National College for
Teaching & Leadership

Closing the gap with the new primary national curriculum

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Section one: Introduction

Implementing the new primary national curriculum poses considerable challenge for schools as they develop new schemes of work and new processes to measure progress and attainment. In the midst of this period of change schools must continue to strive to close attainment gaps between disadvantaged pupils and their peers.

The statutory guidance to the new national curriculum updated in July 2014 makes it clear that schools must continue to be rigorous in ensuring all groups of pupils are sufficiently and appropriately challenged. It states:

> 'Teachers should set high expectations for every pupil. They should plan stretching work for pupils whose attainment is significantly above the expected standard. They have an even greater obligation to plan lessons for pupils who have low levels of prior attainment or come from disadvantaged backgrounds. Teachers should use appropriate assessment to set targets which are deliberately ambitious'[1]

The requirement to close gaps in attainment for pupils from disadvantaged backgrounds is a high priority for schools. The Ofsted inspection framework asks inspectors to make judgements about the performance of all groups of pupils. The efforts that schools are making to close gaps are scrutinised and they are held to account for their effective use of the pupil premium (PP) grant.

With schools receiving increased amounts of PP funding[2] the accountability stakes are high. Increased funding mirrors the commitment by the government to ensure the poorest pupils leave school on an equal footing to their peers and Ofsted inspects schools on this basis.

This report is the result of work undertaken by 12 teaching school alliances (TSAs). The project was initiated to enable teaching schools to develop good practice which would be of value to other schools, and ensure that they continue to close the attainment gap as they undergo the challenges of implementing and embedding the new national curriculum. It contains a number of themes which emerged from the projects and is intended to be a central piece of advice containing good practice for schools to use. The findings from the research may be used in several ways by schools. For example to:

- inspire and motivate schools to engage in action research projects of their own which will lead to closure of attainment gaps

- inform school improvement planning

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[1] National curriculum in England: framework for stages 1 to 4
[2] Pupil Premium 2014 to 2015: conditions of grant

- form the basis of professional dialogue and continuous professional development (CPD) for teachers

The research work undertaken by the teaching school alliances has been written up in terms of the important themes that emerged. Research by George Abbot TSA, whilst undertaken from a a secondary perspective, does have relevance to the primary sector and has been included in appendix 2 under the themes of addressing barriers to learning, building resilience and improving literacy.

Research from Anglian Gateway TSA is on-going and is included in appendix 3.

Section two: Key themes

Although the research themes chosen by the project schools were diverse, some themes emerged as common threads. In order to help schools think about their own attainment gaps this report highlights each of these common themes and illustrates them with extracts from particular studies. A full list of research topics can be found in appendix 1.

Theme 1: addressing barriers to learning

Research at Freegrounds Infant School, part of the Wildern TSA, demonstrated how a specific needs analysis tool[3] could be used to provide tailored support to individual pupils. The school acknowledged that additional support was provided only to pupils with identified special educational needs (SEN) and wanted to address this to provide targeted support for pupils in receipt of the PPG. The school also wanted to improve uptake of extra-curricular activities for PPG children. After using assessment data to highlight where pupils were not making the same progress as their peers the needs analysis tool was used to identify the following barriers to learning: emotional wellbeing; bereavement; absenteeism; self-esteem issues; special educational needs and lack of parental support. Thirteen pupils in Key Stage (KS) 1 were identified as needing additional support and their progress was tracked.

Specific interventions were put in place with the aim of removing the identified barriers to learning including: 1-1 support; emotional literacy support assistant (ELSA) sessions for emotionally vulnerable children; support for children to attend after school clubs and close family liaison to support attendance issues. The effectiveness of each of these interventions was monitored.

Research by the Together to Succeed TSA in Hartlepool focussed on how schools with a track record of closing gaps successfully identified, diagnosed and dealt with the needs of individual pupils. This is in contrast to applying less successful strategies which pay attention to the grouping of the child for example: SEN, English as an additional language (EAL) or free school meals (FSM) rather than getting to grips with what is stopping each child from learning and then putting in specific tailored interventions.

Theme 2: building resilience

At Meredith Infant School, part of the Portsmouth TSA, research was based on the desire to improve outcomes for all pupils. The school has no significant group of learners making less than good progress but recognised that as children moved through KS1 their

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[3] See tools section of this report

independence skills, ability to become absorbed in learning and resilience within challenging situations lessened. Children were sometimes passive and some teaching at the school compounded this. Ofsted commented that 'in a small minority of lessons teachers spend too long explaining what to do or interrupt lessons unnecessarily when children are working on their own to give further guidance'.[4] The research focused on building pupils' resilience as learners. By improving their learning resilience the school aimed to fulfil its vision of making a difference to the lives and future successes of each child. The work of Guy Claxton in Building Learning Power (BLP) underpinned the study[5] and impact was measured over an initial six month period.

Whilst Claxton's four domains of learning (resilience, reflectiveness, reciprocity and resourcefulness) were introduced to pupils and made relevant by the attribution of puppet hero characters,[6] this research focuses upon resilience only.

Theme 3: using a multi–sensory approach

A number of schools involved in the research looked at how making use of kinaesthetic resources might improve outcomes for children in acquiring basic skills, particularly in the acquisition of basic number concepts and improving children's writing and application of correct spelling.

