ECARDA

# What the Evidence Suggests

## 2017 Wilkin Chapman Grimsby Conference

With education policy apparently being driven more by opinion than evidence, I took the opportunity to go back to the evidence and re-draw inferences. These presentation notes and slides look again at the local and national achievement landscapes and question the wisdom of pursuing structural change (academies and grammars) at the expense of cultural change (collaboration and coherent regional planning). A couple of topical issues: term-time holidays and Shanghai mathematics are put under the spotlight.

**Peter Lacey**
**February 2017**

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# WHAT THE EVIDENCE SUGGESTS

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Given that we now live in a world without levels, it is still possible to create achievement landscape pictures.

At the end of Key Stage 2:

The attainment measure (horizontal axis) is the proportion of eligible pupils who reached the expected standard in all three of Reading, Writing and Mathematics.

The progress measure (vertical axis) is the sum of the cohort progress measures in each of Reading, Writing and Mathematics.

At the end of Key Stage 4:

The attainment measure (horizontal axis) is that defined as “Attainment 8”.

The progress measure (vertical axis) is that defined as “Progress 8”.

For today’s audience I am showing you the named-school achievement landscape pictures for North East Lincolnshire.

The national-level picture, composed of local authority statistics show a marked change on previous years.

Is this to do with the validity and reliability of the new measures? Or has the world changed?

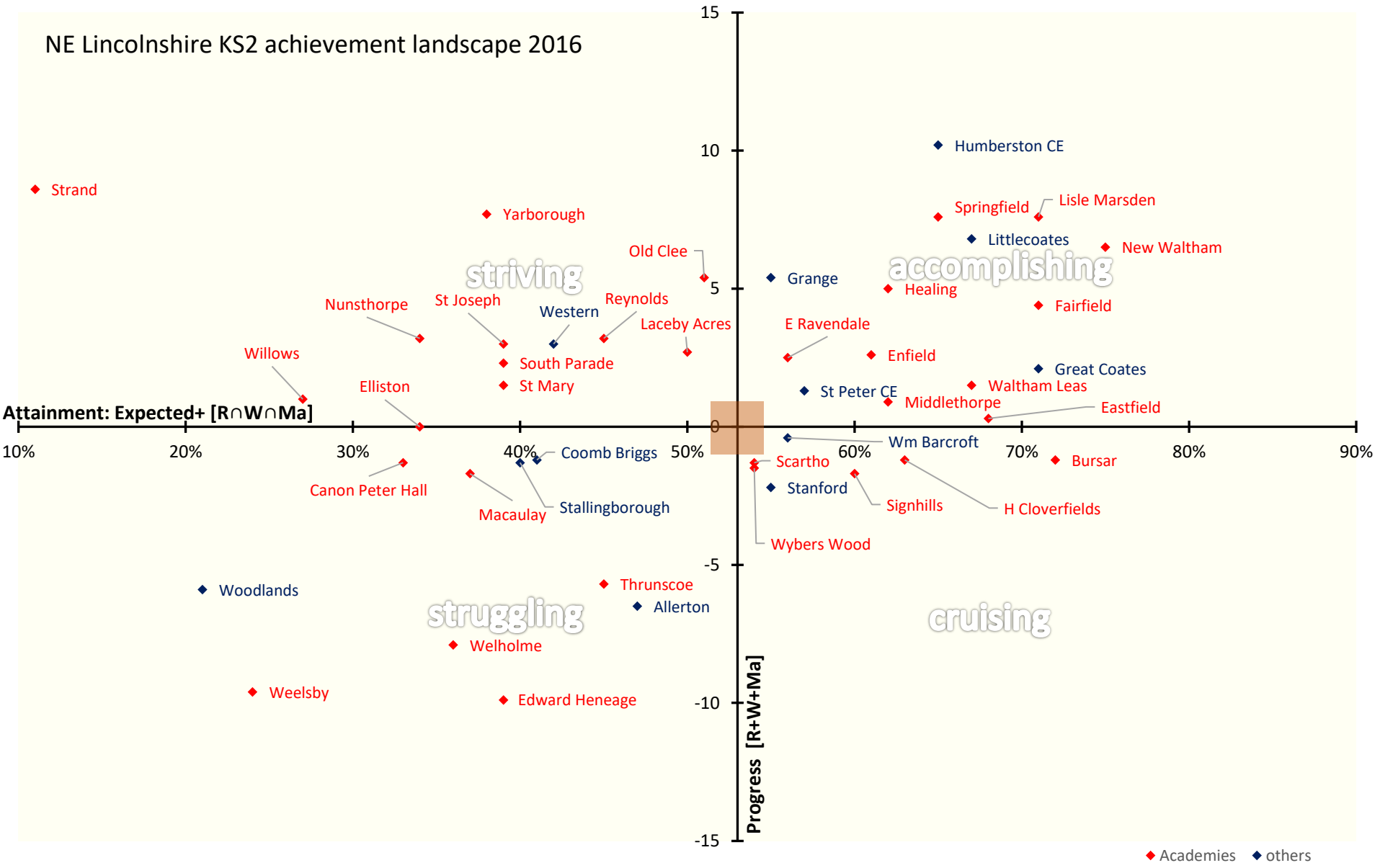
Last year I commented on the fact that there is no correlation between the proportion of academies in a LA and the performance of all pupils across that LA. That inference appears to remain true in 2016.

Stretching the inference, it would be possible to argue that structural changes to schools have little impact on performance across the area.

