Research for Teachers
Effective strategies for pupils with EBD

published: Mon Nov 01 10:36:37 GMT 2004

....

- Overview
- Study
- Case studies
- Further reading
- Appraisal
- Research tasters: Five activities

Which strategies are effective for primary school pupils with emotional or behavioural difficulties (EBD) in mainstream classrooms?
We think many practitioners will have a keen interest in research that has investigated different strategies for supporting children with EBD in mainstream primary classrooms, so in this TLA research summary, we have summarised the findings of a systematic review of research, which was designed to uncover and synthesise all the studies on this topic (published between 1970 and 2000).

The review is:

Evans, J., A. Harden, J. Thomas and P. Benefield. *Support for pupils with emotional and behavioural difficulties in mainstream primary classrooms: a review of the effectiveness of interventions*. EPPI-Centre and NFER: 2003.

Although behaviour management is a high priority in schools, it appears to be an under-researched topic. The reviewers found relatively few research studies investigating the impact of behaviour strategies in primary schools. Ten of the 28 relevant studies that they did find provided sound evidence about the effectiveness of three types of strategies:

- training programmes
- the arrangement of children's tables in the classroom; and
- rewards and sanctions.

The reviewers also reported on other behaviour strategies which showed some evidence of being successful at improving behaviour for children with EBD. They considered these alternative approaches needed further evaluation and concluded with recommendations to researchers for robust approaches for evaluating behaviour interventions. Practitioners who want to monitor the effects of behaviour interventions in their own schools will

find their suggestions about evaluation helpful too.

As usual, we present a number of case studies. Two of the studies are drawn from the review. We have also included five other case studies in order to provide extra illustrative material. Whilst these extra studies describe activities which were not evaluated using the robust methodology underpinning the main review, they nonetheless point to interventions practitioners may wish to explore in their own schools in the context
[Back to top](#)

....

Overview

Why is the issue important?

Many teachers find including pupils with EBD in mainstream classrooms a challenge (as indicated by the number of exclusions), so identifying effective strategies that can be used by primary school teachers, either on their own or in collaboration with other school staff, is likely to be welcome.

What did the research show?

The study found sound evidence about the effectiveness of three main types of strategies:

- training programmes that aim to change pupils' behaviour or address the children's underlying problems
- rearranging children's tables from groups into rows
- rewards and sanctions using token systems that aim to contain behaviour.

The reviewers also identified a fourth strategy which was based on theories of parent-child relationships (such as nurture groups), but the evidence was more limited.

How was this achieved?

The training programmes helped the children to learn how to monitor their own behaviour, cope with their feelings of anger and frustration, and improve their social skills had the most sustained, positive effects. Changing the layout of the classroom from groups to rows had a marked effect on pupils who were easily distracted, but its use was limited to individualised tasks and it was unclear how long the effect would be sustained. Using a system of rewards and sanctions reduced the amount of off-task behaviour and increased the amount of on-task behaviour, but the improved behaviour was short-lived - lasting only whilst the rewards and sanctions were in use.

How was the research designed to be trustworthy?

The authors of this review systematically searched for relevant studies published between 1970 and 2000. Out of an initial 265 citations, they identified ninety-six studies that focused on intervention strategies; of which forty-eight were concerned with primary-aged pupils. Twenty-eight of these reported the results of formally testing the effects of the strategies. They assessed the quality of these studies according to whether the research design was appropriate to the question being addressed by the review, and had been correctly applied. Using these criteria, the reviewers reported on the ten studies they judged as 'sound' evidence and commented on a further eighteen studies they considered 'inconclusive'.

What are the implications?

The findings suggest the value of:

- devising training programmes that respond to the children's specific needs, such as improving pupils' communication skills, helping pupils to manage their feelings of anger and how to monitor their own behaviour
- monitoring the effects of different seating formations and finding out the pupils' views of them
- using a system of rewards as well as sanctions, and finding out from the pupils what kind of rewards they think support learning and what kinds of sanctions they think make the best deterrents
- involving parents, by for example, giving them opportunities to contribute to the process of identifying their children's needs, and discuss alternative strategies for supporting their children.

What do the case studies illustrate?

The case studies show:

- ways children were trained to monitor their own behaviour, cope with feelings of anger and improve their communications skills
- why and how teachers changed the seating arrangements in their classrooms for different lessons
- the characteristics of six secondary school teachers who successfully managed disaffected students within a whole-school rewards and sanctions policy. They incorporated an appreciation of students' feelings and built positive relationships with them.

Back to top

....

Study

What was the focus of the review?

The reviewers wanted to find out what is known about the effectiveness of different strategies for supporting primary-aged children (age 4-11 years) with EBD in mainstream schools. They made a systematic review of the research literature published between 1970 and 2000 (using established methods designed to find and synthesise, without bias, all the available research evidence) to help them explore the following question:

'What are effective strategies to support primary-aged children with emotional and behavioural difficulties in mainstream classrooms?'

Strategies that could be put into practice by primary school teachers, either working on their own, or in collaboration with other school staff, to support children within mainstream classrooms were of particular interest. The reviewers excluded from their search studies that:

- involved children who were taught in special schools or special classrooms (e.g. resource rooms) within mainstream schools:
- reported strategies using drug or psychiatric treatments;
- evaluated strategies for general discipline problems;
- did not report the full results of an evaluation; and
- were not published in the English language.

What kinds of behaviour do pupils with EBD show?

The reviewers used the definition of emotional or behavioural difficulties (EBD) given in the government's Code of Practice for identifying and assessing children with special educational needs (Circular 9/94, DfEE, 1994). The document suggests that 'EBD' is a broad label that groups a range of specific difficulties:

- age-inappropriate behaviour or behaviour which seems otherwise socially inappropriate or strange;
- behaviour which interferes with a child's own learning or the learning of their peers (eg, persistent calling out in class, refusal to work, annoyance of peers);

- signs of emotional turbulence (such as unusual tearfulness, and withdrawal from social situations); and
- difficulties in forming and maintaining relationships (eg, isolation from peers, aggressiveness to peers and adults).

The reviewers found that these difficulties gave rise to four main groups of behaviour in class associated with EBD:

- off-task behaviour (such as fiddling with pencils and equipment, wandering around the classroom and not engaging with the work set by the teacher);
- disruptive behaviour (such as calling out in class, interfering with others' possessions, or talking to others and disturbing their work);
- aggressive behaviour (including behaviours such as arguing, fighting or namecalling); and
- social difficulties (including inappropriate attempts to engage with peers, refusal to engage with peers or adults).

What types of effective strategy for tackling behaviour associated with EBD did the review discover?

The reviewers identified three types of effective strategy from the research that can be used in schools for tackling EBD:

- providing children with information and training;
- putting the children's tables into rows; and
- rewards and sanctions using token systems.

Providing children with information or social skills training

The reviewers reported several effective training programmes:

- a programme in which children were given training outside the classroom for how to control their own behaviour, which reduced the amount of disruptive behaviour they showed when they returned to the mainstream classroom. This reduction was sustained for several months after the programme had finished.
- two programmes run by counsellors to help children cope with their feelings of anger, which reduced the amount of aggressive behaviour the children showed in class. Although effective whilst the programmes were running, the positive effects were not sustained after the programmes had finished. This suggests such programmes may need to be ongoing; and
- a social skills programme run by regular classroom teachers, which had positive effects on children's social skills, again whilst the programme was being delivered.

Changing the seating arrangements in the classroom

Arranging the children's tables in rows had a positive impact on the time the children spent on task. When the tables were arranged in groups, the children spent less time on-task. These effects were more marked for the most easily distracted pupils. How long the positive effect of arranging the tables in rows would last for was not determined.

Rewards and sanctions

Strategies using token systems (e.g. ticks on a chart) for delivering rewards and sanctions to either the whole class, or individuals within a whole class, were effective for reducing behaviour which was off-task or disruptive to the children's own or other children's learning. Although the children's behaviour improved, the improvement only lasted as long as the rewards and sanctions were being used - when they were withdrawn, the children's behaviour reverted to how it had been previously.

We look at the three types of behaviour strategy in more detail in the pages that follow.

What was the effect of providing children with information and training?

The reviewers found that providing children with information or training had positive effects on the behaviour

of children with EBD. The programmes trained children how to:

- monitor their own behaviour;
- cope with their feelings of anger and frustration; and
- improve their social skills.

