

UNIVERSITY OF
NEWCASTLE UPON TYNE



Building the Capacity to Learn to Learn



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■ PROJECT AIMS & PROGRESSION FROM YEAR ONE

Our aim was to continue to explore how cooperative learning strategies could enhance levels of engagement in lessons. We also wanted to assess if the model used for staff development in Year 1 would continue to be a successful vehicle for training as it was extended to a wider cohort of staff.

■ RESEARCH FOCUS (LIST 1 AND 2)

How the adoption of Learning to Learn (L2L) approaches impacts on teacher motivation and capacity to manage change and whether Learning to Learn approaches support the development of confident and capable lifelong learners. In addition, how different learning environments impact on achievement with environment taken to mean the layout and groupings of the classroom.

■ DIMENSIONS OF THIS CASE STUDY

Around 20 teachers are being trained in using cooperative learning structures. Some, but not all, participated in Year 1 of the project.

In addition, they are being introduced to a number of thinking skills approaches to investigate how cooperative structures can facilitate the use of thinking skills strategies. The staff have been asked to focus, as a minimum, on their Y8 group, although many are using the strategies with other year groups as well. Students in Y8 group will do an online questionnaire to assess their Learning Power, developed by Guy Claxton (www.trackinglearningonline.co.uk), and participating staff are being trained in understanding and highlighting the dispositions of successful learners.

■ SUMMARY OF FINDINGS

Participating in this research project has emphasised the value of creating professional learning programmes, tightly focused on classroom practice, with sustained opportunities for dialogue and reflection. Furthermore, we believe that the lead learner model has contributed to building capacity within the school to take on new initiatives, particularly those concerned with teaching and learning.

Focus in the 5 Rs for
Lifelong Learning:

Resilience



Remembering



Resourcefulness



Reflectiveness



Readiness



YEAR ONE RESEARCH

Summary of Year one findings

Following on from Year 1 of the project we found that our model of creating lead learners in departments and then giving them exposure to training over the course of a year had been successful. Through observation of lessons, staff questionnaires and interviews with students during Year 1 we were persuaded that cooperative approaches were practical and worthwhile. They led to increased involvement from the students, more peer learning opportunities and an enhanced ethos of cooperation. We have therefore established a second cohort of lead learners who are being trained in how to use cooperative learning strategies.

Moving forward

One of the issues raised by the staff in the first year was their perception that perhaps higher ability students benefited less from the cooperative structures than students of lower ability. Consequently in Year 2, we plan to investigate if the cooperative structures lend themselves to Thinking Skills approaches.

We also felt after Year 1 that we needed to do more to highlight the Rs for learning to students and so we will be asking the staff participating in Year 2 to make these qualities much more explicit in their work with their target class. We want to assess if the teaching and learning methods being used in the school match the learning dispositions of the students and intend to do this through observation and through analysis of their Learning Power profile.

A major area of focus will be on the sustainability of the model used for professional development and whether it is succeeding in building capacity among the staff.

CONTEXT

School background

Fallibroome High School is a successful, oversubscribed, mixed comprehensive school situated in Macclesfield, Cheshire. It had 1496 students, including 280 in the sixth form, 3.7% Special Educational Needs (SEN), 2% Free School Meals and very few pupils with English as an Additional Language. Attainment on entry to the school is above average and this is maintained or improved, with very strong results at Key Stage 3, Key Stage 4 and Key Stage 5, which is reflected in sustained A or A* scores in the PANDA reports. The intake of the school reflects a wide socio-economic spectrum and most parents are pleased with the school because of its high expectations and high attainment.



Rally Robin

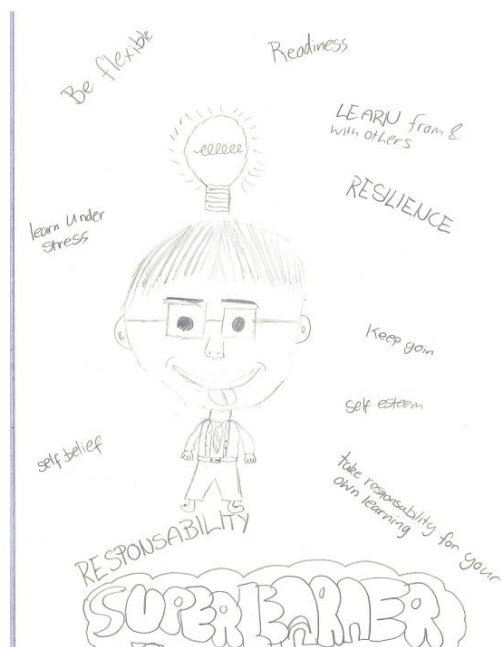


Think, Pair share

Cooperative Structures based on the work by Spencer Kagan used throughout the school

The school has a very strong commitment to innovation in teaching and learning, which has been recognized nationally. It leads a Networked Learning Community of five primary schools and a Leading Edge

partnership of three secondary schools. Two staff from the primary schools have been on secondment for five terms and have been extensively trained in cooperative learning approaches and they lead regular INSET sessions in all of the town's schools, as well as at INSET events across the region. They coordinated Learning Brain Europe, a conference held at Old Trafford in Manchester in July 2005, attended by all teachers in Macclesfield. This conference brought together experts in teaching and learning from across the UK and the US. It is modelled on the BrainExpo conferences held annually in the US, organized by Eric Jensen, to which Fallibroome and its partner schools have sent delegates for the past three years.



Year 7 and 8 completed a booklet examining what made a 'Super Learner'

This year, delegates from 3 secondary schools and 5 primary schools will attend a five day intensive course on cooperative learning, hosted by Dr Spencer Kagan in July each year. The school also has a major commitment to developing its expertise in Assessment for Learning and Behaviour for Learning and is exploring how cooperative approaches can support

these strands of its School Improvement Plan.

Personnel involved in the research

The teachers

Around 20 members of staff regularly attend the workshops. They take place at twilight sessions each half-term and so numbers can fluctuate slightly. The staff involved range in experience from those in their first year of teaching to those with more than 25 years experience. Their roles within school also vary greatly, from Heads of Department to Heads of Year or Assistants, and NQTs. All are volunteers to the project. Some staff from the previous cohort stayed on but the majority were new. We are fortunate to have such a large number of people enthusiastic about developing their expertise and it is very much part of the expectations in the school that teaching and learning is high on the agenda. Moreover, active participation in and contribution to a whole school area for development offers a way for staff to evidence their work for performance management.

The children

The target group is Year 8, continuing on from the focus on Year 7 in the first year. In the Ofsted Report of November 2002, students at Fallibroome were described as being keen to learn, considerate of others and able to form good relationships with their peers and their teachers. Year 8 are described by their Head of Year as a truly comprehensive intake:

- 242 students, 117 boys and 125 girls from 19 primary schools;
- 100 achieved Level 5 in English at Key Stage 2;
- 102 achieved Level 5 in Mathematics at Key Stage 2; • 153 achieved Level 5 in Science at Key Stage 2; and

- 6 students are statemented.

He goes on to describe the general ethos throughout the year as one of optimism with students who were motivated both academically and socially to get involved in all that the school has to offer, such as performing arts concerts, sport, music lessons etc.

Many of the participating teachers also used the approaches with other year groups, perhaps most particularly in KS3. A major reason for this is that cooperative approaches are being used in the majority of the school's associated primary schools and so there is a continuity of experience for the students. In addition, some of the strategies are used regularly in KS4 and KS5 as well.