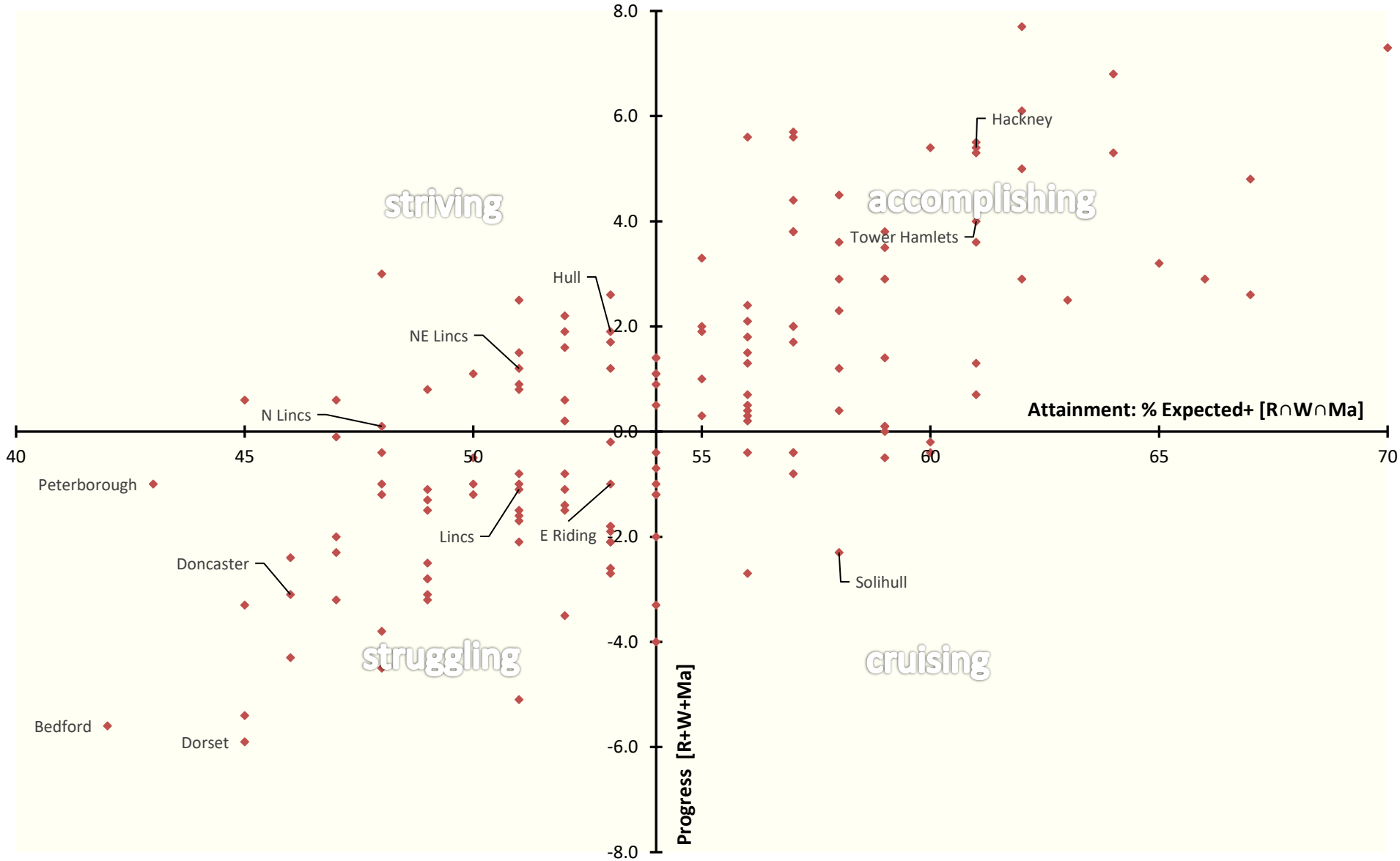
Interesting to note the position of couple of London Boroughs I referred to last year. They continue to perform well, when 15 years ago they were struggling at the bottom of the local authority league tables.

Of course, the most significant drivers for this change was the London Challenge, characterised by its national support, its cross-area leadership, the deep collaboration across schools and the willingness of all stakeholders to do things differently in order to secure better outcomes for pupils.