Children monitoring their own behaviour

Manning (1988) reported on an eight-hour programme during which the researcher taught fifty-five seven to nine year olds how to monitor their own behaviour through modelling, practising and cueing. The programme was effective in the short and medium term (several months) at reducing children's off-task and disruptive behaviour. We give further details of this study in our case study section for practitioners who would like to find out more about how children were taught to monitor their own behaviour.

Training children to cope with their feelings of anger and frustration

Omizo et al. (1988) and Lochman et al. (1987) reported on counselling programmes delivered by trained specialists to help children aged nine to twelve cope with their feelings of anger and frustration. Both training programmes were effective at reducing the children's aggressive behaviour whilst the programmes were running, indicating that such programmes may need to be ongoing. We give further details of the first of these two studies in our case study section for practitioners who would like to find out more about training children to cope with their feelings of anger and frustration.

Training in social skills

Sawyer and MacMullin (1997) reported a social skills programme lasting twenty weeks, delivered by regular classroom teachers to 198 eight and nine year old boys and girls (all the Year 3 and Year 4 pupils in one school). The programme aimed to help children:

- recognise feelings in themselves and others
- be aware of, and sensitive to, interpersonal problems
- generate alternative solutions to such problems
- understand the consequences of their actions; and
- understand the importance of give-and-take between their feelings and the behaviour of others.

The children were taught to apply these skills when dealing with common peer difficulties such as teasing, unwanted interference, aggressive acts and arguments concerning play. The programme was effective to the extent that the children's social skills improved in the short term, but there was no evidence of improvement one year later.

Practitioners may also like to read a case study which describes how the behaviour of pupils and students with poor communication skills improved following a ten-hour training programme. This case study featured in a follow-up EPPI review on the same topic. (See Further Reading for more information).

Practitioners may find it helpful to look at ways of enabling teachers to sustain the impact of new strategies, which we identified in another RfT summary of a systematic review, 'The impact of collaborative CPD in the classroom'.

How did changes in classroom organisation affect pupil's behaviour?

The reviewers found one sound study (Hastings and Schweiso, 1995, study 1) that evaluated the effects of changing the way the children's tables were arranged. They commented on how the findings of other researchers who had investigated this strategy were inconclusive because they had not taken the 'novelty effect' into account: that is, they had not determined which was the significant factor - changing the layout, or the layout itself.

The Hastings and Schweiso study evaluated the effects of classroom layout on time on-task with children aged nine to eleven in two classrooms in the UK. Two parallel mixed classes in a junior school took part in the study. To overcome the novelty effect, the researchers chose classes that initially used neither rows nor groups. Both classes were normally arranged in a maze formation. During the experiment, the classes were put into each of the following seating arrangements for two weeks:

- one class was seated in rows, then in groups, then back into rows;
- the other class was seated in groups, then in rows and then back in groups.

For both classes:

- the time children spent on-task when in rows was higher than when in groups;
- the change from rows to groups led to a decrease in the time the children spent ontask during the experiment; and
- the children who were most easily distracted when working in the groups arrangement made the biggest gains in time on-task in the rows arrangement.

As the new seating arrangements were maintained for only a short time, it is not clear whether this effect would be sustained, or if it would wear off over time.

The reviewers pointed out that although changing the layout of the classroom from groups to rows had a positive effect on children's behaviour when they worked on individualised tasks, practitioners may feel it is important for children to work in groups, to help them learn other valuable skills, such as cooperation and teamwork. Practitioners may like to read two case studies that describe the ways two teachers compromised by changing the layout of tables in their classrooms for different kinds of activities.

What effect did rewards and sanctions have on children's behaviour?

The reviewers found four sound studies that demonstrated positive effects from a rewards and sanctions strategy. These were: Broussard and Northrup (1997), Crouch et al., (1985), Salend and Gordon (1987) and Shepp and Jenson (1983). The reviewers noted a number of common features between all four studies. These included:

- providing rewards for on-task behaviour, such as ten minutes of free time for play, talking, or listening to music etc;
- loss of rewards by individual children for off-task and disruptive behaviour;
- teachers using visual aids such as graphs or symbols (e.g. ticks on a chart, ribbons) to show the children how they were progressing towards receiving a reward;
- delaying rewards or punishments to help avoid the problem of a group's behaviour deteriorating after it had received its reinforcement for the day;
- not punishing the whole class for the bad behaviour of one or two children. This appeared to help minimise the possibility of one or two children trying to spoil the group's chances of a reward; and
- making use of peer support and pressure - this appeared to be important for the success of this type of intervention.

The studies found that using rewards and sanctions:

- reduced the amount of off-task (e.g. talking, day dreaming) and disruptive behaviour (eg, talking loudly, calling out, pushing, interfering) amongst pupils with EBD; and
- increased the amount of on-task behaviour (eg, working independently, raising hand, standing quietly in line).

But the improved behaviour was short-lived - when the rewards and sanctions were withdrawn, the children's behaviour changed back to how it had been before.

The reviewers pointed out that although interventions based on token systems can have an immediate positive effect, some practitioners may feel that they are mechanistic - making children respond to particular stimuli and behave in particular ways without tailoring interactions to their individual needs. Practitioners may be interested in reading a case study of how six secondary teachers incorporated an appreciation of students' feelings and built positive relationships with them, within the whole-school system of rewards and sanctions. These teachers were successful at motivating students and managing their behaviour.

The RfT team note that whilst rewards and sanctions are effective at containing behaviour, they do not attempt to change pupils' behaviour in the long term. Neither do they address the underlying problems that children bring with them to the classroom which result from social and emotional deprivation. We therefore also looked at some training programmes that aimed to change pupils' behaviour or address the children's underlying problems on an earlier page. We also identify other strategies on the next page of this summary and illustrate all the strategies found by the reviewers in the case study section.

What other interventions have been tried?

The reviewers reported on other interventions within each of the strategies in addition to those we have reported so far. They suggested that these alternative interventions had some effect with pupils who had EBD, but that they would benefit from further, more robust, evaluation. Practitioners may feel they would like to explore some of these interventions with their own classes. The interventions were:

Training programmes

- 'Responsive instruction' (training teachers to show that they were available to give support to children who lacked initiative in learning, took the child's perspective, supported the child's competence and challenged the child to take an active role).
- Training children how to recognise bad behaviour and the consequences of it.
- A combination of different strategies (for example, peer tutoring combined with social skills training, and home-school communication systems combined with rewards and sanctions.
- Training children how to resolve conflicts.
- Teaching children to value each other and raise each other's self esteem.

Rewards and sanctions

- 'Assertive discipline' (which involved establishing classroom rules, putting the rules up on the wall, reviewing these rules with the class each day and the consequences of breaking them, and positive reinforcement for appropriate behaviour).
- Sending daily report cards to parents, who gave their children rewards if the report was good or satisfactory and ignored the report if it was unsatisfactory.
- Training teachers to increase the amount of praise they gave to children.

Classroom layout

- 'circle time' for dealing with whole-class issues, including problem behaviour. We described how a school successfully used circle time in a case study in our RfT summary about inclusion in secondary schools - 'Positive alternatives to exclusion'.

The reviewers identified a fourth strategy for supporting pupils with EBD that was based on theories of parent-child relationships, but they found no completed studies that had evaluated this kind of strategy. 'Nurture groups' come into this category. These are being used increasingly in primary schools. Practitioners may like to read a case study that describes how an infant school set up a nurture group, then developed nurturing practices throughout the school. This case study featured in a follow-up EPPI review on the same topic. (See Further Reading for more information).

What factors helped to make a strategy successful?

Some of the studies explored the reasons behind the success of a strategy. The researchers tried to find out the pupils' and teachers' views of their experience of the strategies. The reviewers reported that the teachers thought that the important factors were:

- consistent implementation by teachers across the school; and
- not putting strategies into practice in a 'top down' fashion.

The children thought that consulting and listening to them was important for ensuring the acceptability of a particular strategy.

Teachers' views

The reviewers described an intervention by Nelson (1996) in which advisory committees consisting of teachers, administrators and parent representatives were set up. The committees developed plans for improving behaviour and presented them to the whole school staff for approval. The staff discussed the plans and the committee amended them in the light of the comments until the teachers generally agreed on them. Finally, the programme was evaluated. The study found that the teachers in the experimental schools were more likely to agree that they had shared goals for working with students with problem behaviour and that they felt capable of dealing with disruptive children.