Teachers at Bedonwell TSA taught mathematics using a multi-sensory approach in order to appeal to a group of less confident pupils. The group selected had not picked up on basic number and calculation skills such as counting objects, conservation of number, reading and writing numbers, counting forwards and backwards, basic addition and subtraction and place value. The school made use of a 12-week structured Numicon programme[7] with the aim of improving pupils understanding of basic mathematic concepts; boosting pupils' confidence in mathematics and closing gaps for targeted pupils.

Teachers at Towngate Primary School, part of the Outwood TSA, focused upon making use of kinaesthetic apparatus (making use of Numicon) to improve the learning for a group of under achieving pupils in Year 4. Electronic and concrete materials were involved. Pupils were selected on the basis of their acute lack of confidence to recall simple number facts especially regarding times tables. Autumn assessment data was used as a baseline.

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[4] Ofsted December 2013 Meredith Infant School

[5] Link to the Building Learning Power website

[6] resilience became Tough Turtle, resource fulness became Solver Snail and so on

[7] Numicon – a multi–sensory approach to teaching mathematics Link to the Numicon website

Activities were chosen for their appeal to children with less developed visual and auditory learning strategies who rely more upon physical manipulation, trial and error.

The programme was based on the three main areas of learning for maths: counting, calculating, and sequencing patterns and numbers. The children were encouraged to learn maths language, understand mathematical relationships, do calculations without counting and make connections to use and apply their understanding of maths.

Four schools were involved in the project undertaken by the Carmel College TSA where teachers were concerned about the inability of many pupils to transfer skills taught in discreet lessons to their work in other areas of the curriculum. For example, pupils may score highly in a spelling test of high frequency words but fail to spell these correctly in their writing.

Similarly, though simple punctuation (sentences demarcated by full stops) is taught from the very early years, this often does not become embedded even by the end of KS2. Pupils performing well in sentence level work still fail to apply this skill in their free writing and when writing in other areas of the curriculum.

The research undertaken involved a kinaesthetic, tactile approach to learning aimed at helping children to embed their learning and thus become more successful in applying skills to a range of contexts.

Teachers wanted to find out whether making use of a demarcation technique, using Blu-tack to indicate where a full stop should go and to improve spacing between words, would impact positively upon children's writing.

A second study, to find out whether using a competitive word sorting approach using colours for different words was a better spelling strategy than the traditional look, say, cover, write, check approach to learning spelling had very limited impact. Mixed ability groups of children from Year 1 to Year 5 were involved in this study.

Research in the North Wiltshire TSA used Neil Griffiths' Storysack[8] approach to design and deliver a bespoke intervention in mathematics and also drew upon the work of Hattie[9].

Schools set about creating a set of materials similar to those used in 'Storysacks' to complement and draw out the mathematical objectives (linked to the new curriculum) from four texts.[10] The intention was to discover if by producing resources, which could be

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[8] Neil Griffiths is a former primary head teacher, a prolific children's author, professional storyteller and the inventor of the multiple award winning "Storysack."

[9] See Hattie, 2012, Visible Learning for teachers: Maximising impact on learning London, Routledge

[10] Jean-Luc Fromental and Joelle Jolivet 365 Penguins, April Pulley Sayre and Jeff Sayre One is a Snail and Ten is a Crab, Anno Masaichiro Anno's Mysterious Multiplying Jar and Elinor Pinczes 100 Hungry Ants

delivered to FSM students by either a teacher or a teaching assistant, the gap in progress between FSM and non-FSM students could be closed.

Four schools from the alliance took part mainly from Year 3 to Year 5 with one pupil from Year 6.

Schools selected a cohort of between 5-7 pupils, (pupils already receiving direct intervention for SEN or any other reason were not included). Where the percentage of FSM students was small it was decided that non-FSM students would be added to the project. Data based on teacher assessment and optional Scholastic Aptitude Tests (SATs) was collected before and after the programme which lasted for 12 weeks.

Theme 4: investigating outstanding practice

Through scrutinising the Ofsted data dashboard[11] the Central Bedfordshire teaching school partnership (CBTSP) identified the gaps between the cohort and the disadvantaged groups in outstanding schools in Central Bedfordshire. The partnership discovered that in lower schools the gap was significantly less than in other schools and in some areas vulnerable cohorts performed better than the rest of the cohort. In middle schools this gap was more evident, but still smaller than the gap in schools that were not outstanding.

The research made use of questionnaires and interviews to investigate the outstanding practice used by the identified schools to close gaps in attainment with the aim to disseminate good practice across all schools in Central Bedfordshire. The research uncovered a menu of good practice which schools' may wish to adopt when looking at their own gaps, particularly in relation to the new national curriculum and in the absence of familiar levels of attainment.

Theme 5: making effective use of classroom support

Research at the Wildern TSA focused on children from two schools for whom a significant gap had opened between their existing and expected attainment in writing. More specifically teachers wanted to examine the gap in children's writing skills which exists at KS1 and grows as the children move towards KS2.

Schools were concerned that the role of the teaching assistant had evolved from one of providing pastoral support to being important players in the teaching process. The research focused on improving the subject knowledge and teaching skills of teaching assistants (TAs) in particular: marking work, assessing progress and providing written

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[11] dashboard.ofsted.gov.uk

feedback and setting high expectations for pupils. Training for TAs also focused on terminology, phonics, purpose, knowledge and skills.