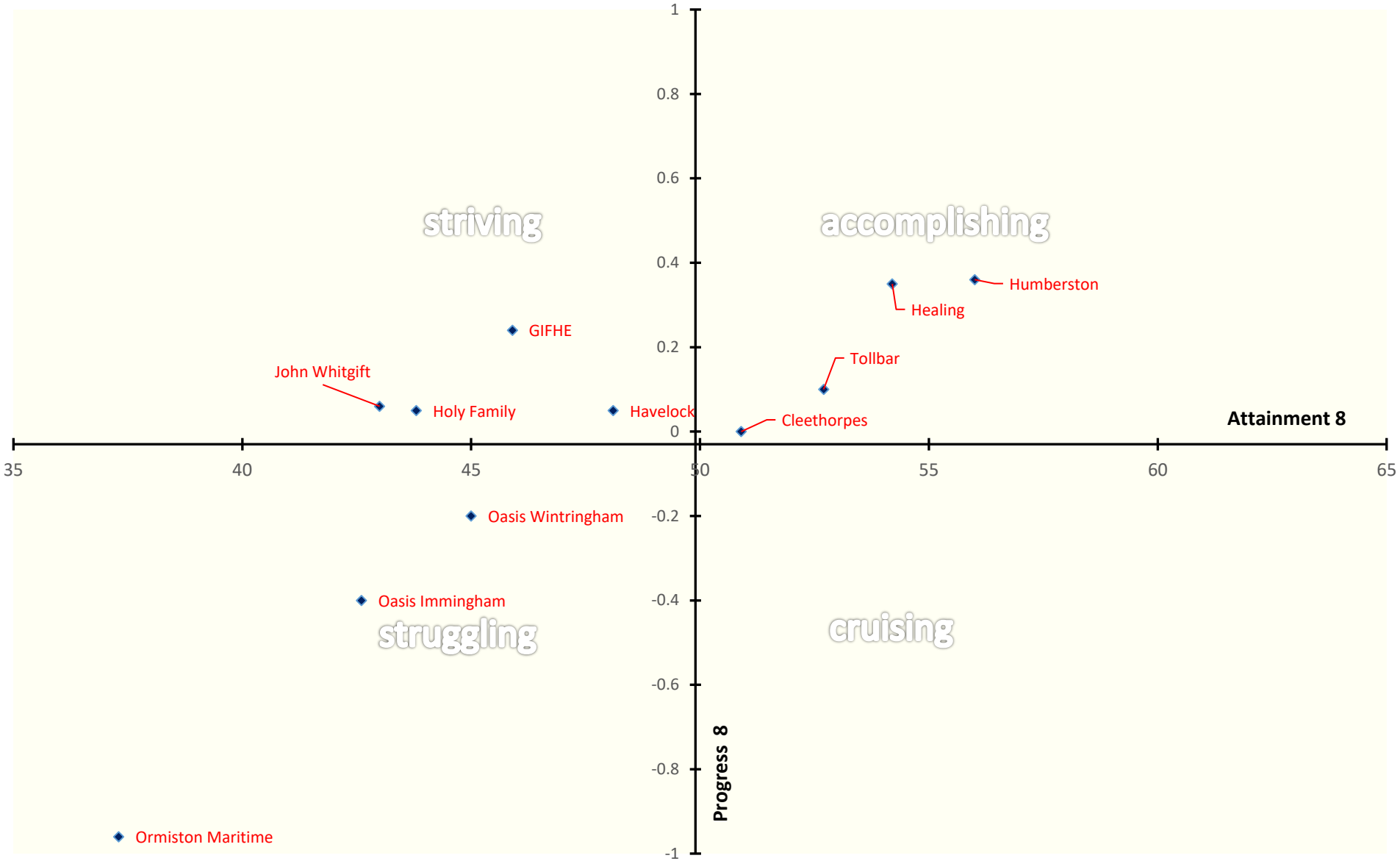
In short, it was a systemic and not structural change that transformed pupil outcomes.


NE Lincolnshire KS2 achievement landscape 2016
Attainment: Expected+ [R∩W∩Ma]
Progress [R+W+Ma]
10%
20%
30%
40%
50%
60%
70%
80%
90%
15
10
5
0
-5
-10
-15
striving
accomplishing
struggling
cruising
Strand
Yarborough
Old Clee
Nunsthorpe
St Joseph
Western
Reynolds
Laceby Acres
Willows
South Parade
St Mary
Elliston
Canon Peter Hall
Macaulay
Coomb Briggs
Stallingborough
Woodlands
Thrunscoe
Allerton
Welholme
Weelsby
Edward Heneage
Humberston CE
Springfield
Lisle Marsden
Littlecoates
New Waltham
Grange
Healing
Fairfield
E Ravendale
Enfield
Great Coates
St Peter CE
Waltham Leas
Middlethorpe
Eastfield
Wm Barcroft
Scartho
Bursar
Stanford
Signhills
H Cloverfields
Wybers Wood
Academies
others