Children's views

The reviewers described a study (Jordan and Le Metais, 1997) where the children were encouraged to reflect on what they had learned during the intervention, both academically and socially. The teacher also gave feedback on how he felt the process was working. Giving feedback helped make the pupils understand what the intervention was aiming to achieve and helped reinforce their learning. Asking the children for their views of the intervention helped the teacher learn how to make it more effective. For example, the children resented random assignment and became non-cooperative. By changing the way the children were assigned to the groups, the teacher improved the children's acceptance of the intervention.

Teachers may find that a strategy they try with a class is unsuccessful at first and that they may need to persist at and refine their efforts before they are successful. Practitioners might like to reflect on a case study that describes how a secondary teacher overcame the problems in his first unsuccessful attempt at improving students' behaviour, and went on to explore a more successful second attempt.

How can teachers generate information about behaviour strategies useful to themselves and other teachers?

There is clearly a need for more research about, and evaluation of, the effects of different behaviour strategies - the reviewers found relatively few studies that had investigated the effectiveness of behaviour interventions in primary schools. Many of the studies that the reviewers did find, did not provide conclusive evidence because the research was poorly designed or the design was not described in enough detail. Some of the studies the reviewers regarded as providing sound evidence involved very small numbers of pupils, meaning some of the evidence they found related to highly specific situations, rather than being applicable to other classes and schools. Because of this, we have not reported the studies that involved individual or very small groups of children - all the studies we have featured in this summary involved a whole class, or more than one class, of children.

The reviewers gave advice on how to go about designing research that will give findings likely to be useful to other researchers and practitioners. Teachers wishing to evaluate strategies with their classes may find it helpful to consider the following recommendations:

- research should be conducted 'with' rather than 'on' children - their views and experiences should be considered as a valuable resource for the development of interventions;
- the views of other participants (teachers and parents) should also be sought;
- to help evaluate the impact of the intervention, the children could be divided randomly into two equal groups so that one group receiving the intervention can be compared to another group not receiving the intervention. (For an example of this procedure, see further reading); and
- full details of the research method (such as the ages and number of pupils involved, the length of time the intervention lasted and how the change in pupil behaviour was measured) should be provided in the research report.

Practitioners may also find it helpful to look at the recommendations the reviewers made to researchers. We

have summarised these on the next page.

How might researchers go about evaluating the effects of an intervention on pupil behaviour?

The reviewers made a number of suggestions for researchers investigating the effects of an intervention on the behaviour of children with EBD in addition to the advice given on the previous page to teachers. They recommended:

- making sample sizes sufficiently large to ensure that their study adequately detects the effects of the classroom strategies (i.e. to ensure results aren't due to chance);
- allocating children or classes or schools randomly to intervention and nonintervention groups (ie, to ensure results aren't due to bias);
- paying careful attention, when random allocation is not possible, to obtaining groups that are matched on socio-demographic characteristics and levels of emotional and behavioural problems;
- being careful to employ an appropriate research method, for instance a reversal design (ie, measuring the baseline outcomes, the outcomes during the intervention and the outcomes when the intervention is withdrawn) can be used for evaluating any immediate effects of an intervention, but not any long term effects; and
- obtaining measures of outcome over the long term, potentially into adolescence and even adulthood, when appropriate.

In general, the reviewers suggested that researchers work in partnership with practitioners to carry out rigorous studies of the strategies currently used. They also pointed out that it is legally necessary, as well as ethical, to seek the parents' and children's consent before asking children to participate in research or evaluative processes of this kind.

How did the reviewers carry out their systematic review?

The reviewers used rigorous research methods in their review. They:

- defined an explicit review question - this led to a set of criteria which defined the type and scope of studies to be included;
- searched six bibliographic databases for citations, using a range of terms for 'emotional and behavioural difficulties' combined with terms for classroom strategies;
- searched 27 journals by hand, scanning reference lists of relevant studies identified by other researchers;
- coded the studies they found according to the type of classroom strategies they evaluated and the characteristics of the children they studied;
- determined the quality of the research method of each study by assessing to what extent the study had minimised the possibility of bias in their findings and ruled out the possibility of other factors contributing to the change in pupils' behaviour. Two reviewers undertook this stage and any disagreement between them was resolved through discussion; and
- synthesised the findings of the study according to the type of strategy and type of behaviour they aimed to address.

The reviewers systematically searched for studies published between 1970 and 2000. Out of an initial 265 citations, they identified 96 studies that focused on intervention strategies; of which 48 were concerned with primary-aged pupils. Twenty-eight of these reported the results of formally testing the effects of the strategies. The quality of these studies was assessed according to whether the research design:

- was appropriate to the question being addressed by the review; and
- had been correctly applied.

Using these criteria, the reviewers judged ten of the 28 studies as 'sound'. We quoted these studies in our summary and give the full references in our further reading section. The reviewers considered the findings of the other eighteen studies inconclusive because:

- in some studies there was no control group (pupils who had not received the intervention) or reversal phase (to compare the measured effects of withdrawing the intervention with the effects measured at the start of the study) which made it difficult to rule out other explanations for changes in behaviour, such as chance or the passing of time
- some studies that did use a control group either did not report the effects of the intervention clearly or there was a problem with the design, for example, the control group being exposed inadvertently to the intervention for part of the

time
- some studies used an inappropriate design, for example, some researchers used a 'reversal design' to evaluate an intervention designed to bring about a long-term change in behaviour. As the reversal design involves measuring pupil outcomes during a baseline period, during the intervention period and during a period when the intervention is withdrawn, it can only be used to demonstrate the immediate effects of an intervention, not the long-term effects
- some researchers did not report their methods and/or results clearly enough, for example, they omitted important information, such as the ages or numbers of pupils involved in the study.

Implications for practice

Teachers seeking to improve behaviour in their classrooms may wish to consider the following implications of the findings of this research review:

- the reviewers found evidence that changing the classroom layout from groups to rows increased the concentration and engagement of the most easily distracted pupils for individualised tasks, at least in the short-term. Would it be useful to investigate with your class the effects and the pupils' views of different seating formations?
- if you use a system of rewards and sanctions, could you investigate what your pupils or students think about the system - for example, whether they like the system and think it is effective, what kinds of rewards they think support learning and what kinds of sanctions they think make the best deterrents?
- in this summary we reported several different kinds of training programmes - programmes designed to improve pupils' communication skills, help them manage their feelings of anger and how to monitor their behaviour. Would it help to get together with colleagues to identify the particular needs of pupils in your school and devise a training programme that targets their needs?
- the reviewers suggested that asking parents for their views is important. Could you do more to involve parents of children with EBD, by for example, giving them opportunities to support their children at home, contribute to the process of identifying their children's needs, and discuss alternative strategies for supporting their children at school?
- the case studies illustrated a range of strategies that other teachers have tried. Would any of these be appropriate in the context of your classroom?

School leaders may find the following implications helpful in acting on the messages in this RfT:

- could you create more opportunities for colleagues to discuss and reflect upon the behaviour challenges they face, the causes of the problem behaviours and ways of tackling them jointly, using a whole-school approach?
- would it be helpful to find out how teachers in your school view school behaviour policies - how they make use of them, whether they think they are appropriate and effective and whether they think alternative strategies might be more effective?
- could you do more to support colleagues trying out a different strategy for improving behaviour, by for example, organising workshops and inviting external help, such as practitioners from university education departments or other schools?

Filling in the gaps

Gaps that are uncovered in a piece of research also have a useful role in making sure that future research builds cumulatively on what is known. But research also needs to inform practice, so practitioners' interpretation of the gaps and follow-up questions are crucial. Some gaps in the research we noticed while preparing this RfT were:

- what is the most effective way of developing teachers' expertise in tackling problems of EBD in their classrooms?
- what views do children, with or without the label EBD, hold about possible intervention strategies?
- what level of additional support from other providers (such as psychologists) might teachers need to assist pupils with EBD?
- how much time will teachers have to spend to achieve success?

Do you think that research exploring these questions would help you inform your practice? Do you have any evidence for example, regarding short and long-term strategies, working with other providers or professional development of teachers in addressing EBD issues?

There was little evidence within the studies included in this review of a shift away from seeing emotional and behavioural difficulties as problems located within individuals (the so-called 'medical model' of EBD) towards a more context-based approach, where behaviour is seen as a response to particular situations. There was also little sign of a greater focus on social justice and equal opportunities in framing the context within which support for pupils is offered. Rather, the studies tended to be framed in terms of trying to reduce social or behavioural 'deficiencies'. Have you any experience of working in a school which regarded behaviour as a response to specific contexts?