PROJECT OBJECTIVES

Developing the rationale

Reaction to the cooperative strategies trialled in Year 1 had been positive from both staff and students and so the approach was felt to be worth pursuing. Year 2 of the project was conceived very much as extending and establishing what had been done in Year 1. The thinking skills element was new but much of the training still focused around introducing, practising and evaluating the cooperative strategies themselves. Year 1 had generated a lot of enthusiasm and created an advocate for the strategies in each department but only 14 staff out of over 90 had had extended training in the cooperative methodology. All staff had had a general introduction but one of the lessons from Year 1 was that teachers need time to return to developments in a structured way, with time for planning, evaluation and trouble-shooting built in, if they are to make a sustained change in practice. The ongoing nature of the training in Year 1 had tried to meet that

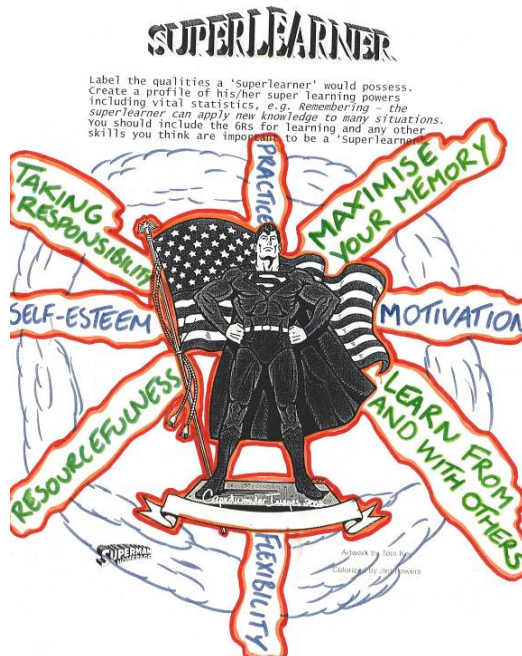
need. Consequently in Year 2 new lead learner groups were established, one to look at cooperative structures and one focused on Assessment for Learning (AfL), each with departmental representatives, half-termly meetings and an expectation that participating staff would feedback to their departments at regular intervals through the year.



Cooperative learning strategies were examined in Year One of the project

Through wider reading and through INSET, including that organised by the Campaign for Learning for schools in the research project, it was becoming clear that there was a substantial overlap between much of the L2L and AfL agendas. Within the school, the cooperative structures and classroom ethos were perceived to be a way of facilitating self and peer assessment activities in a supportive classroom environment. At the start of Year 2, work on the AfL strand was less advanced than on the cooperative learning strand, hence the formation of the working party to investigate and trial approaches. (The reflections and findings of one of the participants in the AfL group are presented

separately). However, at the start of Year 2, the leaders of two strands were already provisionally planning for Year 3 (2005-06) when it is intended to report on the process of making AfL and CL part of policy expectations for Year 7.



The pupils in Year 7 and 8 were encouraged to actively think about their learning

Objectives

We wanted to disseminate the training on cooperative learning so that a wider range of staff used the approach regularly. The training was open to all staff and all departments had at least one representative. The data collected refers mainly to Year 8 students but the approaches and ideas are being used in other year groups, probably most consistently in Year 7. From a leadership perspective, our objective was to reflect on how the lead learner aspect of our staff development programme was creating opportunities for staff to share expertise, and if it was succeeding in building capacity in the organisation.

Hypothesis

The research hypotheses were that using cooperative learning techniques would

facilitate engagement in lessons and would act as a vehicle for incorporating thinking skills approaches. Secondly, that the model of staff development would build capacity and allow dissemination of the ideas across the staff. Thirdly, that providing information about the student as a learner, using the 5Rs as a model, would lead to better quality feedback to students and parents.

RESEARCH PROCESS

Teachers' choices

In the first year, the cooperative structures had been widely used and well received but there was a feeling that they were most suitable for activities aimed at testing recall or mastery. As such, there was a query about how they could be employed to encourage higher order thinking and it was this that the second cooperative learning group wanted to assess.

The second year report also focuses around reflections on the format of the lead learner model and its wider impact across the school, using the experiences of the participating teachers and the observations of the two assistant headteachers who have coordinated the work. It was an opportune time to do this because Year 2 has been about consolidating and refining, prior to the major initiative of Year 3, which will deal with using the cooperative structures and ethos, amongst other things, to establish AfL principles in all Year 7 programmes of study.

It is increasingly clear from much of the research (NCSL, 2002; Hopkins, 2001; Fullan, 1991; 2001) that a focus on expanding the teaching and learning repertoire of staff is a key component of school improvement. Fullan, (1991) asserts that:

Educational change depends on what teachers do and think – it's as simple and as complex as that. (Fullan, 1991:117)

Therefore it seems incontrovertible that creating the opportunities for individuals to learn is the prerequisite starting point for building capacity for improvement in a school. To facilitate this, schools need to build the capacity within their organisation to engage with new ideas and absorb them into practice. Newmann *et al.* (2000) describe four core components of capacity building:

The quality of individual staff members – do they have the required knowledge, skills and dispositions?

A professional learning community – do staff have the opportunity to work collaboratively to set shared clear goals, related to problem-solving tasks and student learning and achievement.

Programme coherence – is the school overloaded with initiatives or has it decided on a smaller number of core innovations through which other developments can be filtered?

Technical resources – does the school have the materials needed in terms of technology, curriculum, assessment instruments etc.?

The latter three can be said to create the conditions whereby the first can be enhanced. Year 1 of the school's participation in the Campaign for Learning research project had been successful in creating a lead learner group which functioned as a collaborative learning community for its participants. The challenge in Year 2 was to see if that could

be recreated, both with the second Cooperative Learning group and with the separate Assessment for Learning group.

One of the strong points to emerge from the first cohort was the emphasis placed by the teachers on the practicality both of the cooperative structures themselves and the way they were actively modelled to them during the training sessions. This echoes a review of research conducted into teacher learning (Desforges, NCSL, 2003) suggesting that teachers are not always reflective about their classroom environment, which poses problems when they are asked to highlight significant factors or experiences which illustrate their learning or exemplify areas they want to improve.

The collaborative, ongoing and structured process of action research, as undertaken in the lead learner groups, has proven effective in terms of changing practice and ideas, but greater attention needs to be paid to the emotional process of learning and to the complex and varied demands of the classroom. Without this, the trend is for the teacher to return to the status quo, simply because they can feel overwhelmed by the multiplicity of demands upon them or because they do not have the time to sufficiently understand and trial an approach. This would imply that for staff to successfully implement a change in the classroom, they need to understand the change and the rationale for it. They need to be able to link it to their existing understanding of good practice and their awareness of where their own practice fits in.

Teachers derive a strong sense of professional identity from what they do in the classroom; therefore asking them to adapt their practice can be painful, difficult and take some considerable time. Attention needs to be paid to providing coping strategies over the period of the training, as well as ensuring that there are

sufficient opportunities to reflect, discuss and create new understandings. The opportunity to work collaboratively during this process can offer an essential support mechanism as well as maintaining the momentum towards the desired goal.

To make the training accessible, Hughes, (2002), talks of 'tweaking' in order to transform, meaning by this that the change needs to be seen as achievable, not unrealistic. He talks of pitching change at just above the 'comfort zone' and then at similarly small incremental levels. In the context of student learning, Hughes (2002: 52) refers to Vygotsky's work on the Zone of Proximal Development, which is an area just beyond the child's current capabilities which they cannot master alone and need support in the form of scaffolding. Applying this to the context of teacher learning the scaffolding might include opportunities for participants to discuss with the trainer and with other colleagues, opportunities to reflect on their personal reaction to the change, opportunities to discuss classroom outcomes, coaching and a series of training 'interventions', over a sustained period, which gradually develop and clarify thinking about the new behaviour.