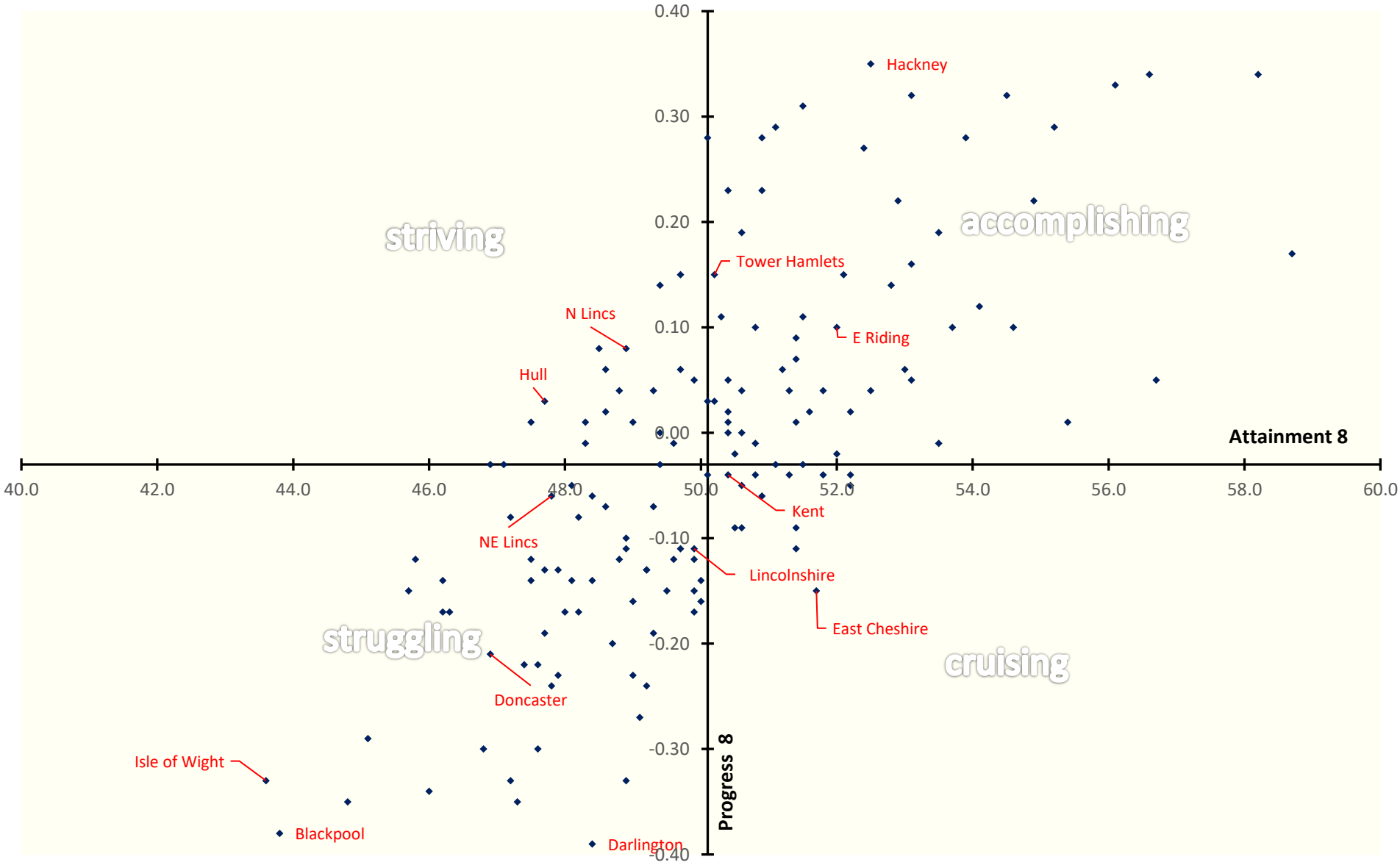
# Local Authority KS2 Achievement Landscape 2016



# N E Lincolnshire KS4 Achievement Landscape 2016



# Local Authority KS4 Achievement Landscape 2016



Since last year we have responded to the consultation on increasing the number of grammar schools. The full response is on the ECARDA website, (under publications). The picture of Key Stage 4 local authority area achievement above shows no relationship between the proportions of grammar schools in a LA and the performance of all pupils across that LA. Indeed, with Lincolnshire and Kent around the middle of the pack, one could see the intention to increase the number of grammar schools no more than an ambition for mediocrity: very English!

In Lincolnshire, for 2015 outcomes, the KS2 average point score on entry to the Grammar schools was 31.4 – a whisker above the old level 5C. There is an abundance of evidence to show pupils with that entry level in many non-selective schools, matched and exceeded the grammar school outcomes.

If Grammar schools are selecting those at L5 then their selection is biased towards the least disadvantaged, for, at age 11 in 2015, only 13% of disadvantaged pupils reached this standard compared with 29% for others. This is echoed with very young children. At the end of Foundation Stage in 2015, 58% of children from the 10% most deprived areas reached a good level of development, compared with 77% from the 10% least deprived areas.

The causes of disadvantage gaps at age 16 are to be found in early years.

Invest in rectifying causes rather than addressing symptoms.

We appear keen to import classroom practices from abroad. Have more stringent border controls I say! Let me quote from DfE funded research on the teaching of Science and mathematics in China: Shanghai, in particular.

You have the green handout, but here are some choice extracts:

> Class contact time is dramatically lower [than England], at between 25%-30%,
>
> Teachers plan so well for all children that no learning is lost.
>
> Discussion time is built into the day, especially the collaborative planning of lessons
>
> Teachers are expected to observe each other regularly to develop their skills as practitioners:
>
> Teachers are expected to observe others on at least 10 occasions a year
>
> A primary head reported observing 100 lessons each term, both for developmental support and monitoring
>
> After five years, teachers are expected to have observed 360 classes
>
> Teachers are expected to carry out research and develop their skills through membership of one subject research team and an age cohort team, co-ordinated by senior staff.
>
> Teaching Research Groups have been a legal professional requirement in Chinese schools since 1952 when they were set up to enable teachers to study teaching and improve their practice
>
> Teachers must produce two research papers each year: the best are honoured with publication
>
> The degree of system stability is impressive: The Government's 10 Year Plan was fixed in 2010, prescribing developments and allocating funding until 2020
>
> The agreed national syllabuses and textbooks, which allow teachers to focus on knowledge, skills and understanding rather than re-planning to meet new examination specifications or Ofsted frameworks, are in striking contrast to the amount of change teachers are accustomed to in England. The English secondary Science curriculum, for example has been revised four times in six years with little time to evaluate impact. In Shanghai, the Science and Maths specifications have remained unchanged since 2004.

Is it true that all those school who have adopted "Shanghai Maths" have adopted all the measures above? I think not.

If we are to import practices, please consider importing the working conditions that allowed those practices to flourish.

## THE CHINESE CONTEXT

Teachers in China spend large amounts of time thinking about how to improve their teaching. Class contact time is dramatically lower, at between 25%-30%, than in English schools where 80%-90% is the norm, although classes are larger with forty or more students.

This high amount of professional non-contact time generates opportunities for extension classes, tutorial work, individual support, detailed planning and systematic and immediate marking with feedback to students. Teacher planning and preparation does not have to be fitted in the evenings and at weekends. Teachers plan so well for all children that no learning is lost. They set and mark work almost every day, sharing marks and test results with eager-to-help parents.