Signs that these concerns are beginning to be addressed are evident in the Teacher Training Agency funded follow-up EPPI review, 'Supporting pupils with emotional and behavioural difficulties (EBD) in mainstream primary schools: a systematic review of recent research on strategy effectiveness (1999 to 2002)'. More details of the report can be found in the further reading section.

References

We quoted the following studies in our summary. The reviewers judged the following ten studies as 'sound':

Broussard, C., and Northrup, J. (1997) 'The use of functional analysisto develop peer interventions for disruptive classroom behavior'. *School Psychology Quarterly*, 12, 65-76.

Crouch, P. L., Gresham, F. M., and Wright, W. R. (1985) 'Interdependentand independent group contingencies with immediate and delayed reinforcement for controlling classroom behavior'. *Journal of School Psychology*, 23, 177-187.

Fowler, S.A., Dougherty, B.S., Kirby, K.C., and Kohler, F.W. (1986) 'A social skills intervention programme for kindergarten children at riskof developing behavioural problems'. *European Journal of Special Needs Education*, 13, 208-215.

Hastings, N., and Schweiso, J. (1995, study 1) 'Tasks and tables: theeffects of seating arrangements on task engagement in primary classrooms'. *Educational Research*, 37, 279-291.

Lochman, J., Lampron, L., Gemmer, T.C., Harris, S.R., and Wyckoff,G.M., (1987) 'Teacher consultation and cognitive-behavioural interventions with aggressive boys'. Paper presented at the Annual Convention of the American Psychological Association. New York, USA August 28-September 1987.

Manning, B.H. (1988) 'Application of cognitive behaviour modification:first and third graders' self-management of classroom behaviours'. *American Educational Research Journal*, 25, 193-212.

Omizo M.M., Herschberger, J.M., and Omizo S.A. (1988) 'Teaching childrento cope with anger'. *Elementary School Guidance and Counselling*, 22,241-246.

Salend S.J.,and Gordon B.D. (1987) 'A group-oriented time-out ribbon procedure'. *Behavioural Disorders*, 12, 131-137.
Sawyer, M.G., and MacMullin, C., (1997) 'Social skills training forprimary schoolchildren: a one-year follow-up study'. *Journal ofPaediatrics and Child Health*, 33, 378-383.

Shepp M.S., and Jenson B.F. (1983) 'A comparison of the treatmenteffects of an operant strategy, a cognitive strategy and a combined approach with the hyperactive boy'. *School Psychology Review*, 12,199-204.

We also quoted from the following two studies. These were included inthe review because they gave useful information about the teachers' and children's views of the interventions.

Jordan, D.W., and Le Metais, J. (1997) 'Social skilling through cooperative learning'. *Educational Research*, 39, 3-21.

Nelson, J.R. (1996) 'Designing schools to meet the needs of students whoexhibit disruptive behaviour'. *Journal of Emotional and Behavioral Disorders*, 4, 147-161.

Case studies

We have selected the following vignettes and case studies to illustrate the different strategies for tackling behavioural problems identified by the reviewers. Case studies 1 and 2 give more details of two of the studies reported in the review. Of the five other studies, two (case studies 3 and 6) were included in a follow-up systematic EPPI review on this subject (see further reading). The remaining three studies (case studies 4,5 and 6) were drawn from teacher-based classroom activities.

How children were taught to monitor their own behaviour

We have chosen this study because it explains in detail the content of an effective training programme in which children were taught how to adapt target behaviours, such as raising a hand to answer a question without calling out. The children were trained in self-instruction by a researcher, in an empty classroom. The children displayed less disruptive behaviour when they returned to the mainstream classroom and the effects of the programme lasted several months. This study was reported in the review.

Manning (1988) taught self-instructional strategies for monitoring and reducing off-task and other inappropriate classroom behaviour to children aged seven to nine in a large primary school in the US. A target group of 55 children, identified by the teacher as exhibiting off-task behaviour, were randomly put into either the group that did not receive the programme (the control group) or into the group that received eight one-hour lessons spread over eight days (the intervention group). The programme had three parts:

- modelling
- practising
- cueing.

Modelling

The children watched adults and pupils who were the same age as themselves using selfinstructional techniques for improving particular behaviours. When watching the adults, the children followed a five-step process:

- the researcher sat at a table in front of the children. The researcher described typical classroom scenarios involving different target behaviours (e.g. raising a hand to speak)
- the children watched the researcher performing a target behaviour as she talked out loud about the behaviour - for example, 'If I scream out the answer, others will be disturbed. I will raise my hand and wait my turn. Good for me - see, I can wait!'
- the children performed the same task whilst the adult model gave verbal instructions
- then the children performed the task whilst instructing themselves as they went through the task
- finally, the children guided themselves in performing the target behaviour using their own inner speech.

The children also watched other children who were the same age on videotape to see how the self-instruction technique aided pupils' performance in a typical classroom scenario. The researcher added a commentary to the video using the following categories of selfinstruction:

- problem definition - for example, 'What is it that I have to do?'

- focusing attention - for example, 'Now, look at this'
- self-guiding - for example, 'Carefully cut along this line'
- self-reinforcement - for example, 'Good, I'm doing fine'
- self-coping - for example, 'That's all right; even if I can't finish, I can try'.

Practising

The children practiced self-instruction through:

- role-play (e.g. classroom scenes to practise self-instruction to guide behaviour)
- pencil and paper tasks (e.g. writing examples of self-instruction)
- art activities (e.g. drawing themselves engaged in self-instruction with their thoughts written in speech bubbles).

Cueing

Cue cards were introduced as prompts to remind the pupils of the self-instruction they had been taught. The cards reminded the children to:

- inhibit poor behaviour - for example, 'Stop me shouting out'
- initiate target behaviour - for example, 'I need to listen'
- reinforce target behaviour - for example, 'Good for me, I concentrated'.

The control group did similar activities, but these did not involve self-instruction. For example, they saw good behaviour being modelled, practised good behaviour and had cue cards, but were not taught self-instruction to help them perform the target behaviours. The target behaviours were presented as 'external directives' or 'classroom rules' that they must follow.

Compared to the children in the control group, the children in the intervention group showed significant improvements in classroom behaviour (as rated by both teachers and independent observers who were unaware of the group allocation) and became more internal in their 'locus-of-control' beliefs. On average, effect sizes ranged from moderate (around 0.5) to substantial (around 0.8). Effects were also sustained at a three-month follow up.

The 'modelling, practising, cueing' process described in this case study has a counterpart in the work of Vygotsky, the Russian psychologist whose theory was that learning first occurs in a social setting and is then internalised. Practitioners can find out about Vygotsky's theory in our RfT summary, 'Social interaction as a means of constructing learning'.

Reference: Manning, B.H. (1988) Application of cognitive behaviour modification: first and third graders' self-management of classroom behaviours. *American Educational Research Journal* 25, 193-212

A group-counselling programme for reducing aggression

We have chosen this study because it explains in detail the content of an effective training programme designed to help children cope with their feelings of anger and frustration. This study was reported in the review. Twenty-four boys and girls aged nine to 12 in the US who had been selected randomly from a pool of 47 children nominated by their teachers as behaving in an aggressive and hostile manner took part in the study. Half the children were randomly allocated to receive the intervention; the other half was assigned to a control group.

The researchers argued that disruptive behaviours, caused by children feeling angry or frustrated, are best

tackled by addressing the root cause of the problem - the angry feelings - rather than by tackling the disruptive behaviour directly by punishment. They suggested that punishing a child who throws things for example, while feeling angry, does not allow the anger to disappear, it just results in stopping an angry child throwing things. The aim of their programme was to teach children how to handle their angry feelings, in order to prevent disruptive behaviour occurring.

The intervention had three phases and was delivered by a trained counsellor over ten sessions:

- phase 1 was to help the children develop an understanding of anger and to differentiate its positive and negative aspects
- phase 2 focused on incidents that had precipitated angry feelings in the children in the past and discussed their reactions to them
- phase 3 provided opportunities for the children to practise appropriate behaviours when they felt angry. This was accomplished by modelling, role-playing and giving feedback.