Schools hoped that by improving these skills in TAs there would be a positive impact upon the achievement of pupils.

Theme 6: improving literacy

Research at College Park Infant School, part of the Portsmouth TSA, focused on closing the gap between girls and boys in reading. The research explored effective approaches and strategies that have impacted on attainment with the aim of highlighting good practice that could be transferred elsewhere.

Research, aimed at improving spelling in schools within the North Liverpool teaching school partnership (TSP), involved exploring a range of models in order to develop creative approaches to improve the quality of spelling in primary schools.

The schools involved wanted to ensure that spelling is taught consistently, using a range of interactive teaching techniques, IT resources and cross curricular opportunities. The aim is for children to be confident and independent using a range of approaches to spell successfully across the curriculum whilst also broadening their vocabulary range.

Section three: Outcomes and impact

All schools involved in the individual research projects demonstrated passion in relation to making a difference and remain steadfast in their commitment to continue to close attainment gaps. It is hoped that when exploring the outcomes and impact, schools will find strategies that they may be able to use in their own contexts to make a difference to the most vulnerable pupils.

The projects used a variety of methods to measure outcomes and impact. Some presented data evidence for before and after the projects and others stated improved engagement or attitude to learning as being the satisfactory outcome. Most of the projects were aimed at closing the gap with a target group of pupils who were in receipt of pupil premium funding or were vulnerable in some other way. Some schools have used gender differences as the basis of their studies.

Whilst impact is variable across the project schools, several aspects of good practice are common to maximising the impact of many of the research projects. Schools may want to adopt or adapt these practices when considering how to close their own learning gaps in the light of the new curriculum.

Theme 1: addressing barriers to learning

Data from Freegrounds Infant School is reported in the tables below. The project took place between autumn term and spring term 2013-14:

Table 1: Year 1 data

Year 1	Pupil premium pupils progress in average point score	Non-pupil premium pupils progress in average point score
Reading	5.8	5.2
Writing	5.6	5.6
Maths	3.2	3.7

Table 2: Year 2 data

Year 2	Pupil premium pupils progress in average point score	Non-pupil premium pupils progress in average point score
Reading	8.8	9.1
Writing	6.7	6.8
Maths	7.3	7.7

No baseline data was supplied so it is not possible to draw conclusions about how much (if at all) gaps have been narrowed. However, it is possible to see that the levels of progress in writing are similar for both groups in both year groups. In Year 1 the pupil premium group made more progress in reading than the rest of the cohort.

The school noted that for children who were emotionally vulnerable a high priority was given to providing ELSA support and that this, coupled with one-to-one reading every day, had the most significant impact upon the achievement of the pupils involved.[12]

Research by the schools involved in the Together to Succeed TSA revealed four important aspects of effective practice:

- how the children were identified

- diagnosing need

- actions taken

- impact recorded

The way in which children were identified for support is important to the process. Attention to 'grouping' (pupil premium and SEN and EAL) rather than a focus on individual need could lead to a 'scatter-gun' of intervention, instead of pinpointing the first step towards narrowing learning gaps[13]. Successful schools identified barriers to learning and took steps to address these before diagnosing and applying particular interventions and took a whole school approach to securing positive outcomes for individual pupils.

In all cases schools tested the impact of at least one intervention. Where the gap was small, schools evaluated exisiting inteventions through a rigorous process of recording impact and ceased those that were not having an impact. In one school this took the form of a mantra: train, test and track which was followed for all intervention programmes. Staff were identified for training because of interest and enthusiasm; the children were tested in and tested out of the programme; and their progress afterwards was tracked.

In addition to this a further three elements of good practice emerged as being influential in closing the gap in children's attainment:

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[12] The provision of emotional support to remove learning barriers is a theme or element of success for many of the projects and an important factor in making a difference and closing attainment gaps.

[13] Research from a secondary school in the George Abbot TSA confirmed this: "i t has been clear that the range of specific student need within each classroom can be significant. In order to be effective, class teachers need to understand each need in order to adopt a range of strategies in order to meet these needs. In many cases, SEN registers are organised according to the specific Code of Practice stage which can lead to teachers seeing each cohort of students as either SE, SA+ or Statement… there are many benefits to be gained from grouping these students according to the assessment of their specific needs."

- **Leadership:** leaders in schools with small or no gaps had a commitment to equity of provision. Leaders seemed consciously to align all policy and procedures with their determination to ensure successful outcomes for every child.

- **Stability around the child:** anything beyond the child's control was accepted and effort was put into compensating. Gaps were often diagnosed as due to lack of schooling or personal circumstances. Protocols and policies were established to settle children into school quickly, evaluate learning and emotional needs swiftly and intervene gently. It was characterised by an attitude expressed as, 'offering an endless supply of "last" chances'.

- **Learning**: successful schools demonstrated detailed knowledge about what works well and were willing to tackle the most intractable of problems. An attitude expressed by one practitioner as 'no child leaves the school without 'getting it' today' pervaded the approach. CPD was matched to the learning needs of the weakest children and sought new solutions to challenges as they emerged.

Theme 2: building resilience

Introducing BLP at Meredith School has challenged the school to think deeply about outcomes for children. Parents, pupils and teachers valued the approach which underpinned the new vision of the school.