Discussion time is built into the day, especially the collaborative planning of lessons. The focus is on ensuring student progression and the development of knowledge through the careful organisation of the topic to be taught. Teachers engage in group planning: their preparation and focus on their two to three teaching groups is extremely intense.

Classrooms in China are open for observation, study and discussion. Teachers are expected to observe each other regularly to develop their skills as practitioners: 'observe each other and better it!' Non-judgemental observation, in which the observer takes on the role of learner, is widespread.

Teachers are expected to observe others on at least 10 occasions a year. A primary head reported observing 100 lessons each term, both for developmental support and monitoring. After five years, teachers are expected to have observed 360 classes.

The Chinese emphasis on professional development at all levels is striking. Teachers are expected to carry out research and develop their skills through membership of one subject research team and an age cohort team, co-ordinated by senior staff. Learning communities, joint planning, regular observation and systems for the formal sharing of practice all support teacher self-improvement.

Teaching Research Groups have been a legal professional requirement in Chinese schools since 1952 when they were set up to enable teachers to study teaching and improve their practice. Teachers regard good teaching as a process rather than an outcome and will jointly plan lessons on a topic which is then taught using the same methodology. Teachers must produce two research papers each year: the best are honoured with publication

Public or demonstration lessons, taught by master teachers, are open to regular small audiences of observers to study and discuss techniques used. Teaching such a lesson is viewed as a high honour. Sometimes parents attend to judge for themselves the quality of the education their children are receiving. In lessons observed by the English participants, there were often at least four other Chinese teachers observing the class as well who would later discuss their observations as a group.

The degree of system stability is impressive: strategic planning carried out at provincial, district and school level is used to devise a 10-year plan which is implemented without intermittent change. The Government's 10 Year Plan was fixed in 2010, prescribing developments until 2020 with a commitment to educational improvement and increased spending.

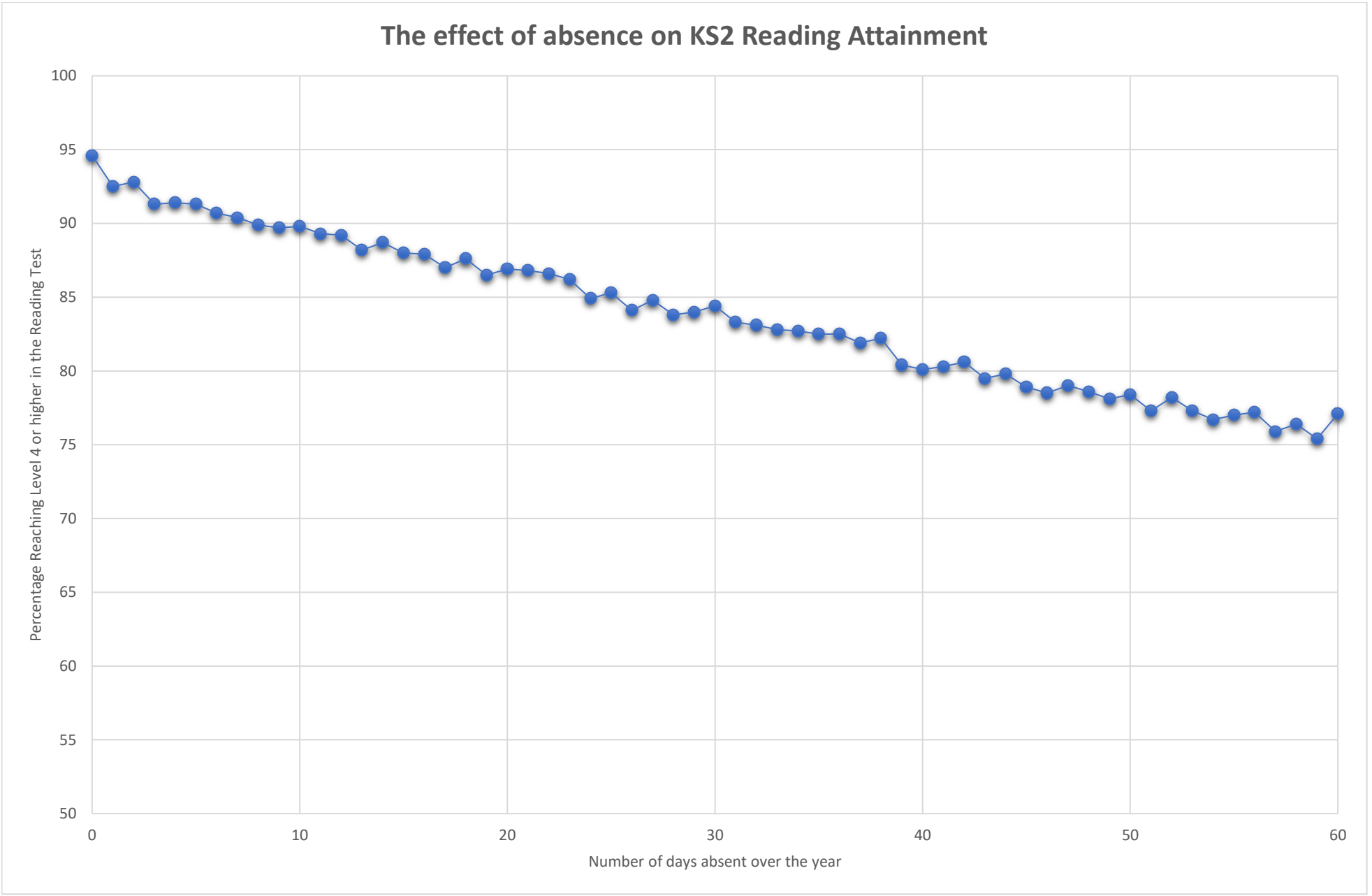
The agreed national syllabuses and textbooks, which allow teachers to focus on knowledge, skills and understanding rather than re-planning to meet new examination specifications or Ofsted frameworks, are in striking contrast to the amount of change teachers are accustomed to in England. The English secondary Science curriculum, for example has been revised four times in six years with little time to evaluate impact. In Shanghai, the Science and Maths specifications have remained unchanged since 2004.