The children took part in the following sequence of activities:

Name tag game

The children were given 'name tag' cards on which they wrote:

- their names
- four positive adjectives they believed described themselves
- their favourite television programme
- something they did which they were proud of
- someone they admired
- a school subject they enjoyed.

The children discussed their name tags with a partner and then introduced each other to the rest of the group. The counsellor presented the rules of the group (for example, one person talking at a time, confidentiality, passing if the child had nothing to say).

Awareness of feelings

The children drew pictures of various feelings that they had experienced. When discussing these drawings, the counsellor discussed the positive and negative aspects of the various feelings with an emphasis on the children's responses to angry feelings.

Specific incidences of feelings

The counsellor showed the children a Ferris wheel with seats of different colours representing different feelings (gold = happy, pink = okay, red = angry, blue = sad, white = so-so). The counsellor asked each child to:

- suggest specific situations which made them feel happy, okay, angry, sad, so-so (one for each colour on the wheel)
- choose the coloured seat that best represented how s/he would feel in different situations suggested by the counsellor (such as getting full marks on a test, being punched and falling over)
- choose the coloured seat that best represented how s/he would feel in situations that would cause angry feelings (such as a friend stealing something and blaming you, a teacher accusing you of cheating when you were not and someone breaking a promise to you).

Finally, the students discussed their reactions and behaviours resulting from their angry feelings in terms of

positive and negative consequences.

Reactions to anger

The counsellor presented the children with more situations that would typically result in angry feelings. The children discussed how they would react and looked at their responses in terms of the seat colours on the Ferris wheel (for example, remaining angry and being alone = blue, talking it over, walking away = pink, giving it time to work out = white, hitting and screaming = red). Then the children discussed alternative reactions that would result in feeling happy (gold) or so-so (white) and whether or not their individual responses were constructive or destructive.

Making choices

The counsellor suggested scenarios whereby the children would practice decision-making skills. Emphasis was placed on weighing the pros and cons of each situation in terms of the consequences.

Alternative reactions to anger

The counsellor presented the children with situations that they would normally feel angry about. Referring back to the Ferris wheel, each child was asked to think of a different response for each of the colours and a reason for choosing those alternatives. Then the children were asked to give real life situations that made them feel angry, identify their usual response, and, finally, decide on a different, more appropriate response.

Modelling behaviours

The children suggested incidences that made them angry. The counsellor role-played appropriate, constructive outcomes with positive results.

Role-playing

The children were divided into groups of two or three. The counsellor gave each of the groups a situation, such as, your parents promised that you could see a movie this Saturday. At the last minute they changed their minds and said that you had to babysit your younger brother. The groups role-played their reactions and the whole group discussed each of the presentations. In the subsequent session, the groups were all given the same angerprovoking situation. Each group role-played their reactions. The whole group discussed the different presentations.

Summary and wrap-up

The children summarised their experiences during the previous ten weeks. The counsellor answered their questions and the children shared their reactions.

The researchers found a significant decline in teachers' ratings of aggression and hostile isolation in the children who had been assigned to the experimental group, compared with the control group. However, the children displayed aggressive behaviour again, very soon after the sessions finished, suggesting that the programme may need to be ongoing to maintain the effect. Another explanation for the short-term effect could be that the programme did not allow the children to gain control over their learning or to internalise the learning, as it did in the previous case study. The extent of the impact of the programme may also have been reduced because the class teacher had revised his or her expectations of the children's behaviour, in view of the training they had been given.

Reference: Omizo M.M., Herschberger, J.M., and Omizo S.A. (1988) Teaching children to cope with anger. *Elementary School Guidance and Counselling* 22, 241-246

Training pupils and students in communication skills

We chose this case study because it describes a training programme designed to help pupils and students who were disruptive and who also had poor communication skills. Twenty-four pupils and students from a primary and a secondary school in Leicester took part in a tenhour teaching programme called the 'Communication Opportunity Group Scheme' (COGS). The programme aimed to improve the pupils' and students' ability to express their thoughts and feelings, to help improve their confidence and behaviour.

The researcher's rationale for the COGS teaching scheme was that talking is central to learning - that thinking aloud helps people to clarify their thinking, grasp ideas and remember them. She argued that it is often the teacher who does most of the talking in classrooms. She also quoted previous research that showed how many children lack language skills and are emotionally immature when they start school, yet school success depends on the ability to use language and to behave appropriately. Some children respond to classroom requirements to listen quietly and do what they are told. Others - the "difficult ones" - do not.

The COGS teaching scheme helped the pupils and students understand and practise using narrative structure, such as giving directions, explanations, accounts and reports. It identified four areas of communication:

- clarity - how to give clear messages and make ideas interesting
- content - giving relevant information
- convention - looking at how to present ideas and the rules that govern this; and
  conduct - how to respond appropriately so as to improve the impression your ideas make on other people.

The pupils and students were given a range of structured tasks and they were assessed in one writing and four speaking tasks. For example, at the first level the tasks included:

- performing a short poem to examine aspects of clarity
- talking on something that interested them to consider issues of content
- formulating a question to someone to look at aspects of convention
- answering questions from the audience to understand the role of conduct
- producing a personal profile as an example of creative writing.

The teaching activities allowed for some student choice. Students looked first at objects and their relationships to one another and then they discussed their feelings and emotions. The programme used a "tell, show, do and coach" approach, starting with review, demonstration and guided practice and followed by corrective and supportive feedback. The pupils and students were encouraged to take control of their own learning through coaching each other in groups and working independently.

Twelve of the pupils and students received one hour of teaching a week for ten weeks and twelve received two hours of teaching a day for one week. A control group of twelve pupils and students, who were also disruptive and had poor communication skills, continued to receive their usual learning support. The three groups were tested in communication skills before and after the teaching scheme. The results indicated a significant and positive difference between those pupils and students receiving weekly or intensive training compared with the controls. Whilst the scores of the pupils and students in the control group deteriorated in the communication and reading tests (which the researcher suggested was due to end of term exhaustion) the scores of the pupils and students who took part in the weekly and the intensive programme improved by a similar amount. The pupils and students who took part in both programmes also demonstrated improved behaviour.

Comments made by the pupils and students indicated that their attitude towards and their understanding of work improved, and that their confidence had increased:

"Talking helps me do more work on my own."

"Talking makes it easier to get help."

"Talking makes you behave better at school."

Their teachers made similar comments:

'Works extremely hard and has improved greatly in confidence and behaviour.'

'Now volunteers answers and has a good understanding of the work.'

A parent also commented on the positive effect she felt the programme had had on her daughter:

"It pushed her forward and gave her a new outlook. She loved it - it was different from normal lessons. I cannot believe the difference in her. She focuses more and is not frightened of doing new things."

Using dialogue was a key feature of this research. The Russian psychologist Vygotsky found evidence about the importance of socially constructed learning. Practitioners can find out about Vygotsky's ideas and how to make use of them, in another RoM summary, 'Social interaction as a means of constructing learning'.

Reference: Sage, R. (2002) 'Start talking and stop misbehaving: teaching pupils to communicate, think and act appropriately' *Emotional and Behavioural Difficulties*, 7(2), pp. 85-96.

Examples of teachers' use of seating to fit different learning tasks

We have chosen these two vignettes because they illustrate how and why the teachers changed the seating arrangements in their classrooms at different times of the day.

Louise

Louise was a newly qualified teacher in a large 320-place junior school. She had a ground floor classroom with unimpeded access to a corridor area. A set of three tables was permanently sited in this area for the shared classroom assistant to work with groups or individuals. The whole area was carpeted.

Louise had two basic layouts for her Year 3 class of 26 children. One of the arrangements was a 'double horseshoe' with sets of tables laid out into two U shapes, a larger one surrounding a smaller one. There was sufficient space between the two U shapes for the teacher to move comfortably around and work from in front or from behind any child who required her help. She used this arrangement most of the time - for all paired and individual work as well as some whole-class teaching. The size of the classroom and the fact that it was carpeted meant the teacher could also have all the children on the floor in front of the tables. As well as the horseshoe arrangement, Louise kept a set of grouped tables to one side of the classroom, as a 'focus group' table. This table was in addition to the tables in the corridor.

Louise used a different layout for collaborative work in science, technology, history and geography - moving the tables to form five grouped sets. This was usually done at the end of sessions, such as just before break and just before lunchtime. In each arrangement, the teacher allocated seats. A team of six children, acting as monitors, moved the tables. The responsibility of 'monitor' was rotated to give all the children an opportunity to learn how to move the tables safely and into different arrangements. The monitors were timed and found to take about sixty seconds to move the tables from the first arrangement A to the second.