Any change of habit or new learning immediately makes one much more consciously aware of one's normal behaviour pattern. Hughes (2002:20-21) alludes to the spectrum running from unconscious incompetence, through conscious incompetence to conscious competence and finally to unconscious competence. Feelings of self-worth and self-belief are associated with the final two but, when asked to change, participants immediately find themselves in the lower part of this spectrum. Sharing the rationale for change and involving staff in defining the vision help to allay the anxieties that this entails. However, even at the stage of conscious competence of the new behaviour, it is still easy to slip back into the old pattern if sufficient support,

encouragement and recognition is not provided. Time is needed to practise the new behaviour until it can replace the old one as the habitual way of operating.

Desforges (NCSL, 2003: 2) argues for teachers being given the opportunity not just to learn about evidence and pedagogic knowledge, but also the opportunity "to learn how to use it to improve their teaching and raise standards." Both are essential, but without the link between the theory and the practice, the danger is that teachers learn to 'talk the talk', but do not assimilate the ideas into their daily repertoire of teaching strategies. To incorporate the new approaches, teachers may have to 'unlearn' certain habits and routines, which can be a challenging experience, as alluded to above. The model of regular, 'hands-on' training over a year was designed to attempt to address the issues raised in the research.

Evidence Collected

The evidence collected consists of reflections from the participating teachers and the cooperative learning trainers about how cooperative structures and thinking skills approaches are complementary. This is supplemented by peer observation notes from the lead learners as they trialled strategies with Y8. Lead learners completed a Plus, Minus, Interesting (PMI) review of their training and three staff were also interviewed about their experiences. The assistant headteachers co-ordinating the training also completed a PMI review.

Student data consists of some examples of work done in tutor time based around the Rs for learning and the results of the Learning Power survey, as well as the online questionnaire from the University of Newcastle. Year 2 centred around building capacity in the staff and so not as much progress as had been anticipated was made with using the Rs for learning in a meaningful way with students. As a result, a snapshot of what is being developed is

presented rather than a more detailed analysis of findings. It is hoped that this area can be returned to in Year 3.

The role of Learning to Learn

Increasingly, L2L in the school is being interpreted as an ethos rather than as a particular set of strategies. There is so much research emerging about effective learning that it can be difficult to keep abreast of it all. Moreover, as highlighted above, one of the components of capacity building is programme coherence. That means having a limited number of innovations which are high-profile and which remain so over a period of time. These core innovations can act as a filter through which to introduce new ideas. Having been persuaded of the value of the cooperative structures and their potential contribution to a number of areas, the school is using them as a vehicle to introduce further developments.

This Year 2 report assesses how cooperative structures can support thinking skills and Year 3 will discuss how they support the AfL agenda. Consequently, the way we have understood L2L is in its broadest sense: a belief that learning is learnable. This applies to the students but also to the teachers and the expectation is that together we should try to discover how we can make learning more effective for everyone. For the teachers, this involves increasing numbers of them becoming involved in structured, ongoing reflection about their work, often facilitated through participation in lead learner groups.

DISCUSSION OF RESULTS

Findings

Given the research discussed earlier about teachers' pragmatism, the first aspect of the findings to be discussed will centre around the practicalities of using cooperative structures to support thinking

skills approaches. Evidence from the teachers' comments about the structures and peer observation evidence is used to illustrate the points made.

Firstly, teachers valued how the cooperative strategies allowed them to structure the debate engendered by the thinking skills approaches. The cooperative structures differ from more open group work because of their emphasis on four key principles, known by the acronym PIES:

- Positive interdependence
- Individual accountability
- Equal participation
- Simultaneous Interaction

An analysis of the structure Numbered Heads Together illustrates the point. The steps are that the teacher poses a question and gives individual think time at the end of which all students have to write down their personal answer (Individual accountability and equal participation). Students are seated in teams of four and the next stage is for them to 'put their heads together' and arrive at a team answer. This allows simultaneous interaction as well as equal participation – compare it to the scenario where a teacher poses the question to the whole class and only one student can answer. The answer arrived at has to be a team answer and everyone in the team needs to be able to explain it as the students do not know at this stage who will be called on by the teacher. This creates an opportunity for peer coaching, establishing a positive interdependence among the team's members, as it is in everyone's interest for everyone to be able to answer.

In Year 1, Numbered Heads had proven to be popular with both staff and students but was mainly used as a way of testing recall. However, in Year 2, it became apparent that many of the structures had enormous

potential for more open-ended tasks as well.

One of the teachers in Year 2 combined Numbered Heads with Odd One Out. This is a thinking skills strategy which helps to develop the skills of classifying, comparing and contrasting, analysing relationships and justifying answers. The teacher used an idea from the *Thinking Through Modern Foreign Languages* resource book below:

STRATEGY 1 Odd One Out

| Odd One Out | | Les Vacances | |
|--------------|-----------------------|--------------|-------------------------|
| PHRASE SHEET | | | |
| 1 | le chef | 13 | un terrain de camping |
| 2 | l'auberge de jeunesse | 14 | téléphoner à l'avance |
| 3 | le soleil | 15 | la patronne |
| 4 | le directeur | 16 | à trois étoiles |
| 5 | du brouillard | 17 | l'hôtel de ville |
| 6 | la nourriture | 18 | une chambre double |
| 7 | en avion | 19 | une chambre à deux lits |
| 8 | une réservation | 20 | gratuit |
| 9 | une valise | 21 | une chambre simple |
| 10 | un numéro vert | 22 | la cabine téléphonique |
| 11 | bon marché | 23 | une tente |
| 12 | un réchaud de camping | 24 | de luxe |

Thinking Through Modern Foreign Languages

Odd one out activity as presented in Lin and Mackay (2004)

This activity had been used before but as an individual piece of work or as a group activity but without the added structure of the cooperative strategies. The teacher felt that as individual work it had not offered the opportunities for peer coaching and discussion. As unstructured group work there was a risk that some students would dominate or that some would coast or opt out.

By using the Numbered Heads strategy to deliver and regulate the activity the teacher felt that it was much more successful. This

was echoed by other colleagues who trialled this idea. One science teacher who was familiar with delivering CASE lessons said that CASE gave the what of the lesson but the cooperative structures gave the how and because they have built in checks for participation and accountability in particular, she was much happier with the result in the classroom.

STRATEGY 1 Odd One Out

| Odd One Out | | Les Vacances | |
|--|----|--------------|----|
| INSTRUCTIONS | | | |
| You have been given a set of phrases, which you might have come across during your work on <i>Les Vacances</i> . You are going to use these phrases to complete the following tasks. | | | |
| Task 1 | | | |
| Working with a partner, look at the sets of numbers below, which match with a phrase from the list on the phrase sheet. Pick out the phrases and write them in your book. Then decide which phrase from each set is the ODD ONE OUT. Underline this phrase in your book and explain why it is the Odd One Out and what the other two have in common. | | | |
| Set A | 2 | 13 | 17 |
| Set B | 4 | 15 | 1 |
| Set C | 14 | 8 | 22 |
| Set D | 22 | 10 | 18 |
| Set E | 1 | 12 | 14 |
| Set F | 20 | 11 | 24 |
| Set G | 3 | 5 | 12 |
| Set H | 17 | 2 | 19 |
| Task 2 | | | |
| Now that you have started to see a pattern, add an extra phrase to each set which matches the pair. KEEP THE SAME ODD ONE OUT. | | | |
| Task 3 | | | |
| Now try to put together your own set of phrases with an Odd One Out. You must have a good and obvious reason. Swap your group of phrases with your partner and see if they can work yours out. | | | |
| Task 4 | | | |
| Now try to sort out all the phrases from the list into five groups. | | | |

Thinking Through Modern Foreign Languages

Instructions for odd one out activity as presented in Lin and Mackay (2004)

Another thinking skills approach trialled was Reading Images, which was combined with the two cooperative structures of Think-Pair-Share and then Round Robin (see references at end for website with instructions). Reading Images helps to develop skills in drawing inferences, making deductions and judgements, using evidence and suggesting hypotheses (See Thinking Through ... series and Leading in Learning pack (DfES) for more information). Again the cooperative structures regulated the debate, creating thinking time, establishing the expectation that everyone should take part and developing the social skills of active listening and building on others' responses.