My last source of evidence is related to the relationship between absence from school and achievement at school.

Clearly, increasing absence has a downward pull on achievement. But, let's not over-egg the impact of approved holidays:

Indeed, a not unreasonable inference would be that authorised term-time holidays up to 10 days duration have a beneficial effect on outcomes!

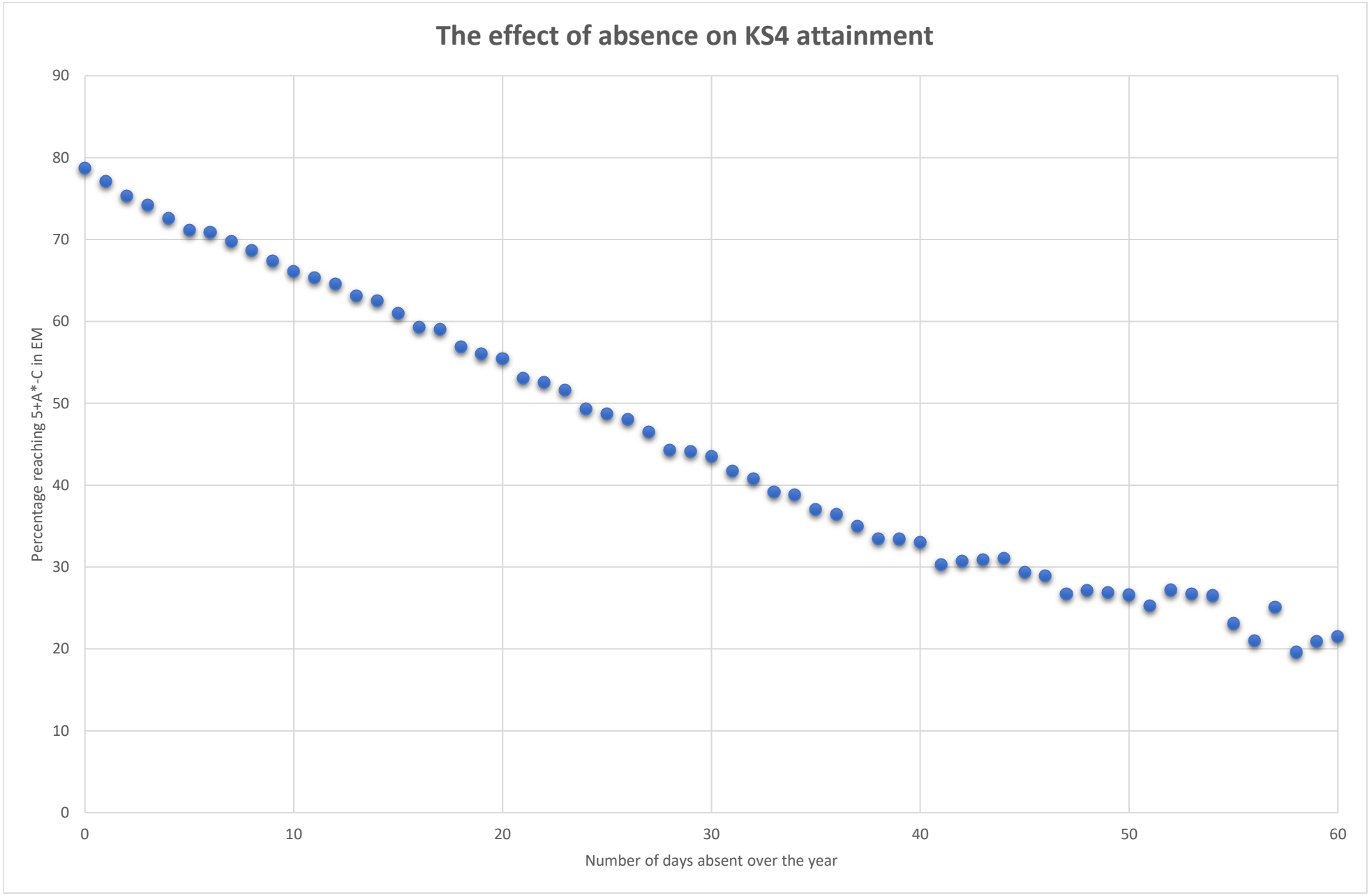
Can we please focus on the big issues that have an impact on improving pupils' life chances rather than become distracted by relatively unimportant matters?