Mark

Mark was a leading mathematics teacher in a large city primary school who had taught for five years. He taught a class of 26 Year 6 children in a small 'box' classroom which precluded even the possibility of a 'carpet area'. Like Louise, he also used two basic formations.

For individual, paired work and all whole-class work - especially in literacy and numeracy - Mark used an E-shape, with a long set of tables along one side of the room from which three further sets jutted out. There were also two tables right at the front and a set on the righthand side, which did not connect with the 'E'. Although it was not impossible to move between tables to work with children from behind, it was not easy. As a result, Mark often used the tables at the front for the children he wanted to work closely with.

Mark adapted the E-shape arrangement for collaborative work and also for some mathematics tasks. The middle tables were rotated (rather than moved) to the sides to create groups of four tables. The children sitting at those tables did the moving.

Reference: Hastings, N., and Chantrey Wood, K., 'Space for learning in primary classrooms: bridging the gaps'. Paper presented at the British Educational Research Association Conference, Cardiff University, September 7-10 2000, available from: www.leeds.ac.uk/educol/documents/00001532.htm

Managing students' behaviour through appreciation

We chose this case study because it shows how some teachers successfully managed their students' behaviour using an informal approach within a formal whole school rewards and sanctions policy. The headteacher of a secondary school in Norwich (who was also a trained Ofsted inspector) observed and interviewed six teachers who had a reputation in the school for their ability to manage disaffected students successfully, to try to identify some common characteristics between them.

The school had a credit and debit system of rewards and sanctions in place to help counter disaffection and encourage good work and behaviour - teachers could give credit slips for any work or behaviour they felt was worthy of note, or better than expected. Debit slips could be given for late handing in of homework, not having the proper equipment or for unacceptable behaviour. The criteria for the award of credit and debit slips was left to the judgment of individual teachers. Credits and debits were added up on a termly basis and certificates (gold, silver and bronze) were awarded to students who had done well at year group 'achievement assemblies'. The debit system had been discontinued at the time of the study.

The headteacher evaluated the teachers' lessons according to Ofsted criteria and recorded how the teachers managed their students' behaviour. To do the latter, he used an observation chart that contained 'approval' and 'disapproval' indicators. The approval indicators were:

- positive gestures or facial expression
- unqualified verbal praise (for example, "very good")
- qualified praise (for example, "that was good, but ...")
- acceptance of students' ideas or suggestions
- use of credit or merit slips.

The disapproval indicators were:

- negative gestures or facial expression
- verbal cautions and reprimands (for example, "don't do that ...")
- verbal warning (for example, "if you don't then ...")
- rejection of students' ideas or suggestions
- use of debit slips, detention cards etc.

The lessons he observed ranged across Years 9, 10 and 11 and included careers, drama, English, music and science. The lessons involved group work, whole-class teaching with opportunities for individual contributions, and students working on individual tasks. Each of the classes he observed contained a pupil or pupils whom some teachers regarded as disaffected or difficult.

Using Ofsted criteria, the headteacher judged all the lessons as highly effective. He also found no evidence of disaffection on the part of any pupil in the classes: all pupils appeared to be actively and positively engaged throughout the fifty-minute lessons. None of the teachers were observed to make a great use of the disapproval indicators, although sometimes the teachers used a minor verbal caution, like saying 'Sh' to bring a class back on task. There was a high level of acceptance of students' ideas and use of unqualified and qualified praise directed towards individual students. In three of the teachers' lessons, there was evidence of good humour through smiles and verbal quips.

The headteacher identified seven common characteristics of these effective lessons. The teachers:

- knew all pupils by name and addressed them by name
- had strong eye contact with individual students
- directed most praise to individual students, rather than to the class as a whole
- demonstrated a high level of acceptance of the students' own ideas and suggestions
- prepared and structured their lessons carefully
- made the purpose of the lesson clear and continually reinforced its learning objectives - pupils were clear why they were doing the tasks they had been set
- started and ended the lesson with minimal fuss and paid little attention to minor distractions within the lesson.

In general, the teachers were alert to what was going on and the pupils knew it: there was no hiding place for any student. The teachers motivated their students to achieve through praise and formative feedback, and managed their behaviour through establishing a positive relationship with individual students and good lesson planning. Their approach was based on developing an intrinsic desire to learn in all students. None of the teachers were observed making use of credits. The teachers explained why in these words:

"I would award credits to students in Years 8 and 9 only, whom I felt needed a tangible sign of approval - usually when and if they jog my conscience and remind me that other teachers give them. I have to confess this seldom happens and I seldom use them". (English teacher, Year 10 group)

"In Years 10 and 11 I feel they (credits) are not so widely valued. There are other motivating factors such as getting the grade at the end of the course". (Music teacher, Year 10 group)

"Credits are used at their request". (Science teacher, Year 11 group)

"I use credits occasionally for good group work, leadership skills, role play, team events, etc". (Careers teacher, Year 11 group)

Reference: 'No hiding place: the characteristics of six good lessons' was written by Tom Elkins of The City of Norwich School, as part of the Norwich Area Schools Consortium (NASC) 'Rewards and Penalties' cross-school enquiry.

Developing a nurturing school

We have chosen this case study because it describes the introduction of a nurture group into an infant school in Norfolk and the subsequent adoption by the whole school of nurture group practices. It is an example of an early intervention behaviour strategy.

Originally, Ofsted had placed the infant school in special measures. At that time, the school's physical environment was unpleasant, pupils achieved low academic results and behaviour was very poor. An Ofsted report stated that lessons were continually disrupted and described the playground as a frightening place, full of bullying and injury. The school began to tackle the problems by introducing a differentiated curriculum, identifying pupils with special needs and making better provision for them.

As the school moved out of special measures, it decided that it was not managing to meet the needs of a number of children with social, emotional and behavioural difficulties within mainstream classrooms. Some children faced exclusion because of extreme behaviour; others showed poor social skills and had difficulty trusting adults or interacting with their peers. The staff decided to establish a nurture group to give special attention, away from mainstream classes, to socially, emotionally and behaviourally vulnerable children - children who were performing at a level that would be acceptable for a younger child in terms of their social and emotional development, but was unacceptable when compared with the behaviour of their same age peers in mainstream classrooms.

What happened in the nurture group?

The nurture group addressed pupils with aggressive and socially isolating behaviours. It aimed to provide a positive, safe, secure environment in which pupils could re-experience early learning skills and develop a positive image of themselves as learners. The nurture group:

- was small, supporting ten to twelve pupils at a time
- modelled the positive relationship that ideally exists between the child and his/her primary carers
- recognised children's needs for positive experiences to increase self-esteem
- offered activities appropriate to a child's level of development
- aimed to help children develop secure social relationships
- provided opportunities for children to re-enact early experiences and make sense of them
- had the ultimate aim of successfully reintegrating the children into a mainstream classroom.

To help achieve this last aim, the school took steps to help the whole staff understand the principles and practices involved in adopting a nurturing approach. To promote nurturing practices throughout the school:

- all staff, including lunchtime supervisors, observed their colleagues working with the nurture group
- the school adopted a monitoring procedure which identified what happened before, during and after an incident of poor behaviour, to identify patterns and to be proactive in preventing disruptive behaviour.

Nurturing in the classroom

The teachers in charge of the nurture group designed a social development curriculum to help the mainstream teachers promote social development opportunities within their own classrooms. They also gave advice on how to make classrooms nurturing, for example:

- creating 'nooks' with translucent curtains into which children could retreat when under stress, but from which they could still observe classroom activities from a distance
- encouraging role play and tactile play with sand, water, play-dough, construction equipment, tools and puppets
- using circle-time to build relationships in which all pupils were helped to feel valued and respected and during which adults model positive behaviour and body language
- using positively worded statements to clarify behavioural expectations
- using incentives such as golden time or celebration boxes
- having clear, explicit sanctions if behavioural expectations were not met

- taking 'brain breaks' - periods of brief physical activity unrelated to the task, then refocusing on the learning objective
- writing literacy and numeracy objectives on 'clever clouds' to use as a resource for plenary sessions and to revisit what the class had achieved
- using visual clues to help develop independent working, such as task boards, or traffic lights to indicate the level of noise
- playing music at appropriate times.