In measuring the success of the project parents were asked whether they had heard children speaking about being tough or sticking at their learning. The results of 25 parent surveys were satisfying as so many parents commented both positively and insightfully, a typical response included:

> '…has mentioned sticking with his learning and trying it even if it is hard'.

Data gathered from pupil attitudinal surveys showed that 65% of children understood the concept of resilience through the role of 'Tough Turtle' well and were able to link the notion of 'not giving up/staying tough' with resilience in learning. Of these 30% were beginning to express the concept of resilience more clearly, using terms such as 'persevere' and 'sticking at it'.

Table 3: Data from pupul attitudinal surveys

Pupil understanding of resilience	% of pupils
Can give a limited or no explanation of resilience	35
Can give a developing explanation of resilience	45.5
Can give a confident explanation of resilience	19.5

Pupils in Years 1 and 2 understood that 'Tough Turtle' symbolised an attitude to learning.

Teachers monitored the process by logging reasons for awarding 'Tough Turtle' stickers. This showed that most stickers had been given out to reward the way in which a child had approached and completed a task. A mid-year review of resilience showed that the school had developed a shared language of 'sticking at it'. Comments from staff included:

> 'It's giving the child the power to keep going… they can look at their peers and adults and be able to think if they can do it I can do it'.

This research has been an exciting venture for teachers at Meredith School and provides food for thought for other schools that are looking to close learning gaps through improving pupils' attitude to learning. Through this approach the school is aiming for every child to meet at least age related expectations. Equally as important is the vision to develop habits and strategies which will equip pupils to cope with future challenges.

Theme 3: using a multi–sensory approach

Several alliances explored the value of using a multi-sensory approach to tackle closing attainment gaps for vulnerable pupils. Schools wanting to use a similar approach will notice from the findings that outcomes were variable. However, in most projects the ability to use trial and error, to rehearse, visualise and practise was important to improving confidence and outcomes. The use of talk[14], the concept of pre-teaching, teaching children in mixed ability groups and an element of competitiveness are all highlighted by Outwood TSA as important to improving outcomes for pupils.

The report from Bedonwell TSA also offers suggestions for how the research might be successfully carried out in other contexts. Interestingly, in contrast to Outwood TSA, the school suggests placing children in groups of similar ability to maximise success. It is expected that these different approaches will generate useful discussion when schools consider the best way to set up their own targeted interventions.

The concept of rehearsal was important to improving outcomes for pupils in schools involved in research by Carmel College TSA. When using Blu-tack to demarcate sentences one child said:

> 'It is a bit easier than just putting them (full stops) in, because I moved it once or twice because I put it in the wrong place and when I was reading it, it didn't make sense.'

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[14] See also research by Wildern TSA where enabling boys to draw and talk as part of the writing process had a positive impact upon motivation.

At Bedonwell TSA, although the school's target for improving progress and closing gaps were not all achieved, it reported a significant increase in the number of assessment areas secured by the children. The school was also able to evidence an improvement in the confidence of pupils engaged in the intervention. Comments by TAs involved confirmed the improved confidence of pupils:

> "He often could do the activities but needed drawing into the task. Barriers would go up and he would say he couldn't do it. By the last few weeks, he had far more enthusiasm and was confident to have a go at new activities."

Table 4: Average point score (APS) reception data

Reception	Summer 2 APS
Average for reception	2.25
Average for intervention group	1.75
Gap	0.5

The target of at least 2 APS progress for the intervention children was not met and there is a 0.5 APS gap between the year group as a whole and the intervention group.

Table 5: APS Year 1 data

Year 1	Spring 1 APS	Summer 2 APS
Average for Year 1	8.38	11.9
Average for intervention group	6.7	9.6
Gap	1.68	2.3

The gap widened by +0.62. The gap has grown and the target to reduce it to less than 0.9 APS has not been achieved.

Teachers reflected that it was not possible to know whether the gap would have been wider if the intervention had not taken place. They also noted that a number of the pupils involved also fitted into other vulnerable groups such as poor attendance or special educational needs and disability (SEND) which may have impacted on progress.

Table 6: APS Year 2 data

Year 2	Spring 1 APS	Summer 2 APS
Average for Year 2	13.41	17.49
Average for intervention group	10.5	16.8
Gap	2.91	0.69

The gap narrowed by -2.22. The target of closing the gap to less than 0.9 was achieved. Intervention pupils made APS gain of 6.3.

Table 7: Maths questions responses

	% Happy	% OK	% Sad
Before intervention	61	27	12
After intervention	63	35	2

Pupils indicated their response to three questions: How do you feel about maths lessons? How good do you feel at maths? Does your teacher think you are good at maths?

Visual resources helped children to 'have a go' and visual representations aided retention. Children began to automatically know some number bonds and were also seen to develop a problem solving attitude to mathematics.

There are some elements that seemed crucial to the success of the intervention which might be considered by other schools wishing to undertake a similar piece of work:

- selecting pupils carefully for example, good attendance, having similar ability children in one group,

- careful selection of staff to deliver the intervention with support for administration tasks,

- having a designated location to carry out the interventions and sufficient resources,

- providing support to TAs for completion of paperwork and the planning of activities,

- children should be very familiar with the apparatus.