The History and Geography teachers who trialled this reported that:

Constructive pair work was evident leading on to a productive group session – this allowed for building on others' ideas. The students in both classes showed real interest and worked very productively, remaining on task throughout.

The same cooperative structures were used in Music combined with De Bono's Thinking Hats. The teacher reported how well the students worked:

It was great to see them all engaged and active. When they were doing Rally Table instead of just taking it in turns going round the table I used the talking chips idea where the student puts a pen into the middle when they want to speak. They then have to allow the others to respond before they can speak again. It stops one person dominating and I was impressed with how it led to the students debating the ideas once the initial 'thinking hat' statement had been made. Every student was involved in the discussion and lots of active listening took place. They were noticeably very confident when it came to giving feedback to the whole class.

The trainers had not used some of the thinking skills strategies before and were interested in how the cooperative structures could be applied to them. One of the trainers did a PIES analysis of collective memory which is given below:

Positive Interdependence

The teams were positively dependent on each other, the 'contribution of one student was a gain for others.' This structure was very strong in this aspect if one student failed then they all did. PI was reinforced with the addition of a Recording Sheet' Also during the plenary teams were contributing to the success of each other. Students definitely felt themselves on the same-side. Students enjoy this structure immensely it has both friendly competition (team to team) and positive interdependence.

Individual Accountability

This structure contains a lot of Individual Accountability. The students were accountable for looking carefully during their 10 seconds and for explaining clearly to others. The individual effort of each student was recorded on the strategy sheets. Each student had to respond on their own when their number was called. This could also be enhanced if there was individual follow-up after the collective memory activity.

Equal Participation

This aspect needed some further thought. Although the students were working equally, some students did more of the actual design although they explained the item equally. Each student had the equal number of turns looking at the hidden item.

Simultaneous Interaction

The students were actively engaged for a great percentage of the class time because of the sequential nature of the structure. Students were either engaged in explaining or in responding to instructions.

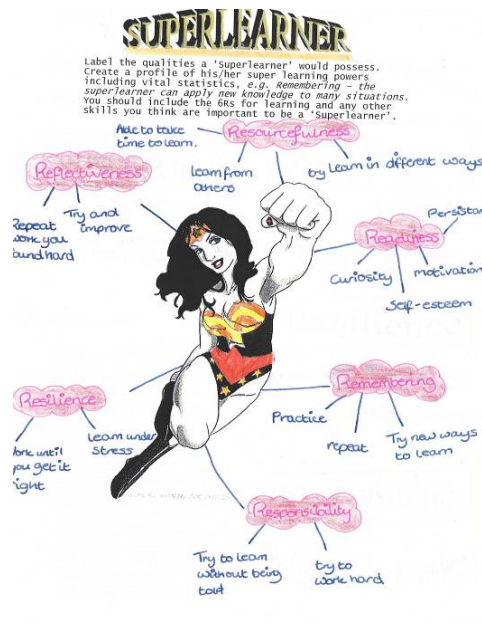
Once the students have done a collective memory activity for the first time and have completed a debrief into what made them successful or not, it would be possible to emphasise the social skills inherent in the activity. They were described by the trainer as:

- Encouragement and support for each other
- Planning together / Agreeing
- Building on others ideas/ Elaborating
- Clarifying ideas
- Praising
- Making Sure everyone understands
- Offering help/coaching
- Taking turns
- Tolerance
- Working together

It seems clear from the above that during Year 2 there is evidence of the teachers learning to use the cooperative structures in combination with their existing practice and that they appreciate the underlying benefits of the structures such as their capacity to ensure the involvement of everyone and create opportunities for peer coaching. This is a development from Year 1, where the structures were often used as a stand-alone activity, and implies a deeper assimilation of the potential of the structures.

Another area that required more emphasis after Year 1 was how to make the issue of successful learning dispositions more relevant to the students. We found this hard, perhaps because some of the language is not immediately user-friendly. What follows is a description of what we have started in the school but it cannot yet be said to be embedded into practice. During the sessions the teachers reflected on how different cooperative strategies could provide opportunities for teachers to notice and reward positive learning behaviours in class. It was felt that

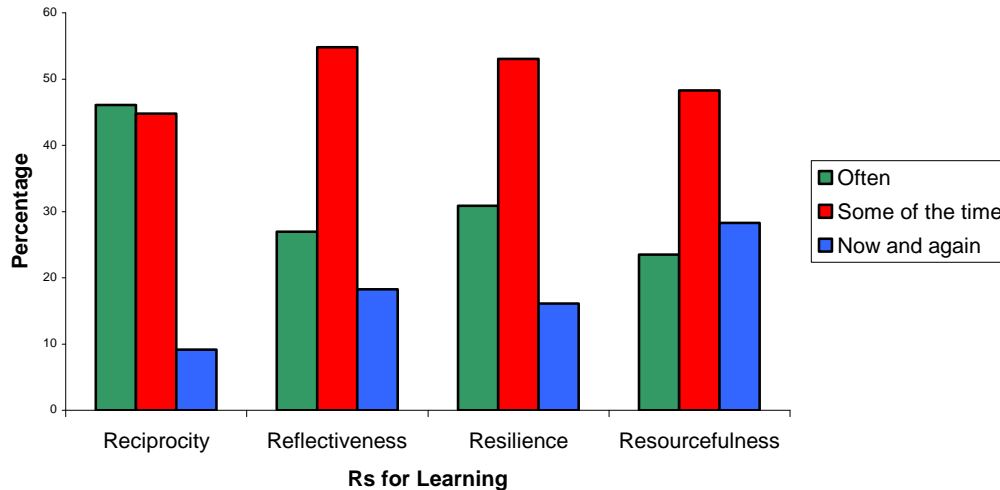
Readiness could be addressed through the team building activities and safe environment of the cooperative classroom. Another aspect of readiness is connecting with the 'What's in it for me?' aspect of learning. Students need to see the point of the learning and be able to make personal connections. Using structures such as Rally Robin or Rally Table etc to generate questions at the start of a topic or a lesson can be an excellent way to promote interest in the topic and get the students thinking about what they already know and how it might link in with the new learning. Thinking Tools such as single bubble / double bubble diagrams, concept maps, etc can be used to generate ideas and questions at the start of a topic and then returned to throughout the topic as a visual representation of how much more the students now know.



Students have been observed to enjoy the feedback about their learning

To promote skills in Remembering techniques for forming and accessing memories should be explicitly taught. Structures like Roving Reporter or others where the students move around and discuss with other students are good ways of triggering episodic memory.