Nurturing children in the wider school environment

The school also introduced a number of measures to promote nurturing in the wider school environment. It gave particular attention to playtimes, as these were identified as a potential flashpoint for some pupils. The school:

- held regular meetings between senior management and midday supervisory teams to ensure everyone used the same approach and to pre-empt difficulties
- increased the provision of play equipment and introduced a borrowing card system to encourage responsible use
- led structured games at playtime and modelled these as warm-ups during games lessons
- promoted the use of a buddy stop in the playground and encouraged children to approach those standing at the stop and to invite them into their games.

The school also introduced a sanctuary lunchtime club to support pupils who found the playground too rough and intimidating. Although staff might encourage particular pupils to use the sanctuary, attendance was voluntary and seen as a privilege. The routine at lunchtime also changed. Mixed age groups sat together, with older children helping younger ones. The school operated a token scheme to reward good behaviour. Teams who collected many tokens were praised publicly.

One assembly each week celebrated particular successes: good work, acts of kindness and courtesy; children's names were entered in a 'golden book' on display in the hall. Themes in PHSE were chosen weekly by staff to address specific issues and to link to the assembly theme for the week.

Once a week, children were vertically grouped for a mixture of art or design technology and structured play sessions. The nurture group staff helped support individual children within mainstream classrooms during these sessions.

The effects on children's behaviour

An early Ofsted report described the school as "a bear pit". The atmosphere changed to being pleasant, calm and purposeful. All staff felt confident in their ability to use the principles of nurture in their work and several children at risk of exclusion were reintegrated into mainstream classrooms. The children commented positively on their school, saying for example, "We're having fun and we're getting clever."

Reference: Doyle, R. (2003) 'Developing the nurturing school; spreading nurture group principles and practices into mainstream classrooms'. *Emotional and behavioural difficulties*, 8 (4) 252-266.

Two attempts at improving students' classroom behaviour

We chose this case study because it describes how a secondary teacher investigated an alternative successful behaviour strategy with his Year 9 science class when he found that the first strategy he tried was unsuccessful. The school had had a sudden large influx of low ability students from a nearby school that had closed recently. The teacher felt the students in his Year 9 science class were particularly unsettled and difficult to teach.

First, the teacher tried to change the students' behaviour by asking them to reflect on videotape a colleague had made of part of one of his lessons with the class. The video revealed much fidgeting and chatting amongst the students, but no serious misbehaviour in the class. Most of the students appeared to have a short attention span and many did not seem to understand the experiment they were asked to carry out despite having had a clear demonstration. The teacher showed the video to the class two days later and asked them to fill in a checklist categorising their behaviour and the behaviour of two or three other students using four categories:

- working
- not working
- distracting others
- ignoring instructions.

The teacher found a difference between what he and the students viewed as off-task behaviour. For example, the teacher felt that many of the students were easily and frequently distracted by others and that his instructions were often ignored by the class. He felt the video evidence supported this view. However, the number of instances where the students felt they were subjected to distraction or felt they ignored his instructions, was low.

As showing the students the video did not appear to make them aware of their lack of concentration and the need for them to change their behaviour, the teacher decided to try a different teaching strategy. He planned to reduce the amount of time he spent talking to the whole class and concentrated on developing the students' cognitive skills, including active reading and writing tasks, such as 'Directed Activities Related to Texts' (DARTs).

The teacher chose DARTs activities because they help students who struggle with reading - especially the type of language to be found in many non-fiction texts. Such students can feel excluded from activities that involve print. Their difficulties can be exacerbated by constant exposure to decoding practice, rather than meaningful reading. DART activities are one method of providing purposeful interaction with print.

DARTs activities involve a range of devices for enabling students to focus on the structure and meaning of different types of texts, including:

- text completion (filling in missing words etc)
- reorganising mixed sets of sentences
- prediction
- comparing texts
- underlining and highlighting texts
- reforming or replacing text
- making spider charts, flowcharts and concept maps etc.

The main focus of DART activities is reading then discussing a text in groups. Less skilful readers work alongside more accomplished pupils, so that they experience reflective and purposeful reading. Discussion is an essential part of the process, making it possible for poor readers to contribute their ideas verbally. Activities can also be designed to support those pupils whose recording skills are limited by:

- sharing the recording task within a group
- encouraging verbal presentations
- employing a wide range of alternative methods of presentation.

DARTs activities can be differentiated by task or outcome because:

- the problem of providing appropriate texts for pupils with poorly developed literacy skills is removed in mixed-ability groups
- discussion allows all pupils to contribute their ideas and opinions
- using alternative methods of presentation enables all children to play an active role in the publication of results.

With the change of teaching strategy, the teacher saw improvements in the behaviour of his class:

- work was ready for the students when they arrived for their lesson, such as a worksheet or a few short instructions on the board, which most students began to tackle straight away
- students chose to work on their own or in small groups and the teacher monitored their behaviour to try to make sure their talk was task related
- many students preferred no to have help from the teacher and only came to have work checked when it was completed and/or they needed equipment, but the teacher judged how far to let them go and when to step in
- movement from written work was more orderly and less confused
- the atmosphere in the classroom changed from one of boredom to one of satisfaction with completed tasks and improved overall performance.

Reference: McCormick J., and Freeman, P. (1998) "If the mountain won't come to McCormick..." Improving pupils' classroom performance: a practitioner's case study. *Educational Action Research*, 6(2) pp.305-319.
Back to top

....

Further reading

What else might I enjoy reading?
Behaviour4Learning http://www.behaviour4learning.ac.uk/
The Behaviour4Learning website offers teacher trainers and their trainees resources and materials for managing classes and pupil behaviour.

Alana Cowan: M.Ed Action research study
Practitioners may find it helpful to read about this small-scale research project involving a social skills training programme for children with EBD,which was carried out by a teacher for a M.Ed. qualification.

Illinois Loop: Desk arrangement
http://www.illinoisloop.org/desks.html

Find out more about what the research says about the effects of classroomseating arrangements, including further details of Nigel Hastings' research, which we quoted in our summary.

Incentive Plus: Anger management http://www.incentiveplus.co.uk/cl/1201/Anger-Management.html

For suggestions of books, games and activities to help children learn to control their feelings of anger.
Teachernet: Behaviour and attendance http://www.teachernet.gov.uk/wholeschool/behaviour/

Circle Time http://www.circle-time.co.uk/
Open University: DARTs activities http://www.open.ac.uk/crete/movingwords/pages/poetry/DARTS.html
Teaching English: DARTs http://www.teachingenglish.org.uk/think/articles/interacting-texts-directed-activities-related-texts-darts
Nurtue Groups http://www.nurturegroups.org/
The EPPI-Centre http://eppi.ioe.ac.uk/cms/
Back to top

....

Appraisal

Robustness

This systematic literature review was carried out as a collaborative venture between the National Foundation of Educational Research (NFER) and the Evidence for Policy and Practice Co-ordinating Centre (EPPI-Centre) at the Institute of Education of the University of London. It set out to identify and synthesise studies, conducted between 1970 and 2000, that provided evidence to answer the research question:

What are effective strategies to support primary-aged pupils with emotional and behavioural difficulties on mainstream classrooms?

It excluded strategies which used drug or psychiatric treatments.

The researchers defined clearly their research question and their terms. Their search strategies identified 265 citations. After subjecting the full reports of these studies to a set of inclusion/exclusion criteria, 96 reports were judged to lie within the scope of the review. The final synthesis was based on ten evaluative studies, which were considered to be sound methodologically and therefore likely to provide reliable findings. The reviewers gave a detailed explanation of the limitations of unsound studies that teachers and researchers in this field will find helpful.

The review explored strategies underpinned by three groups of theoretical models:

- behavioural models, which links learning and behaviour
- cognitive-behavioural models, which is a refinement of the behavioural model to incorporate self-reflection by pupils ; and
- systemic models, which sought to alter the organisational and learning contexts.

Studies relating to each of these models were explored in terms of their impact on a number of specific off-task or disruptive behaviour patterns shown by pupils. The reviewers provided a realistic assessment of the strengths and weaknesses of the included studies and were cautious in their conclusions about the effectiveness of the strategies employed in the schools. They found support for the effectiveness of behavioural and cognitive-behavioural approaches and rather less for systemic strategies, including 'circle time' for example. A helpful feature of the review is that the reviewers did not rule out strategies where there was little evidence of success, but referred instead to the lack of sufficient evaluation of them.