The effect of absence on KS2 Reading Attainment
Percentage Reaching Level 4 or higher in the Reading Test
100
95
90
85
80
75
70
65
60
55
50
0
10
20
30
40
50
60
Number of days absent over the year

# THE EFFECT OF TERM-TIME HOLIDAYS (Key Stage 2)

| Year | Absence type | Absence days missed | End key stage pupils N | KS2 Read+Mat L4+ N | KS2 Read+Mat L5+ N | KS2 Read+Mat L4+ % | KS2 Read+Mat L5+ % |
|---|---|---|---|---|---|---|---|
| **Table 5** | | | | | | | |
| 2013/14 | authorised_holiday_absence | 1 | 35275 | 30930 | 14305 | 87.7 | 40.6 |
| 2013/14 | authorised_holiday_absence | 2 | 23295 | 20410 | 9220 | 87.6 | 39.6 |
| 2013/14 | authorised_holiday_absence | 3 | 15775 | 13930 | 6295 | 88.3 | 39.9 |
| 2013/14 | authorised_holiday_absence | 4 | 13420 | 11765 | 5125 | 87.7 | 38.2 |
| 2013/14 | authorised_holiday_absence | 5 | 22255 | 19030 | 7780 | 85.5 | 35 |
| 2013/14 | authorised_holiday_absence | 6 | 12090 | 10460 | 4470 | 86.5 | 37 |
| 2013/14 | authorised_holiday_absence | 7 | 9355 | 8150 | 3540 | 87.1 | 37.8 |
| 2013/14 | authorised_holiday_absence | 8 | 7100 | 6205 | 2710 | 87.4 | 38.1 |
| 2013/14 | authorised_holiday_absence | 9 | 6625 | 5760 | 2405 | 86.9 | 36.3 |
| 2013/14 | authorised_holiday_absence | 10 | 11125 | 9530 | 3910 | 85.6 | 35.1 |
| | | | 156315 | 136170 | 59760 | 87.1 | 38.2 |
| **Table 7** | | | | | | | |
| 2013/14 | unauthorised_holiday_absence | 1 | 20330 | 17485 | 7540 | 86 | 37.1 |
| 2013/14 | unauthorised_holiday_absence | 2 | 13305 | 11440 | 4740 | 86 | 35.6 |
| 2013/14 | unauthorised_holiday_absence | 3 | 9170 | 7850 | 3185 | 85.6 | 34.7 |
| 2013/14 | unauthorised_holiday_absence | 4 | 8055 | 6815 | 2650 | 84.6 | 32.9 |
| 2013/14 | unauthorised_holiday_absence | 5 | 12470 | 10390 | 4040 | 83.3 | 32.4 |
| 2013/14 | unauthorised_holiday_absence | 6 | 5800 | 4850 | 1790 | 83.6 | 30.9 |
| 2013/14 | unauthorised_holiday_absence | 7 | 4395 | 3675 | 1380 | 83.7 | 31.4 |
| 2013/14 | unauthorised_holiday_absence | 8 | 3355 | 2785 | 1050 | 83.1 | 31.3 |
| 2013/14 | unauthorised_holiday_absence | 9 | 3110 | 2595 | 955 | 83.4 | 30.8 |
| 2013/14 | unauthorised_holiday_absence | 10 | 4055 | 3355 | 1265 | 82.7 | 31.2 |
| | | | 84045 | 71240 | 28595 | 84.8 | 34.0 |
| **2013/14** | **all pupils** | | **482245** | | | **85.1** | **35.4** |

**Pupil absence and attainment across Key Stage 2 in England: 2008/09 to 2013/14**
**National tables, state-funded mainstream schools in England**


The effect of absence on KS4 attainment
Percentage reaching 5+A*-C in EM
90
80
70
60
50
40
30
20
10
0
0
10
20
30
40
50
60
Number of days absent over the year

# THE EFFECT OF TERM-TIME HOLIDAYS (Key Stage 4)

| Year | Absence_type | Absence days missed | End key stage pupils N | GCSE AC5 N | GCSE AC5EM N | EBACC N | GCSE AC5 % | GCSE AC5EM % | EBACC % |
|---|---|---|---|---|---|---|---|---|---|
| **Table 12** | | | | | | | | | |
| 2013/14 | authorised_holiday_absence | 1 | 9515 | 7450 | 6555 | 3260 | 78.3 | 68.9 | 34.2 |
| 2013/14 | authorised_holiday_absence | 2 | 5200 | 3955 | 3465 | 1610 | 76.0 | 66.6 | 30.9 |
| 2013/14 | authorised_holiday_absence | 3 | 3215 | 2390 | 2090 | 980 | 74.3 | 64.9 | 30.4 |
| 2013/14 | authorised_holiday_absence | 4 | 2500 | 1770 | 1520 | 625 | 70.8 | 60.9 | 24.9 |
| 2013/14 | authorised_holiday_absence | 5 | 4415 | 2945 | 2500 | 950 | 66.6 | 56.7 | 21.5 |
| 2013/14 | authorised_holiday_absence | 6 | 1860 | 1220 | 1010 | 400 | 65.6 | 54.5 | 21.5 |
| 2013/14 | authorised_holiday_absence | 7 | 1210 | 805 | 675 | 235 | 66.4 | 55.7 | 19.2 |
| 2013/14 | authorised_holiday_absence | 8 | 740 | 490 | 420 | 145 | 66.1 | 57.0 | 19.8 |
| 2013/14 | authorised_holiday_absence | 9 | 695 | 440 | 360 | 140 | 63.5 | 52.2 | 20.5 |
| 2013/14 | authorised_holiday_absence | 10 | 1285 | 775 | 640 | 230 | 60.1 | 49.7 | 17.7 |
| | | | 30635 | 22240 | 19235 | 8575 | 72.6 | 62.8 | 28.0 |
| **Table 14** | | | | | | | | | |
| 2013/14 | unauthorised_holiday_absence | 1 | 12050 | 8385 | 7235 | 3125 | 69.6 | 60.0 | 25.9 |
| 2013/14 | unauthorised_holiday_absence | 2 | 7225 | 4880 | 4195 | 1620 | 67.5 | 58.1 | 22.4 |
| 2013/14 | unauthorised_holiday_absence | 3 | 5130 | 3240 | 2710 | 1020 | 63.2 | 52.9 | 19.9 |
| 2013/14 | unauthorised_holiday_absence | 4 | 4160 | 2555 | 2150 | 795 | 61.4 | 51.6 | 19.2 |
| 2013/14 | unauthorised_holiday_absence | 5 | 6200 | 3535 | 2915 | 975 | 57.0 | 47.0 | 15.8 |
| 2013/14 | unauthorised_holiday_absence | 6 | 2975 | 1660 | 1365 | 400 | 55.8 | 45.9 | 13.4 |
| 2013/14 | unauthorised_holiday_absence | 7 | 2060 | 1155 | 940 | 275 | 56.0 | 45.5 | 13.4 |
| 2013/14 | unauthorised_holiday_absence | 8 | 1435 | 800 | 660 | 200 | 55.7 | 45.9 | 14.1 |
| 2013/14 | unauthorised_holiday_absence | 9 | 1290 | 720 | 570 | 150 | 55.7 | 44.2 | 11.7 |
| 2013/14 | unauthorised_holiday_absence | 10 | 1640 | 850 | 675 | 185 | 51.8 | 41.0 | 11.4 |
| | | | 44165 | 27780 | 23415 | 8745 | 62.9 | 53.0 | 19.8 |
| **2013/14** | **all pupils** | | **503,775** | | | | **68.6** | **59.3** | **25.7** |