YEAR TWO PROJECT 2004/2005



Graph showing the learning dispositions of the whole of Year 8 as indicated by the Learning Power survey 2004/2005

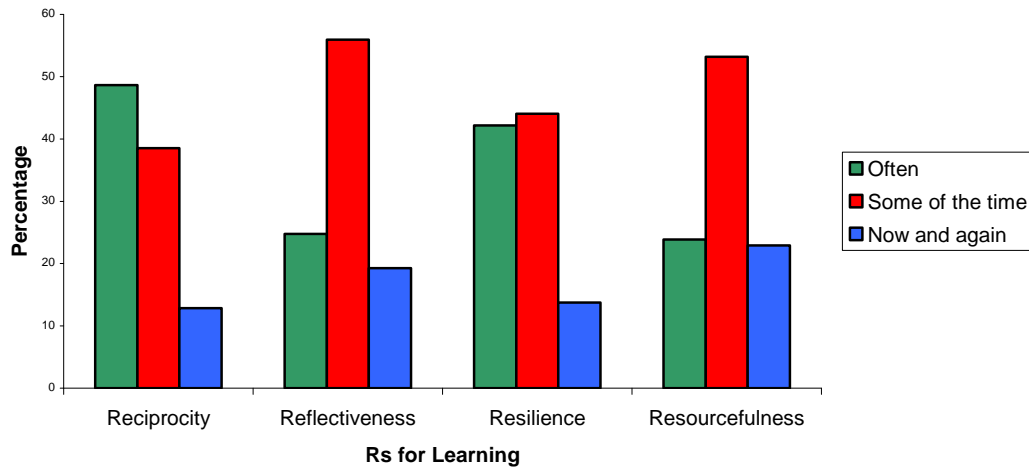
Many of the cooperative structures address Resilience and Resourcefulness as they allow pairs to work on an answer before contributing to a team answer. Structures such as Send a Problem demonstrate that it is OK to be stuck. Similarly, thinking skills approaches such as Odd One Out, Mysteries, Sequencing, Reading Images etc all help, as they have no set answer. Moreover, structures such as Paraphrase Passport, Spin'n'Think, Spin'n'Review, Numbered Heads etc all build in processing time. This should be highlighted to students as part of the process of modelling thinking.

Reflectiveness is encouraged through the debriefing at the end of the thinking skills activities where students consider how and why they were successful and how they might approach a similar problem in the future. Through comparing group work to cooperative strategies, the students could also reflect on how they are developing their learning skills. Many of the cooperative structures support plenary

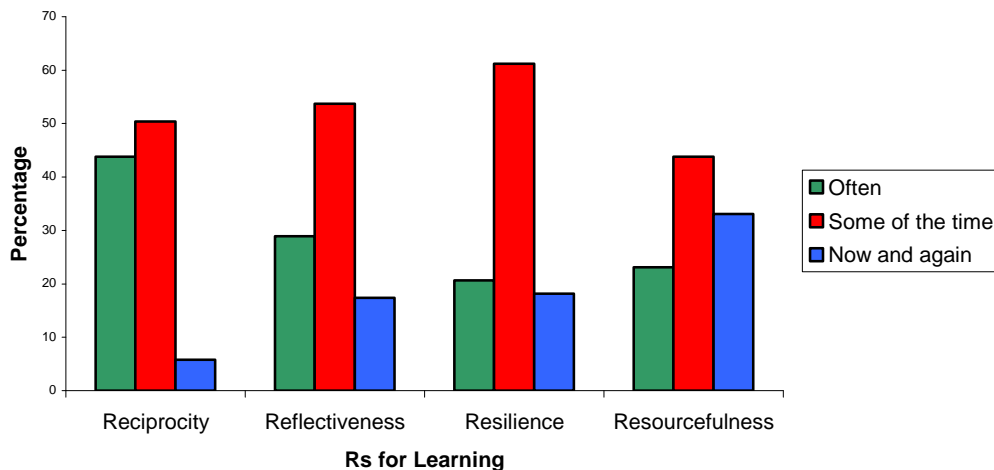
tasks which has helped to strengthen this part of the participating teachers' planning.

The school used the online survey at www.trackinglearningonline.co.uk to allow students to assess their 'Learning Power'. This survey is based on the work of Guy Claxton and uses a slightly different set of Rs to those of the Campaign for Learning. Students receive feedback on their Learning Power in terms of Reciprocity, Reflectiveness, Resilience and Resourcefulness. They then receive suggestions on how to develop their weakest area. This has been trialled with Y7 and Y8 and the students enjoyed receiving the feedback. It was followed up with an assembly about successful learning and some tutor work designing a super learner. (See examples included in this case study). In addition a booklet explaining the qualities of a successful learner was prepared for Y7 and Y8 parents and issued during the tutor consultation day.

YEAR TWO PROJECT 2004/2005



Graph showing the learning dispositions of the boys in Year 8 as indicated by the Learning Power survey 2004/2005

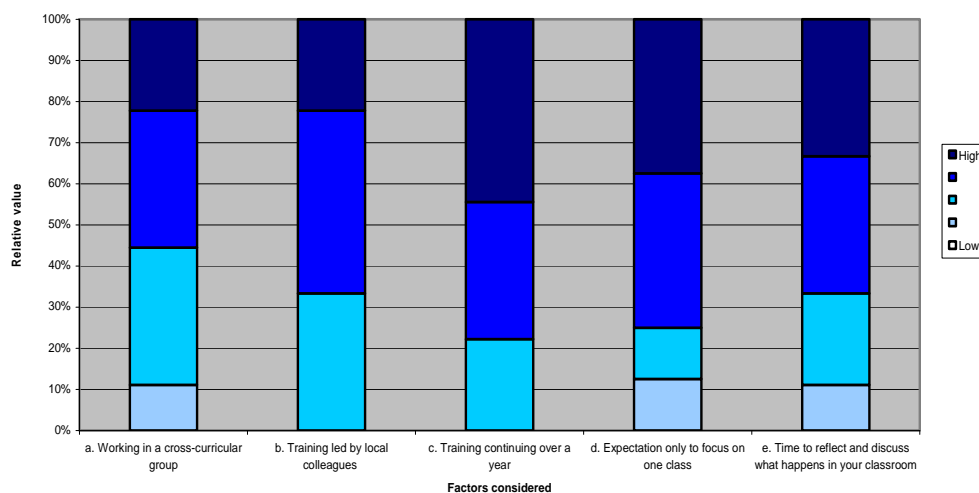


Graph showing the learning dispositions of the girls in Year 8 as indicated by the Learning Power survey 2004/2005

Once students have completed the online survey, the teacher is able to access feedback by individual student, by class or year and by gender. The graphs show the global feedback for each learning disposition for all of Year 8, for Year 8 girls and for Year 8 boys. Reciprocity, that is, learning from and with others, scores consistently highly, and suggests that the cooperative strategies that the school is investigating form a good match to the learning dispositions of our students. The boys are noticeably more positive about resilience than the girls and the weakest

area for both is resourcefulness. It will be interesting to see if this changes during Year 3 of the project as more self and peer assessment activities are developed through AfL and changes are made to the school marking policy to ensure more consistent use of high quality, targeted feedback. The online questionnaire designed by the University of Newcastle shows a slight decline in positive attitudes to school from Year 7 to 8 but the results are still in line with results for that age group from all schools in the project.

YEAR TWO PROJECT 2004/2005



Graph showing the feedback about training in Year One of the project

Tutors were given feedback by form and the Heads of Year can access individual feedback if required when dealing with students having problems. At the moment this facility is not being exploited fully as it only became fully operational towards the end of the year. However, it does offer scope for future development. For example, one of the lead learners in the project used the learning power survey with a Y11 student who was receiving mentoring to help him attain the best possible grades and she reported that it led to an interesting discussion with him about how he could make changes in his preparations for his examinations.