Relevance

The review specifically sought to identify strategies that could be used by primary school teachers on their own or in collaboration with other school staff. The review aimed at studies based on classrooms which included children whose behaviour or emotional difficulties were not so extreme that they could not be taught in mainstream classrooms but who required specific interventions by teachers or other adults. It excluded special units and special schools.

Applicability

The review concludes by identifying a number of implications for practitioners (primary school teachers, Special Educational Needs Co-ordinators (SENCOs), heads and deputies), policy makers and researchers. For example, the review highlights gaps in the research, such as that related to the evaluation of circle time or nurture groups. The reviewers also make recommendations aimed at strengthening the methodology employed by researchers and other practitioners, including teachers, such as greater use of control groups and random allocation of children, classes or schools to intervention and non-intervention groups. They advocate

greater collaboration between practitioners and researchers. School governors, advisers and educational psychologists may also find the review interesting and helpful.

Writing

The review is well structured and the different sections are clearly signposted. It is jargon-free and relevant terms such as 'cognitive-behavioural' or 'psychotherapeutic' are defined early in the review.

Research tasters: Five activities

1. How might pinpointing the nature of the problem behaviour in your class help?
The RFT study showed that behavioural problems in class (such as off-task, disruptive and aggressive behaviour, and refusal to engage with adults or peers) have a range of distinct causes for individuals. These include trauma, emotional turbulence, difficulties in forming relationships and learning difficulties. Disruptive behaviours are often symptoms of underlying vulnerabilities, including pedagogical ones which a teacher can directly affect.

Investigating learning in your classroom

If you have individual pupils in your class who exhibit disturbed and disruptive behaviour, you might find identifying patterns in their behaviour (including positive behaviours as well as specific triggers for problem behaviours) helps you to find ways to tackle the problem behaviour. You could document incidents of problem behaviour over several days (or ask a colleague to observe your class and document incidents for you) recording the following:

The conditions, ie. When exactly does the disruption or unusually positive behaviour occur?

- Is it random or regular?
- Is it always the same child?
- Is it always regarding the same task?
- Is it usually in response to similar kinds of stimuli?

The characteristics, ie. What exactly happens?

- Is it a verbal reaction?
- Is it a physical reaction?

The consequences, ie. What are the effects?

- On the child?
- On the teacher?
- On the class? (Do others join in, ignore the behaviour, retaliate?)

Any ameliorating factors? (ie. Are there actions which seem to stop or calm the behaviour?)

- By the child?
- By the teacher?
- By the class?

This should be carried out as an analytical, not a judgemental, exercise.

Next steps

Having pinpointed the nature of individual pupils' problem behaviour and the situations that it arises in, you might like to explore how providing the children with information and training about how to monitor their own behaviour helps. (You may find it helpful to read the case study section which gives examples of effective training programmes).

2. How might identifying the needs of the most vulnerable children help?
The RFT showed the importance of carefully identifying EBD children's needs and considering alternative strategies for supporting such children.
Investigating learning in your classroom

You could set about identifying a particular child's needs by keeping a record of your lesson activities over several days and how the child reacts to the different activities. Some questions you could ask yourself might be:

- Are there long sequences of seatwork and/or writing? How well or otherwise did the child cope?
- How did s/he respond to activities that other pupils found exciting?
- Did the pupil enjoy active tasks, passive tasks, both or neither?
- Which activities generated the most positive responses?
- Did s/he prefer to work alone, in a small group, as part of the whole class?
- How is the child responding to any classroom support s/he currently receives? What would need to happen for the child to make better use of the support?

Next steps

Consider the findings from this exercise, and perhaps with the help of a colleague, try to work out the reasons for any patterns you identify. Could you use what you have found out about the pupil's responses to lessons to create more effective ways of supporting the pupil, such as changing the types of task set, making the task more active, avoiding excessive writing? If the pupil is already receiving support, can you use the evidence you have gathered to target the support more effectively?

3. How can we ensure we match strategies to pupils' starting points appropriately?
The RFT study highlighted how personalised strategies focused on their individual starting points are effective for pupils with emotional and behavioural difficulties. These include anger management programmes, counselling and group therapy sessions, such as circle time and nurture groups.

Investigating learning in your classroom

To help ensure a child is given the best programme for his/her needs, it will be important to have a close knowledge of the pupil concerned. You might like to use the following activity to help you to review what you know about a particular pupil in your class who has emotional and behavioural difficulties. You could think about:

- what you have been able to find out about the pupil through normal classroom learning activities
- what you have learned about the pupil through informally chatting to the child
- how the pupil behaves generally in class and around the school
- how the pupil interacts with other children
- what you have been able to learn about the pupil's family background
- what you learned about the pupil from his/her parents and from your colleagues.

You probably need to allow yourself time to develop such information gradually. Summarising your key understandings and your areas of uncertainty might help you pinpoint the child's strengths as well as his/her specific needs. Can you find any other ways of finding out about your pupils? For example, could you give pupils opportunities to share their news with the class or bring in photos of events and activities they have

been involved in out of school? Some researchers advocate asking pupils to bring in shoe boxes containing 5-6 key items from their homes that are important to them and invite them to explain why, as a way of understanding the child as a learner in his/her home environment.

Next steps

Could you use the information you now have to help you decide on an appropriate programme for the child? To do this, would you find it helpful to discuss the information you have gathered about the child with a colleague?

4. Could you do more to reinforce behaviour that is conducive to learning?

The RFT study showed that teaching pupils with emotional and behavioural difficulties how to monitor their own behaviour can help them to change and/or maintain appropriate behaviour so that they are ready to learn. One effective way of doing this is to ask pupils to keep a record of their own behaviour on a tick sheet. They identify a target behaviour (such as keeping hands and feet to themselves) and make a record of it at set or cued intervals. The teacher can help to reinforce their positive behaviour with praise.

Investigating learning in your classroom

You might like to monitor the extent to which you reinforce positive behaviour with praise. You could ask a colleague to sit in on one of your lessons and record the positive actions you take using the following observation schedule:

Child's initial action	Your reinforcing action	Child's response
result	result	result

Afterwards, you could discuss your colleague's observations, identify the patterns in your actions and your pupils' responses and consider any additional appropriate opportunities for reinforcement are being missed.

Next steps

If as an outcome of the monitoring process you find that some children do not receive adequate reinforcement bearing in mind their apparent needs, you could in another lesson consciously both check that you are not missing opportunities for praising these pupils and generate genuine opportunities to praise their efforts. You could also monitor the pupils' responses.

5. How can we be sure we apply sanctions appropriately and effectively?

The RFT study showed how rewards and sanctions strategies were effective for reducing behaviour which was off-task or disruptive to the children's own or other children's learning. Even though the improvement only lasted as long as the rewards and sanctions were being used - when they were withdrawn, the children's behaviour reverted to how it had been previously - this is a useful strategy for changing disruptive, challenging or unhelpful behaviour and changing the classroom culture.

Investigating learning in your classroom

Having sanctions available and using them appropriately and effectively are two different things. You may like to analyse your records of recent use of sanctions and rewards. Or if you or the school don't have a formal sanctions and recording system, you may be able to ask a colleague to observe some of your lessons and work with you to explore in more depth what is happening. What did you do:

- If off-task or disruptive behaviour only occurred once?
- If it was repeated, did you, for example, use non-verbal gestures, move towards the child, or ask a question or encourage a comment in order to direct a focus onto work?

- If it was persistent, in addition to the responses above did you identify the inappropriate behaviour and comment on the behaviour rather than the child and/or clearly describe the behaviour you were looking for? Was it necessary to isolate the child to discuss this in order to avoid having an 'audience'?

- If the inappropriate behaviour was serious did you apply procedures from the school's behaviour policy?

- In extreme cases, in which the child had to be removed from the class, did you make sure the pupil and the class knew what procedure you were following and what was about to happen?

Can you divide your responses into ones that you feel were most appropriate and effective and those you feel were less so? Did you feel that you achieved closure in relation to the various incidents as far as you and the class were concerned? Were you able to identify scope for increasing consistency? Would it be helpful to discuss use of rewards and sanctions with your class and collect their views of what helpful consistency looks like?

Next steps

Would you find it helpful to discuss your use of sanctions with a colleague? Would you find it useful to observe and compare how a more experienced colleague handles similar situations?
Back to top