaries or, in cases where the Head of Year was directly involved in monitoring, via letters home.

There were some problems in the use of reports to extract subject specific targets in that staff did not always include a target and if they did, they were not always clear enough for the student to extract a SMART target. Furthermore

reports are only issued once a year and not always at the same time of year. Thus targets were often set in isolation with little regard given to the statistics available. Although the setting of SMART targets improved throughout the year, there were still too many woolly ones being set.

The Head of Year confirmed that, in her opinion, the process did not always stretch able students. Tutors often said that they often could not think of any targets for them and effort grades were nearly always recorded as A's, even when the more able student was not working to their full potential. She was also aware that not all tutors were fully committed to the process, particularly of the claim that time was insufficient to carry out the task effectively. This was a serious concern as a negative message was given to the students with the result that they also placed less value on the system. There was evidence to suggest that tutors did not always review the process satisfactorily, either because of lack of time or lack of information on whether the targets have been achieved. The use of rewards linked in with the school policy was patchy.

ANALYSIS

The system of monitoring introduced into Year 8 at Therfield School has to be seen as a positive step towards effective student progression. There have been too many examples of target-setting becoming a knee jerk reaction at the latter stages of Key Stage 4 and, effectively, being reduced to a process of targeting individual students - particularly those on the borderline of C/D at GCSE. The earlier intervention reported here brings with it a sense of rationality and should lead to a more systematic examination of progress that is

supportive of all students. It also provides a vehicle through which schools can focus their efforts on achievement rather than merely on attainment. In other words, it is an approach which should allow for individual students to match their performance potential, and to reach for intrinsically defined targets, as opposed to externally applied measures of assessment.

Indeed there is ample evidence from the findings to show that there have been many perceived benefits through the introduction of a system of academic monitoring into this key stage. Our findings show that students are more aware of their progress and, generally, are motivated toward better performance and are now capable of setting practical and realistic targets for themselves. Tutors and the Head of Year report a largely positive response from themselves and the students to the new system, with all people involved now exhibiting greater levels of understanding about the purpose and practicality of SMART targets. An examination of the research outlined earlier suggests that for it to work on an individual level, both students and staff must perceive the benefits of the system. There is some caution to be expressed with regard to the overall success of the new initiative, therefore, as it is clear that some staff were not committed to the system and were responding in a negative manner which, in turn, was being picked up by students.

For that reason it is important to note that monitoring is more effective when individual teachers take responsibility. It is otherwise very easy to overload a student with targets if it is left to departments within a secondary school, where students can have numerous teachers. At Therfield School, for example, it is

not uncommon for a student in Year 8 to have 14 different teachers and obviously many of these staff change at the end of each year. It is important, therefore, for communication between subject staff and tutors to be efficient for effective monitoring to take place and it is critical that a single member of staff takes on the responsibility for co-ordinating the information relating to individual students. Any documentation on individual students strengths and weaknesses in different subject areas should be clear and readily available so that realistic targets can be set. Here the school has been largely successful in that aim by locating the task of monitoring with the tutor, rather than the subject staff, thus providing the student with clarity, consistency and coherence in the process of target-setting.

The clarification of expected performance through target-setting similarly fits well with the findings from relevant research which highlights the need for high expectations. Stoll and Mortimore (1995: 5) and Fullan (1991: 17) additionally point to the need for a system of positive reinforcement, praise and rewards to be in place as a key factor in influencing student progress. In this case we can see that there is still room for improvement, for although students report instances of praise and extrinsic rewards these are not tied closely enough to the school's award system to achieve maximum effect. We can also note that some of the more able students were not being stretched, particularly in terms of their effort grade, again an area for concern in the search for a comprehensive approach to enhancing student achievement.

The active involvement of parents is an important feature of improved performance as reported by Sammons, Hillman and Mortimore (1995) in their synthesis of research into the key characteristics of effective schools. In this case we can see that the improved flow of quality information to the home, through homework diaries and letters, has enhanced the relationship with parents in a way that will be supportive of student achievement.

CONCLUSIONS

Although it can be concluded that although the system in principle is basically sound, it can be seen from the analysis that there are a number of areas where improvements could be made. We know, for example, that tutors feel there is insufficient time to carry out the task effectively and as a result are often less committed to the scheme. Students possibly pick up this lack of commitment and consequently are often less than enthusiastic about the setting of targets. It is interesting that students are generally more positive where the monitoring is more frequent and there is consistent feedback.