Turning to an evaluation of the training, it is worthwhile starting with the feedback from Year 1 which is presented in the chart above. The first cohort particularly valued the ongoing format of the training, the in-built opportunities to reflect and, to a lesser extent, the expectation to focus on just one class.

The second cohort of lead learners were asked to complete a PMI frame giving their views which proved to be consistent with the Year 1 feedback. In the summary of Desforges' article, (NCSL, 2003), the

importance of the teacher's motivation is discussed. Teachers are described as being more likely to engage in deep reflection and processing of an issue if it is directly related to their needs. Here, the teachers wanted to investigate ways to improve levels of student interaction and engagement rather than just learn about a new technique in isolation. Being aware of the power of such practical and pragmatic motivations is important to those involved in the design of staff development programmes.

The major strands identified in the Plus and Interesting columns were that the training provided really practical tools for delivery of lesson content. The format helped to maintain enthusiasm through the year as topics were revisited.

Comments included:

A one-off course is good for 'firing you up' but there usually isn't the time to implement the ideas. This way the ideas are constantly brought to mind.

Modelling the structures helps to understand how they work and the discussion gave lots of ideas on how to use them.

I felt able to experiment with my teaching and learning methods which was really positive.

It has helped to change the way I think about class dynamics (such as 'hands up'). Certain things which I just took for granted, I now question their effectiveness.

The training was a great way to see people in a new light and as a newcomer to the school it really helped me.

I knew the theory of cooperative learning from other things that have happened in school but the workshops helped me to put it into practice.

Another point mentioned was that the trainers clearly had practical experience of using the structures in the classroom themselves and that it was helpful to see how different departments and different age groups were using the same structure. This connects to research such as that conducted by Hargreaves (1998), cited in NCSL (2005: Pack 2:9):

...teachers believe very firmly that the best and most useable ideas come from other teachers and that it is teachers' peers who are the most credible source of new knowledge and how to apply it.



A further example of a super learner front cover as designed by a pupil in Year 7 or 8

The minus points centred around needing more time to assimilate and also the timing of the sessions after school can be difficult, especially for part-time staff but also in general at busy times of the year. One respondent suggested investigating the model already adopted in some schools of varying the lengths of the school day to create an opportunity for a professional development afternoon on one day. Another minus identified by several staff was creating time in department agendas to share the structures meaningfully.

A 10-minute slot was enough to model a structure but that does not allow for the necessary elements of trouble-shooting and refining understanding. This is why the school tries to offer several different pathways and layers of information, including a teaching for learning bulletin,

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sessions on INSET days, ongoing twilight training and use of gained time in the summer term to create opportunities within the school day for departments to meet. Clearly this takes time but encouragingly one lead learner reported that:

There is a growing awareness about the structures even among those who have only had the basic exposure and there is a willingness to experiment.

Those staff who had been able to take part in joint planning and peer observation

really enjoyed the chance to observe colleagues. It worked particularly successfully in the Humanities where RE, Geography and History planned lessons using the thinking skill approach of Reading Images. These teachers were struck by how they were using the same skills with the students but with different degrees of emphasis. In more diverse subject groups the teachers enjoyed the peer observation because of the encouragement and validation it offered but found the joint planning more challenging. We will continue to explore this idea, using the Leading in Learning pack (DfES, 2005) next year.

| PLUS | MINUS | INTERESTING |
|--|--|--|
| <p>Distributed leadership.</p> <p>Opportunities for contributions from all sectors of the organisation.</p> <p>Chance to experiment in a sanctioned way i.e. some attempts made to remove accountability.</p> <p>Supportive.</p> <p>Cross-fertilization of ideas between departments.</p> <p>Good staff development – promotes reflection and involvement in action research.</p> <p>Promotes ownership of the development among the staff.</p> <p>The market place activities where lead learners presented what they had been doing to colleagues during HoDs / Staff meetings worked well</p> | <p>Could bypass those who are not on the working party – especially middle management.</p> <p>Not able to select the members of the working party.</p> <p>Based on interest not aptitude.</p> <p>Status of the representative – do they have the capacity and the authority to influence others? (especially important if the working party is a policy development forum).</p> <p>Do those staff who are not on the working party fully understand the initiative?</p> <p>Could degenerate into a talking shop.</p> <p>If there are several working parties it could put more of a burden on smaller departments as they have fewer people to share the workload.</p> | <p>Has the potential to provide a forum for policy development but leader has to be clear about this and reinforce message to staff in different ways.</p> <p>Could be linked to the remodelling / performance management agenda to promote the types of professional behaviours beneficial to the school.</p> <p>Should it be compulsory for HoDs to attend? Even though this goes against distributed leadership to some extent?</p> <p>How can the Leadership Team convey information about the initiatives to those not directly involved?</p> |

A Thinking Skills activity, a PMI, was completed by the two assistant headteachers to review their experience of the lead learner model

As a further review of the format of the training the two assistant headteachers, who had coordinated the lead learner groups into cooperative learning and AfL respectively, also completed a PMI grid above:

Finally, to discover whether the views of the assistant headteachers agreed with those of the staff, three interviews were conducted. The first was with a head of department in the cooperative learning group; the second with a head of department in the AfL group; the third with a teacher from the cooperative learning group who had no departmental responsibility.

In terms of building capacity, the comments from the interviews reflect that these participants did feel ownership of the developments and that asking them to present their work to other colleagues, for example, during a market place activity in a staff meeting or leading a session on an INSET day, enhanced their feelings of being valued and respected.

All of them, regardless of role, were confident about understanding the initiative with which they had been involved and felt able to take it back to their departments. The heads of department stated that they allowed time at department meetings for feedback, either from themselves or from other colleagues who were representatives on other groups. This indicates distributed leadership in action, but inevitably, some problems arose.

If the representative on the working group was not the head of department, they did not always realize what needed to be passed on to him/her. This could lead to the head of department missing a deadline or not anticipating an addition to their workload. This problem was also identified in the PMI frame completed by the assistant headteachers. To avoid this, it

will be important in future to ensure that heads of department receive a list of key actions arising from any working party so that they can plan their schedule accordingly.

A further possibility is to ensure that representatives and their heads of department have some protected time in which to meet and feedback. From September 2005, protected leadership and management time will be indicated on timetables and this offers such an opportunity. Another option would be to insist that heads of department act as representatives in all working groups, accompanied by another colleague, but this would significantly increase their workload and decrease the opportunities for development for other colleagues.

Culture and micro-politics were also mentioned by the interviewees. In the PMI frame the assistant headteachers also raise the potential issue that representatives must have the status and the authority to take initiatives back to their departments. Schools wishing to adopt a lead learner model could therefore usefully invest time in developing an understanding of distributed leadership and revisiting this theme regularly.

A further caveat is communication: how can the information be spread to those staff who are not involved in any of the working parties and, if these people are reluctant, how can they be encouraged to trial the ideas? There is no easy solution to this problem, but keeping the developments high profile, aligning them with school policy, creating a wealth of data about them and phasing their introduction over time seem to go some way to addressing the problem.

One positive highlighted in the interviews was that gained time in the summer term had been allocated to the department to

work on the initiative. Previously, teachers would be used to invigilate during this time, but the workforce reforms preclude this. In the researcher's school, this time was therefore used to enable departments to meet to work on development priorities, which focused on cooperative learning or AfL. By aligning development priorities with allocated time, it is possible to try to address the problems identified in the interviews and in the PMI frame.