Teachers in the Outwood TSA project noticed that in six weeks, with a minimum of three sessions each week, the children had resoundingly gained in mathematical confidence. For example, when using the apparatus, children were able to recognise a half as 5/10ths and quickly became confident in using the language of tenths as well as in selecting equivalents for quarters and eighths. Most children gained one to two points of progress in this short space of time. Their mental recognition of numbers and the ability to add and subtract two digits and three digits had been much improved.

Several features of this study made an impact upon its success:

- **the use of talk** - children were encouraged to verbalise their thinking before recording their work. This reinforced learning and provided a valuable link in the step to working with numbers in an abstract way. Similarly when working in groups, children were encouraged to develop talk in relation to mathematical concepts

- **the concept of pre-teaching** - activities were selected with whole class planning in mind so for instance arrays were explored using Numicon in a small group arena the week before it was taught to the whole class

- **working in mixed ability groups** - less able students were grasping the concept more clearly from children who could see the patterns more readily

- **an element of competitiveness** - for example, when children worked in pairs to build groups of 6 at a time and explore various ways to make 49

Across the schools involved in the temporary word spacing and punctuation study in the Carmel College TSA project, the outcome was positive. There was a noticeable improvement in the number of correctly punctuated sentences written by children after the intervention (without the use of Blu–tack). Putting in spaces between words in sentences became imbedded for most of the children involved in the study.

Table 8: Does a Blu-tack writing strategy reduce errors in spacing?

	Average reduction in errors Year R	Average reduction in errors Year 1	Average reduction in errors Year 2
School H		33%	
School B	3.9%	15.6%	34.2%
School G	33.3%		

Table 9: Does a Blu-tack writing strategy reduce errors in punctuation?

	Average reduction in errors Year R	Average reduction in errors Year 1	Average reduction in errors Year 2
School B	6.9%	12.7%	29%
School G		18.9%	
School A		63.2%	

As in the other research projects in this theme teachers found that the use of physical apparatus helped to focus the children on their writing. Children were engaged and motivated to develop word spacing and sentence accuracy and keen to improve their writing stamina. They became conscious of the number of punctuation and word spaces in their independent work and were proud of their achievements. In response to questions asked by teachers one child said "it helped me do my best writing".

The opportunity for rehearsal was recognised by teachers as a factor in achieving good outcomes. Teachers anticipated an even greater impact if the strategy was adopted consistently across all classes in foundation stage and KS1. For schools intending to trial

this approach teachers also noted that it could be developed to include more complex punctuation as the children develop their writing and bring positive outcomes for less secure pupils in KS2.

In common with other research projects in this theme, the research undertaken by the North Wiltshire TSA provided children with lots of opportunities for oral rehearsal and the physical manipulation of objects.

The table below gives the average APS gains for pupils who engaged in the project matched against those who were not involved.

Table 10: APS gain for pupils engaged in the project

	Average Average Point Score gains for pupils on the programme	Average Average Point Score gains for pupils not on the programme
School A	3.5	2.83
School B	2.5	1.02
School C	2.3	1.8

Teachers were pleased with the gains made by the pupils involved and also in the increased levels of pupil confidence in mathematics. Pupils' use of mathematical language also improved.

It was noted that variability in approach by TAs delivering the initiative and different school environments may have had an impact on the difference in scores between schools. It was also suggested that the programme is best delivered to small groups of between two to four pupils.

Theme 4: investigating outstanding practice

Questionnaires and interviews with staff from outstanding schools provided a wealth of information about outstanding practice in closing learning gaps for the CBTSP. The impact from good practice unveiled by this research is evident in the successes of the outstanding schools which provided information for the research. These schools had only small attainment gaps and in some of the lower schools involved the disadvantaged cohort often performed better than the cohort as a whole. CBTSP aims to build upon this evidence by disseminating the findings of the research to all Central Bedfordshire schools. It is interesting that some of the good practice the study reveals is reiterated by

other pieces of research in this project[15]. When planning to close gaps in their own settings schools may benefit from focussing on these common high impact themes.

Staff who were nurturing and supportive, with an in-depth understanding of the individual needs of every pupil, were able to devise tailored interventions rather than fitting the child to an intervention staff are already trained to deliver. Interventions were wide ranging (social, emotional and behavioural interventions were equally valued), had a short time span, took place on a regular basis and were reviewed every six weeks. Children were not allowed to miss out on core subjects for interventions.

Moderation, both internally and externally, was thought to be effective as was effective tracking with accessible data systems (one school inputted data for their Year 1 cohort five times in the year to ensure any gaps were identified).

Theme 5: making effective use of classroom support

The goal to improve confidence and subject knowledge for TAs, enabling them to become powerful role models for the pupils is ongoing within Wildern TSA. There has however, been a positive impact upon practice so far. TAs have had training in how to teach phonics, have benefitted from work sampling, are more skilled in marking work, and can move learning on by providing written feedback which demands a pupil response. Enabling pupils to be actively involved in marking was part of this process of improving practice and outcomes. The level of expectation held by TAs has increased, impacting positively on more able pupils who are now appropriately challenged and pupils with SEND who now have more effective support.

Allowing pupils to have a choice in the writing subject matter (boys at Hazel Wood Infant School used art as a stimuli, using drawings and talk to explore ideas) also had a positive impact upon motivating pupils to write.

Theme 6: improving literacy

College Park Infant School used a multi–faceted approach to closing the gender gap between boys and girls in reading. The study explored effective approaches and strategies that have impacted on attainment.