The second major area for improvement lies in developing the system even further through focused training for tutors and staff and in turn, students. The examination of the system of target-setting and monitoring we have conducted of Year 8 students in Therfield school leads us to make the following recommendations:

- 1. further training is needed for tutors** so that they:

- have a clearer perception of target-setting and the follow up necessary to enable them to help students set SMART targets with strategies;
- are able to use the baseline statistics effectively;
- are more effective in getting all students to work to their full potential.

2. further training for subject staff to:

- assist better communication with tutors;
- make the system of effort grades more effective.

3. to allocate quality time for effective target-setting on an individual basis when tutors are not taken away to do other tasks and without constant interruptions. This could take the form of:

- a withdrawal system where a tutor withdraws a student from a lesson for 20 minutes once a term. The tutor would be allocated one period of extra non contact time each week;
- lessons finishing slightly earlier on one day each week, allowing an extra block of time for tutors to meet their tutees. If students were not required at one of these sessions, they could go home.

4. to involve parents more by:

- introducing the idea of a counselling day as suggested in the DfEE report (1996:30);
- to have a parents' evening to explain the principles of target-setting and monitoring and the ways in which parents might help their children.

5. to improve communication between subject staff and tutors, especially when subject specific targets have been set.

6. **to develop a better system of feedback** to the students with the use of rewards being tightened up. This again could be linked to the staff training.

REFERENCES

- Brown, M. and Rutherford, D. (1996, March). *Leadership for school improvement: The changing role of the head of department*. Paper presented to the quadrennial British Educational Management and Administration Society, Cambridge, England.
- Creemers, B. (1994) *The history, value and purpose of school effectiveness studies* in Reynolds, D. et al *Advances in school effectiveness research and practice*. Oxford: Pergoman.
- Creemers, B. (1997). *Towards a theory of educational effectiveness*. in Harris, A., Bennett, N. & Preedy, M. (eds.). *Organisational effectiveness and improvement in education*. Milton Keynes: Open University Press.
- Daly , P. (1991) How large are secondary school effects in Northern Ireland? *School Effectiveness and School Improvement* 2(4), pp 305-323.
- Department for Education and Employment (1996). *Setting targets to raise standards: A survey of good practice*. London: HMSO.
- Department for Education and Employment (1998a). *Statutory target setting in schools*. [on-line] Available: <http://www.open.gov.uk/dfee/targets/index.htm>
- Department for Education and Employment (1998b). *Target setting*. [on-line] Available: <http://www.open.gov.uk/dfee/seu/target/target04.htm>
- Department for Education and Employment (1998c). *Targets for our future*. [on-line] Available: <http://www.open.gov.uk/dfee/ntargets/pg2.htm>
- Fitz-Gibbon, C. (1996). *Monitoring education: Indicators, quality and effectiveness*. London: Cassell.
- Fullan, M. (1991). *The new meaning of educational change*. London: Cassell.
- Harris, A., Jamieson, I. and Russ, J. (1997). *A study of 'effective' departments in secondary schools*. in Harris, A., Bennett, N. and Preedy, M. (eds.). *Organisational effectiveness and improvement in education*. Milton Keynes: Open University Press.
- Male, T. (1998, April). *The inappropriateness of patriarchal leadership models to the process of school improvement*. Paper presented to the annual meeting of the American Education Research Association, San Diego, California.

Mortimore, P., Sammons, P., Stoll, L., Lewis, D. and Ecob, R. (1988). *School matters: The junior years*. London: Paul Chapman.

National Advisory Council for Education and Training Targets (1995). *Report on progress towards the national targets- July 1995*. London: HMSO.

Ofsted (1996). *Setting targets to raise standards: A survey of good practice*. Sudbury: DfEE Publications.

Pryke, N. (1996, November 22). Schools focus on 'D-graders' to boost ranking. *Times Educational Supplement*.

Sammons, P., Hillman, J. and Mortimore, P. (1995). *Key characteristics of effective schools: A review of school effectiveness research*. London: University of London Institute of Education.

Sammons, P., Mortimore, P. and Thomas, S. (1997, March) *School and departmental effectiveness: Policy, practice and research. Implications from a recent British study*. Paper presented to the annual meeting of the American Education Research Association, Chicago, Illinois.

SCAA (1997a). *Target setting and benchmarking in schools: A consultation paper*. London: SCAA Publications.

SCAA (1997b). *Baseline assessment*. London: SCAA Publications.

Stoll, L. and Mortimore, P. (1995). *Viewpoint: School effectiveness and school improvement*. London: University of London Institute of Education.