Extensions and Changes to the Method

The focus on cooperative structures and thinking skills worked well through the year but time constraints meant that not as much data about student views was collected in Year 2. This will be addressed in Year 3 when students' views about their experience of AfL techniques will be a central part of the project.

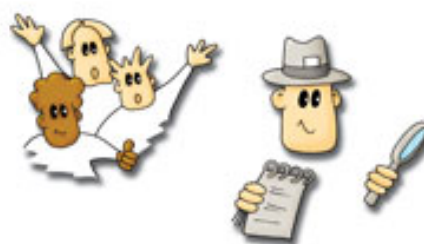
The work on making the Rs for learning more meaningful to staff and students needs to be developed further. It is hard to make the Rs relevant on a day to day basis without it seeming very contrived. Some first steps have been taken in that the lead learners have started to debate what the Rs mean and some of them are using the language with their classes. Revisions have been made to the pastoral curriculum so that the Rs are included as part of the modules dealing with successful revision. The Learning Power survey gave some interesting results and has the potential to be exploited further.

CONCLUSION

Developing this approach

The school feels that it is being successful in addressing the four core components of capacity building discussed by Fullan (2001). The research project has contributed to creating a professional learning community, the value of which has been discussed above. Another factor was

the quality of the individual staff members, that is, whether they have the required knowledge skills and dispositions. As was seen in the responses to the questionnaire and in the interviews, confidence about the initiative is high amongst those staff who have participated in a lead learner group. However, this may not be the case amongst those who have not participated. The Leadership Team will have to monitor this situation and maintain the range of professional development opportunities available.



Roving Reporter



Pairs Check

Examples of the cooperative learning structures recommended by Spencer Kagan

Fullan also identified programme coherence and technical resources as the remaining components. Programme coherence is concerned with the filtering of initiatives through a small number of core innovations. Cooperative learning has been the key item in the teaching and learning development plan for the past two years. The plan is made available to heads of department and it is expected that departmental planning will address its core themes. This helps to establish the expectation that all staff should be

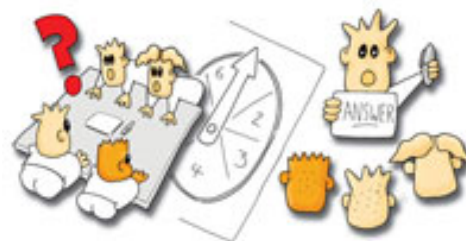
informed about cooperative learning even if they are not a lead learner. Moreover, although the lead learner groups progress more quickly, some of the content of their training sessions is being delivered to all staff, thus establishing a two-speed approach. Other examples include how one of the INSET days was traditionally at the end of the academic year but this reduced its value, as teachers had no time to put into action any of its content. It has now been moved to earlier in the year and it is now much more normal to have a choice of staff-led workshops than a whole school presentation. Gained time in the summer term has also been used for the past two years, firstly to deliver training and secondly to create departmental planning time. Similarly, performance management expectations and line management monitoring have been aligned with whole school priorities.

In terms of technical resources, investment has been made centrally in ensuring that all staff have the necessary equipment to use the cooperative structures (such as a timer and a student selector spinner) and all departments have at least one copy of the handbook and one member of the department who has been a lead learner. Furthermore, a monthly teaching for learning bulletin acts as a forum for tips and ideas and keeps the notion of constant review and improvement of teaching and learning strategies high profile. The school is also investigating how to use video clips, capturing the structures in use in the classroom. These clips would then be available on the staff drive of the network, so that anyone who was unsure about trying a structure could see it in action as well as read about it. If planning to implement this model for staff development, care must be taken to ensure that the wider aspects of capacity building are addressed. The lead learner model is a useful tool but will not work on its own.

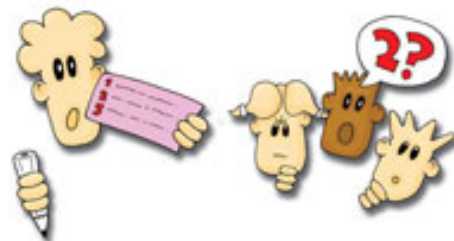
Listed below are some recommendations about the implications of planning development programmes in the future based on the school's experience to date.

Time

Hopkins (2001) states that "one cannot 'ad hoc' staff development – time has to be found for it" and this is one of the major implications of this research. Teacher learning is key to the successful implementation of the school improvement agenda, but it takes time and is not a straightforward, linear process. Instead, teachers will have to go through a period on 'unlearning' and may find the process challenging. Support has to be available and can take the form of networks or coaching. One of the strengths identified in the model was its collaborative nature, firstly for the support and secondly for the momentum to keep going. It is an important aspect of planning development programmes that they include provision for creating networks, then giving them time and space in which to operate.



Numbered heads together



Find the Fib

The teachers' felt that cooperative structures gave built in checks for participation and accountability

The lead learners were volunteers and made the commitment to the groups in

advance. However, not all staff found the arrangement convenient and so this cannot be the only form of training offered. It has to sit alongside traditional external INSET, appropriate use of staff and departmental meetings and use of gained time. There is always a tension between creating time for teachers to attend development sessions and the impact of them being out of the classroom. Pressures on supply and cover may increase in future and therefore school leaders must plan how to use time for staff development with great care. Some schools have been able to rearrange their teaching week so as to have an early finish to lessons on one day and that afternoon is then given over to staff development. This has the benefit of being for all staff, not just for volunteers. Similar creative thinking is required if staff development programmes are to be truly effective.

Quality of provision

Time is not of itself the most important issue. A higher priority must be to ensure that the development opportunities provided are of the highest possible quality and are pertinent to the teachers' context. Research has highlighted teachers' pragmatic and practical concerns and the importance of allowing them to learn both about a pedagogical approach as well as how to apply it to their own work. Maintaining the focus over the year and expecting regular feedback and evidence, both good and bad, about the process of trialling the initiative encourages the teachers to become immersed in the new learning and develop their reflective practice. One of the beneficial aspects of the model of staff development used was that it incorporated time for reflection, discussion and refocusing. Ensuring that the development is pitched at an appropriate level is vital too, because if it seems too difficult or too far away from current practice, it will not be assimilated.

Cyclical and multi-faceted range of development opportunities required

As well as being offered at different times, the training needs to be multi-faceted, so that staff at different stages can access it. In a large secondary school, with over 90 teachers, there will always be a broad range of need for training. Therefore the staff development coordinator should plan for access to sustained training, one-off workshops, advanced and beginner sessions etc. The trials of learning triads, where three staff collaboratively plan a lesson using a particular technique and then observe each other teaching it proved interesting and will be pursued. The arrival of new staff also presents a training need and attention should be paid to teaching and learning work as well as systems in the new staff induction programme. We have been lucky to be able to organise a Friday night / Saturday morning residential for new staff for the past two years. Although expensive it has proven to be worth it in terms of helping staff settle in and learn about the school ethos. Returning to the point made about quality, it is vital that this too is sustained over time. It is all too easy for the first cohort to receive a higher quality experience than subsequent ones, perhaps because the first cohort had extra funding to start off the initiative.

Supportive culture

Another major implication for school leaders is the encouragement of risk-taking as the teachers trial new approaches. Clearly, there is a potential conflict here, because schools are held publicly accountable for their results, hence the risk-taking cannot be so extreme as to be detrimental to that. School leaders can manage this process by ensuring that the new initiative is based on well-researched evidence of its value and by staging its implementation over a number of years. The shift in Ofsted inspections towards a culture of self-evaluation is to be welcomed as it gives schools more scope for experimentation and trialling new ideas, provided that it can be shown that they are

well researched and planned and meet the school's development priorities.