Celebrating progress, however small, and building positive relationships is an important practice at College Park. Adults from across the school, including administration and

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[15] See research from Together to Succeed TSA, Wildern TSA, Portsmouth TSA, George Abbot TSA and Outwood TSA

caretaking staff, gave time regularly to read with children and promote the importance of good literacy skills.

Making sure support staff are confident and competent is important and has had a positive impact on learning.[16] Support staff with sufficient levels of skill were deployed to lead effective guided sessions. A commitment to modelling technical language by staff and an expectation that pupils use correct terminology is embedded throughout the school.

Other factors which have contributed to closing the gender gap for boys include using effective tracking systems and a reading club at which guests, including male colleagues, staff friends and family and members of the community, share texts with pupils. The sessions, aimed at independent learning and pupil voice, were predominantly pupil led with the teacher facilitating and challenging as appropriate.

Although the research at North Liverpool TSP is on-going, co-ordinators report that there has been a positive impact on baseline data. Factors affecting this include:

- raised teacher confidence and subject knowledge of spelling in interactive multi–sensory ways in support of different learning styles

- high quality teaching of spelling through a review of the spelling curriculum and timetabling for teaching

- new dictionary resources and the introduction of a new marking policy

- positive parental support through sharing classroom practice, providing resources for homework and directing parents to websites and applications

- clear guidelines for the teaching of spelling across the schools involved with standardised testing to ensure accountability

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[16] see also Wildern TSA

Section four: Next steps and recommendations

The following recommendations arise from this report.

For schools

Collaboration between schools is vital if the goal of closing the attainment gap for all pupils is to be achieved. It is hoped that this document will provide the stimulus for developing effective partnership as schools design their own research or make use of the findings to generate an impact on closing attainment gaps for vulnerable children in their own settings.

From the research it would seem that when planning programmes to close gaps in the future, schools need to be mindful of **how they identify individual pupil needs.** There is evidence in a lot of the research presented that sensitive and accurate identification of individual need is important to the process. Schools that address this rather than grouping children together, for example 'the FSM group', appear to have more success at closing gaps.

In a similar way, schools with a history of closing gaps made **the early identification of barriers to learning** part of the whole school vision. Identifying why children were not learning and then putting in compensatory measures without attaching blame to the child almost became the moral purpose for successful schools.

Put children at the centre of the learning process by involving them in marking work alongside the teacher, or enable them to decide upon a stimulus for writing or agendas for reading clubs. Schools that established **high levels of pupil self-esteem** by celebrating even the smallest of gains or by the practice of 'pre teaching' a concept or skill to a group or individual prior to whole class teaching, were able to demonstrate positive outcomes for pupils. As were those which concentrated on improving pupils' attitudes to learning.

When considering how to proceed in the light of the new curriculum the research suggests that there needs to be a **whole school approach to closing gaps**. Equity of outcomes and provision for all pupils should be part of the whole school vision and driven by effective leadership at all levels. Just having 'a bolt on' approach to interventions is not successful and could waste resources. It is not difficult to conjure up images of children who have been involved in 'every intervention going' but still remain stuck.

In addition to this, evidence from the research indicates that it is the **involvement of all stakeholders** including parents that makes the difference to the work that schools do to close learning gaps. Schools cannot effectively close learning gaps in isolation. It is the dogged determination to engage with families even to the point of identifying and assisting with parents' own learning gaps that seems to be a vital ingredient in the process.

For the Department for Education

The capacity for schools to engage in on-going research is important in the process of eliminating learning gaps for the most vulnerable pupils.

Schools, through the support of teaching school alliances and national leaders of education (NLEs), should be encouraged to see work to close gaps as central to their core purpose. It may be effective from an economy of scale point of view for schools to combine PP funding to gain maximum advantage for pupils.

Further research targeted at the needs of the very youngest of children (pre-nursery) may be helpful. Schools with provision for two year olds may have an important role in this.

Family engagement is a vital element for permanently narrowing learning gaps. It would be useful if schools with effective parent partnerships could share their strategies for the benefit of all pupils.

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Appendix 1: Participating teaching school alliances

Table 11: Participating TSAs

Teaching school alliance	Research focus
Anglian Gateway TSA (see appendix 3)	To investigate the use of technology to accelerate the learning of a targeted group of students in order to close their attainment gap in mathematics.
Bedonwell TSA	To investigate whether a 12 week structured Numicon intervention programme can close the attainment gap in mathematics for vulnerable groups.
Carmel College TSA	To improve children's writing through a sentence spacing approach to demarcate sentences and other simple punctuation. To improve the application of correct spelling using a competitive word sorting game.
Central Bedfordshire TSP	To investigate the strategies and interventions used by outstanding schools to close the gap between vulnerable groups and their peers.
George Abbot TSA (see appendix 2)	To improve literacy, focussing specifically on the quality of written communication and grammar, punctuation and spelling. To develop the use of a pastoral mentoring intervention programme to tackle underachievement in Year 11. To close the gap for a middle ability group of Year 9 PP students by developing motivation and attitudes to learning. To make staff more aware of the needs of students on the SEN register and the strategies that have the most impact on securing their learning (included as footnote on page 12).
North Liverpool TSP	Improving spelling for a target group of children in Years 1, 2 and 3. Exploring a range of models in order to develop creative approaches to teaching which will improve the quality of spelling in primary schools.