**Pupil absence and attainment across Key Stage 4 in England: 2008/09 to 2013/14**
**National tables, state-funded mainstream schools in England**

Here’s a summary of DOs and DON’Ts drawn from the inferences of the evidence cited above.

| DON'T | DO |
|---|---|
| Go for restructuring | Go for re-thinking. Look at and learn from case studies of significant area improvement. |
| Keep changing things | Go for stability – unhook from the government term of office; unhook from party politics: a Crown Entity perhaps.<br>Create the time and space for system improvement from within. |
| Be tempted by populist policies | Draw on evidence and learn from research. |
| Imitate the successful practices of others | Understand the conditions which makes the practices of others successful and consider creating these. |
| Encourage greater competition | Foster, and capture the gains of greater collaboration. |
| Go overboard on autonomy | Think more carefully about accountability – to parents, the wider local community, taxpayers;<br>Clarify the roles of RCs, LAs and Ofsted and define the location of sub-regional authority that can drive area-wide improvement. |
| Promote the idea of education as a consumer good | Understand that education is an investment: key to the future of personal fulfilment, community development, environmental sustainability and economic growth. |

And finally, ladies and gentlemen,

If boys achieved as well as girls; if disadvantaged achieved as well as others, our outcomes would rocket. Few schools do **not** have strategies in place to address these imbalances.

At another level, if the lowest performing schools did as well for pupils as our highest performing schools then our area outcomes would rocket. Where is the strategy to address **this** imbalance? Neither autonomy nor competition has delivered here. Perhaps the clue is in our fear or reluctance to continue the upward journey of educational improvement illustrated below.

Or is it a lack of leadership and authority at a sub-regional level?

This, leaders, is the next challenge.

| | |
|---|---|
| INTERDEPENDENT | I can exceed my goals by working with others |
| INDEPENDENT | I can achieve my goals by myself |
| DEPENDENT | I need to work with others to achieve my goals |

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ECARDA was formed in 2005, bringing together experienced consultants who share a set of customer-focussed core values and who provide services to public sector management, especially education.

Since its inception, ECARDA has undertaken several research and development projects for government agencies, local authorities, academy sponsors and schools and colleges across all phases.

ECARDA has developed a unique set of management tools which enables schools to probe deeply into their processes and performance, revealing pictures of 'hot' and 'cold' spots, which inform the design of fast and targeted management responses.

A typical and highly popular example of ECARDA's work is its analysis each summer of end of key stage assessments, providing pictures of benchmarked progress and attainment from Foundation Stage to Sixth Form. Schools using this service have had their completed analyses returned before the autumn term start, (and primary schools before the summer term end, if necessary), enabling self-evaluation to be completed and improvement plans to be formulated at the beginning of the academic year, without having to wait for national reports such as Raiseonline.

Our biggest seller this year is our set of templates for recording periodic summative pupil assessments against the national age-related standards, using the ECARDA 12-point scale. Here single data-set entries provide a wide range of performance pictures automatically and without effort: For example, an instant picture of the attainment and progress of groups in FS2 in term 3, or Y4 in term 2, or Y8 in term 1. Individual pupil quantitative reports showing achievement, attendance and behaviour at the end of each term are part of the package and have proved very popular with parents and teachers. Similar tools have been developed for recording, analysing and representing information on the quality of lessons and the scrutiny of pupils' work. The facility of producing these instant up-to-date reports has proved advantageous to headteachers and principals who are increasingly being asked, at very short notice, to provide such information for governors, sponsors or inspectors. They have proved invaluable in underpinning evidence-based performance management.

ECARDA 's website, www.ecarda.co.uk includes details of all services provided, past publications, and samples of work. Most importantly, the values to which the company works are explicitly affirmed.

If you are looking for a fast, efficient and confidential management support service then get in touch with us at enquiries@ecarda.co.uk