Plan for dissemination

One of the benefits from the leadership perspective of the lead learner model was that each department gained an advocate for the approach, who could explain it to their colleagues and anticipate how to adapt it to their particular subject area. This was a deliberate choice because of the benefits of enhanced communication and the spread of initiatives across the school, but it also meant that it was a more complex process to try to measure its impact in the classroom. If clearly measurable classroom impact were the major priority, it would probably be better to focus the training on one department, rather than the more diffuse method of one representative from each department.

Programme coherence

When planning future initiatives, attention must also be paid to how to balance the new initiative with existing ones, or how to cope with multiple initiatives. This returns to the point made above about 'programme coherence'. School leaders need to engage in strategic planning to have a clear vision of the main priorities for the coming years. This then needs to be communicated to the staff and adhered to. As far as possible, linking initiatives together is a key element to their successful introduction. If staff can understand how they fit together or develop an existing initiative, they are much more likely to be open to new ideas, permitting leaders to sustain the momentum of innovations. Also likely to contribute positively to overall coherence is an attempt to align the initiative with existing systems. Within the case study school active participation in lead learner groups is one way by which staff can demonstrate their sustained and substantial impact on the school, which is one of the criteria for progression to the upper pay spine as part of performance management. Similarly, the

initiatives of the lead learner groups are prioritised in the school development plan, which in turn is reflected in departmental development planning.

Effective communication

Connected to the above points about coherence and dissemination is the issue of effective communication. The area of communication between the representative and the head of department is crucial. If the lead learner model is to be used frequently, school leaders, whilst recognising its benefits, should also be aware of its impact on existing forums, such as the heads of department group, to ensure that they do not feel marginalised.

A research partner

The teachers in the lead learner group enjoyed the opportunity to work with other colleagues and discuss successes and problems as they trialled the cooperative approaches. On a wider scale the school has benefited from having regular meetings with other schools in the Campaign for Learning project and with the research mentors from the University of Newcastle. Being linked to other schools and to a higher education institution has given access to a wide range of research ideas and data collection methods. Advice has always been on hand, and having an outsider's perspective has helped to keep the study in focus and on track. A mentor external to the programme, with whom to share ideas, is therefore highly recommended as it enhances the variety and rigour of the methods used.

Value of student data

The research discussed earlier indicated that there can be a gap between teachers gaining an understanding of a pedagogical approach and them actually regularly using it in the classroom. It is vital to gather data about what is happening in the classroom and this often proves to be one of the most interesting, informative and useful parts of the evidence collected. Teachers are

interested in whether the students notice what they are doing in the classroom and discussion about anomalies can be very productive.

School leaders modelling learning

A final implication for school leaders in the design of staff development programmes is the value of Leadership Team participation, either as the coordinator of the initiative or as a learner alongside the staff. Not only does this give heads of department extra influence when presenting the initiative to their own team, as was commented on in the interviews, it also has the benefit of modelling to the staff as a whole the importance placed on lifelong learning. School leaders must take a high profile in participating in the learning and actively monitoring it alongside the teachers themselves.

Summary

Participating in this research project has emphasised the value of creating professional learning programmes, tightly focused on classroom practice, with sustained opportunities for dialogue and reflection. Furthermore, we believe that the lead learner model has contributed to building capacity within the school to take on new initiatives, particularly those concerned with teaching and learning.

In the past in the case study school, most of the organisation had centred around departments. Cross-curricular work had occurred on INSET days, but these are limited to five per year. Staff meetings had tended to concentrate on information sharing rather than being opportunities to reflect on practice. The lead learner group has offered a fresh model, which has increased opportunities for professional dialogue. As the model has developed over Years 1 and 2, more opportunities have been created, using staff meetings and INSET days, where participating staff lead sessions for other colleagues.

Such processes build feelings of being respected and valued and also allow staff from many different parts of the school to share their ideas and expertise, which contributes to breaking down hierarchical boundaries and creates distributed leadership. Hargreaves (1997) alludes to this as being a way to influence the culture of the school, permitting the free flow of information around the organisation, so that problems are seen as areas to be collaboratively investigated, rather than as occasions to blame someone else. The learning-centred leadership programme from the NCSL also indicates the value of collaborative learning and how facilitating it demonstrates the value school leaders place on their teachers:

“Dialogues demonstrate that teachers’ knowledge and skills are valued and seen as part an parcel of improving teaching, learning and the school.”
(NCSL, 2005: Pack 4:11)

We are looking forward to Year 3 and applying what we have learned so far to introducing and evaluating AfL strategies. Having been engaged in systematic action research now for the past two years, we believe that that will stand us in good stead as we seek to change practice amongst the staff and educate parents and students about AfL principles.

BIBLIOGRAPHY

- Desforges, C. (undated) *On Learning and Teaching in NCSL* (2004), *Learning-Centred Leadership* (Pack 5:14-27)
- DfES (January 2005) *Leading in Learning: developing thinking skills at Key Stage 3*
- Fullan, M. G. (1991) *The New Meaning of Educational Change*, London: Continuum

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- Fullan, M. G. (2001) *The role of the head in school improvement*, Available at: <http://www.ncsl.org.uk/media/F7B/52/kp-ool-evidence-fullan.pdf>
- Hargreaves, D. H. (1998) Creative Professionalism: The role of teachers in the knowledge society, London: Demos, cited in NCSL (2005), *Learning-Centred Leadership II* (Pack 2:9)
- Hargreaves, A. (1997) From Reform to Renewal: A New Deal for a New Age in Hargreaves and Evans (eds.) 1997, *Beyond Educational Reform. Bringing Teachers Back In*, pp 105-125
- Hopkins, D (2001) *Instructional leadership and school improvement* Available at: <http://www.ncsl.org.uk/media/F7B/52/kp-ool-evidence-hopkins.pdf>
- Hughes, M. with Potter, D. (2002) *Tweak to Transform. Improving Teaching: A Practical Handbook for School Leaders*, Stafford: Network Educational Press
- Joyce, B. and Showers, B. (1995), cited in Hopkins (2001) *Student Achievement Through Staff Development* (2nd Edn), White Plains, NY: Longman
- Kagan, S. (1994) *Cooperative Learning*, San Clemente, CA: Kagan
- Lin, M. and Mackay, C. (2004) *Thinking Through Modern Foreign Languages*, Cambridge: Chris Kington Publishing
- National College for School Leadership (NCSL) (2005) *Learning-Centred Leadership II*, Nottingham: NCSL
- National College for School Leadership (2003) *Summary of article by Charles Desforges: How does Experience Affect Theoretical Knowledge for Teaching?* *Learning and Instruction*, 5, pp. 385-400 (undated) Available at: <http://newportal.ncsl.org.uk/media/F7B/94/randd-engaged-desforges.pdf>
- National College for School Leadership (2002) *Leading the Management of Change: Building Capacity for School Development*, Nottingham: NCSL
- Newmann, F., King, B., & Young, P. (2000) Professional development that addresses school capacity: lessons from urban elementary schools. Paper presented at the annual meeting of the American Educational Research Association, Cited in Fullan (2001b) *The role of the head in school improvement*

Useful websites:

<http://www.teachertoteacher.co.uk/> - Website for the two consultants who delivered the lead learner sessions

<http://mysite.wanadoo-members.co.uk/andysfiles/macpan/index.htm> - Instructions for the cooperative structures used

<http://www.trackinglearningonline.co.uk> - Information about the Learning Profile questionnaire