Teaching school alliance	Research focus
North Wiltshire TSA	To create a set of resources which will close the attainment gap in mathematics by addressing gaps in language development.
Outwood TSA	To close the gap in mathematics for pupils entering KS2 at level 2C or below through improving number recognition and mental calculation strategies using electronic Numicon resources and concrete materials.
Portsmouth TSA	To explore how teachers are closing the gap in reading for pupils in KS1. To explore effective strategies to encourage children in the early years foundation stage (EYFS) and KS1 to become independent and resilient learners.
Together to Succeed TSA	How will teachers close gaps in learning when assessment is not by progressive levels?
Wildern TSA	To improve outcomes for pupils by: • providing training and development for teaching assistants with specific reference to increasing their confidence and effectiveness in providing feedback to pupils and assessing their progress, • examining the writing journey to develop teaching strategies which engage and motivate children and increase their confidence and self–awareness as writers, • setting up a portfolio of ideas for peer assessment, target setting, marking and feedback for writing. To improve outcomes for pupils by exploring barriers to learning for pupil premium children and monitoring the impact of interventions.

Appendix 2: George Abbot teaching school alliance

Addressing barriers to learning

The purpose of the research was to examine the impact of using a pastoral-based mentoring system to address barriers to learning. A board[17] was set up in the staff room to share ideas and monitor progress. Members of staff including mentors could add successful learning strategies to the listed students. A Venn diagram was drawn and pictures of students moved into interlocking sections depending on successes over the two terms of the intervention.

Students and staff completed the programme with the majority of pairings managing to meet once each week for twenty minutes. Meetings were used to set achievable subject based tasks, review and prioritise work, to provide coaching on how to deal with difficult situations and to be an advocate for the mentee.

The school reported that the study had limited impact, reflecting that greater impact could have been achieved if:

- the staffroom board had been referred to more frequently in weekly meetings,

- teaching assistants with more time to work with mentees were involved as mentors,

- more time was provided for mentors to share ideas and strategies,

- gauging the feelings of parents would have added value to the project,

- mentees were matched to mentors in terms of their educational needs.

Building resilience

Research resulted from findings from a pupil attitude survey which revealed that scores for PP pupils in Year 9 were significantly lower than their non-PP peers in terms of independence and preparedness to learn.

The school referred to evidence from other schools which had used rewards successfully and a case study from another school where students had been monitored and mentored to perform better in English. Impact was be measured through:

- motivating students to learn through monitoring, mentoring and rewards,

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[17] Staffroom Road to Success Board where photographs of pupils are placed on a Venn diagram according to their attainment could be of assistance in focusing on under achievement. The immediacy of the board means that it can be referred to throughout the day and as a discussion point during meetings.

- improved behaviour and effort, alongside an improved attitude to learning,

- an improvement in the rate of progress of students involved compared to non PP and the cohort as a whole,

- improved progress made by pupils in the upper ability band,

- an increase in the take up of extracurricular activities.

The involvement of other colleagues, as well as direct communication with parents, helped support the progress the students made. Overall a genuine focus on the student through various ways to motivate them to take responsibility for their own progress did have an impact on learning in the short term.

Improving literacy

The research focused on the quality of written communication and spelling punctuation and grammar (SPAG) within geography lessons using a control and experiment class.

A report by Ofsted[18] emphasised the urgent need to improve literacy within the secondary curriculum.

Links were made with primary and secondary schools to share good practice. Primary colleagues voiced concerns that although every lesson in Year 6 had a heavy focus on literacy this was not as prominent when children transferred to secondary school. One primary school mentioned the importance of spelling tests and neat handwriting. Top tips for correcting spellings were agreed upon and a marking key for correcting SPAG was introduced. Teachers found that strategies put in place as a result of this research had a short term impact. Some elements were very successful and could be used by other schools wishing to embed literacy across the curriculum to close gaps:

- student self–assessment before handing in books. Students and teachers both benefited from this,

- the use of literacy wall posters and important vocabulary mats (the mats had a greater impact than the wall posters),

- literacy learning objectives displayed below the geography learning objective,

- the introduction of spelling tests,

- the wider engagement of parents through this initiative.

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[18]Improving literacy in secondary schools: a shared responsibility: Link to the Ofsted website

A much greater impact could be achieved if literacy is embedded as an important focus for every lesson.

Appendix 3: Anglian Gateway TSA personalising learning

The work of the alliance focused on investigating whether the use of technology could accelerate the learning of a target group of students in order to close their attainment gap in mathematics.

The project involved identifying the important constructs in the new national curriculum; testing students at the beginning of the intervention; developing teaching modules using outstanding Ofsted criteria and validated by external moderation; the videoing of teaching points, to allow replay whenever appropriate to support students, accelerated progress. Video clips are between two to five minutes long and played three times each week to the target pupils during 'closing the gap' time (accelerated progress would be measured against the progress made by students of a similar profile for the previous year). The study, which is on-going, involves a target group of children and a control group. See the Tools section for an example lesson plan.

Tools

Pupil Premium pupil Information and targeting need sheet used by Freegrounds Infant School

Child's Name	Year Group	Class		
Expected progress EYFS by end of spring term Year 1 by end of spring term Year 2 by end of spring term				
Attainment and progress	Level on entry to year group	Amount of sublevels progress in previous academic year	Level at end of autumn term	Number of sub levels across stage to date
reading				
writing				
mathematics				
Are there any areas where the child is either not attaining the expected level/progress?		What support could be put in place to help these children achieve the expected levels/progress?		
Are there any aspects of Preschool Education (PSED) that affect learning?		What could be put in place to support this child with development in this area?		
What clubs does the child attend?		Are there any clubs/hobbies/interests the child would like to review?		
Agreed support				

Case Study - Together to Succeed TSA - Reading

Background

The school was aware that some of the children rarely or never read at home with an adult. No matter how often the importance of this home learning activity to children's success in learning was explained, it never made a sustained difference. The school also noted that for these same children, progress in reading accelerated as they moved through the school and this suggested that once children could read without support they 'did it for themselves'.

Identifying Target Children

Rarely heard read at home

Low reading assessment level

(cf age expectation)
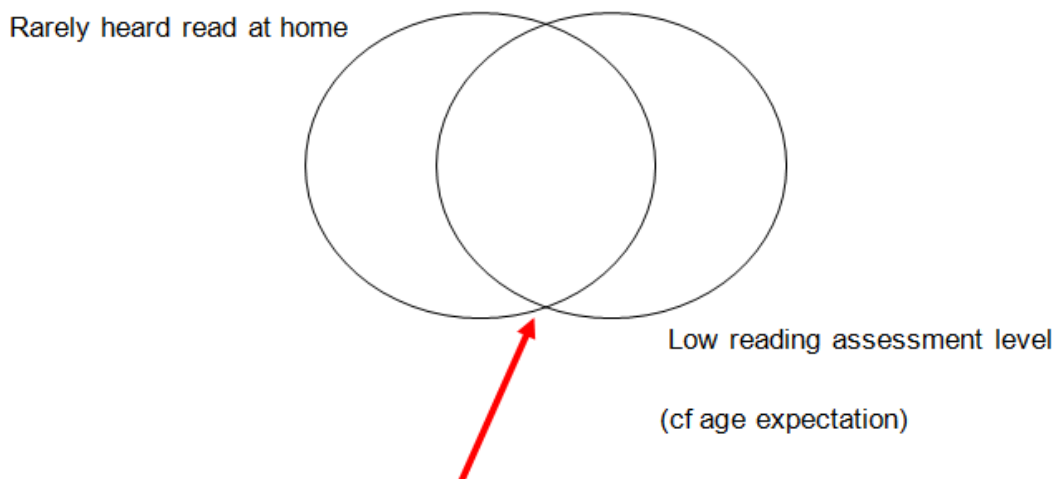
Children were identified if they met both criteria.

A disproportionate number were children who attracted PP funding (56% of identified children were in receipt of pupil premium, compared with only 20% of children in school).

Action

The school allocated an adult in school (any adult – kitchen staff, the caretaker, teachers, administrative staff, learning support assistant, even the head teacher all got involved) to read to the identified children. They were careful to match personalities as best they could. The pair then agreed a time to meet up during the day for about ten minutes, when the child would read with the adult. All the adults involved received training in 'paired reading' techniques. Each child had a pre-test and post-test – reading age and comprehension age scores. The initial test phase of the initiative was for one term.

Outcome

In the initial three months, on average, children made ten months progress in reading and eight months progress in comprehension. However, the school also noticed that the children involved were more confident. They were happy that someone was interested in their learning and progress. In some cases this positive relationship with an interested adult led to other learning activities, such as testing tables knowledge or checking spellings.

After the first term it was felt beneficial enough to continue, and the school continued to test progress of a sample with reading and comprehension age, and while progress diminished from the initial 'spurt' all children continue to make accelerated progress.

Closing the Gap Research Project Anglian TSA Gateway Lesson Plan

Table 12: Video lesson plan 1

Learning objective: To subtract a single digit number from a two-digit number crossing a tens barrier.	
Input: Instructions for child: **'Get** straws bundled in tens and ones. With the straws make 72. It should look like this... Show image of straws in tens and units. 'Now I'm going to subtract 5 from 72'. Model taking away the two loose straws. 'Oh no, there are no more units left. I'll have to take the rest away from one of the tens. I need to partition this bundle of ten into units.' Model doing this as you talk. 'Now I can take away the rest. I have already taken away two so that leaves three more to take away. How many do I have left now? I need to count them.' Model counting the straws in tens and units. 'I now have 67 straws. This means that 72 subtract five equals 67' Write this number sentence. 'Now we are going to repeat this with another example. With your straws make 84. We are going to do 84 minus 8.' Write this calculation down. 'Now we are going to take away 8 straws.' Model taking away the four loose straws. 'Oh no, there are no more units left. We'll have to take the rest away from one of the tens. We need to partition this bundle of ten into units.' Model doing this as you talk. 'Now we can take away the rest. We have already taken away 4four so that leaves four more to take away. How many do we have left now? We need to count them.' Model counting the straws in tens and units. 'We now have 76 straws. This means that 84 subtract eight equals 76' Write this number sentence.	**Resources**: Art straws bundled in tens and ones Postcard 1
Postcard question: 'Pick up the postcard. Choose one question to complete. Use the straws to work out the answer. Show your work to me when you have finished. If you have watched this video before then make sure you choose a different question.	**Vocabulary**: Partition, subtract, minus, take away, tens, units

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