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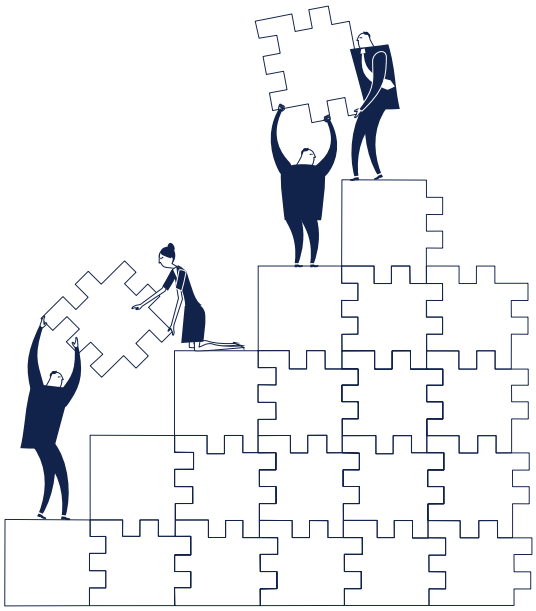

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Performance Metrics, Practice, and Implications: Lessons from Academy Schools in the UK

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Abstract

This paper presents longitudinal research investigating the role of management in achieving performance metrics within Academy schools in the UK. The findings suggest that those schools most successfully achieving the performance metrics set by the government tend to make eight changes in a particular order that focus on creating a platform for change before focusing on specific performance metrics. This approach is quicker to succeed where there is greater scope for change. Hence, rural and coastal schools appear to take much longer to achieve improvements in the performance metrics than urban and inner city schools. While these management practices are effective in helping individual schools achieve the performance metrics set, they raise questions concerning broader societal impacts, the viability of spreading these practices to all schools, and the long-term sustainability of such practices. The findings highlight the importance of understanding any unintended consequences of setting performance metrics and that these need to be monitored and reviewed over time.

Keywords: performance management, performance metrics, public policy, leadership, operations

Introduction

This paper considers the management of Academy secondary schools in the UK. These are state schools in England that are directly funded by central government in the form of the Department for Education, having been previously been under the control of local government. The current debate around Academy schools in the UK concerns both educational and managerial issues. This paper sets aside the educational issues and focuses on the management perspectives. Hence, the terminology used in this paper reflects management literature and may refer to terms such as markets and revenues that do not always easily translate to a public sector environment. In particular, this paper discusses how performance metrics are achieved in practice, as well as the sustainability of such changes. These findings form part of a larger research agenda on how high

performance is created and sustained in different contexts, including: retail, art, commercial services, education, science, sport, and technology organisations.

This paper presents detailed longitudinal research investigating the impact of leadership, structure, process and systems investments on operational and financial performance over time within eight organisations, selected from 160 UK Academies. The investment-performance relationships identified were then tested by being presented to 49 education experts (principals, heads, or teachers) who have led or advised over 300 schools over the last 20 years. Although previous research has looked at the relationship between investment and performance in both service and manufacturing organisations, they tend to look at one type of investment and have not necessarily understood how this impacts changes over time. The research presented here attempts to address this gap by considering two questions: (1) how are performance metrics achieved in practice? and (2) how sustainable are such changes over time?

The research highlights the sometimes conflicting priorities between creating and sustaining performance of individual elements within a wider system.

Literature review

Table 1 summarises previous research investigating the impact of investment on performance in service and manufacturing organisations illustrating the investment and performance measures used. This highlights three main points. Firstly, all these studies only consider one type of investment. Secondly, the majority of these studies in services have considered the impact of process investment on organisational performance.

Table 1 - Previous research investigating the impact of investment on organisational performance

Author (date)	Investment measure(s)		Business performance measure(s)	
	Type	Measure	Operational	Financial
Service organisations				
Jurison (1996)	Process	IT capability (user productivity)	Productivity Effectiveness	-
Francalanci and Galal (1998)	Process	IT capability (number of employees, number of managers and structure)	Cost Productivity	Sales revenue
Menon and Lee (2000)	Process	IT capability (structural efficiency, multi-site systems and vertical integration)	Cost	-
Devaraj and Kohli (2003)	Process	IT capability (processing speed, reports produced and records accessed)	Quality	Sales revenue
Beccalli (2007)	Process	IT capability (processing speed, computers per employee and software/hardware availability)	Efficiency	Profit Return on assets Return on equity
Bismillahir et al. (2012)	Product/service	New product development programmes	-	Profit Return on assets Return on equity
Manufacturing organisations				
Weill (1992)	Process	IT management commitment IT capability (firm experience and user satisfaction)	Cost Productivity	Sales growth Return on assets
Brynjolfsson and Hitt (1996)	Process	IT capability (number of computers, value of computers per head)	Productivity	Sales revenue Operating costs
Hitt and Brynjolfsson (1996)	Process	IT capability (network efficiency, computers per employee and software/hardware availability)	Productivity	Customer value Profit
Hu and Plant (2001)	Process	IT investment per employee	Efficiency	Profit Sales revenue
Dedrick et al.(2003)	Process	IT capability (decision-making systems, job training and business process redesign)	Efficiency Productivity	-
Ankarhem et al. (2010)	People	Training and development	-	Return on equity
Nath and Ramanthan (2010)	Product/service	Product diversification Market diversification	Operational capability Cost	Sales revenue Return on capital employed
Morita et al. (2011)	Process	Process capability	Process flexibility Efficiency Productivity	-
Niromand et al. (2012)	Product/service	Product diversification Market diversification	-	Return on capital employed

Table 2 then summarises the investment and performance relationships identified by the research shown in Table 1. This shows that although some research in service organisations found performance was positively impacted by process investment (Jurison, 1996; Francalanci and Galal, 1998; Devaraj and Kohli, 2003) and product/service development (Nath and Ramanthan, 2010), this was not the case in all studies (Beccalli, 2007).

The reason for these conflicting results might be because the studies use different measures or look at investment-performance relationships at a single point in time across organisations serving markets with different needs, stability, and levels of competition, which may significantly affect how quickly and how much performance improves.

Table 2 - Significant relationships identified by the research shown in Table 1

Investment measures (grouped by type of organisation and type of investment)		Positive relationships with performance		No relationship with performance	
		Operational	Financial	Operational	Financial
Service organisations					
Process	IT capability	Jurison (1996) Francalanci and Galal (1998) Devaraj and Kohli (2003)	Devaraj and Kohli (2003)	-	Beccalli (2007)
Product/ service	New product development programmes	-	Bismillahir et al (2012)	-	-
Manufacturing organisations					
Process	IT capability	Brynjolfsson and Hitt (1996) Hitt and Brynjolfsson (1996) Dedrick, Gurbaxani and Kraemer (2003)	Weill (1992)	Hu and Plant (2001)	Hitt and Brynjolfsson (1996) Hu and Plant (2001)
	Process capability	Morita et al. (2011)	-	-	-
People	Training and development	-	-	-	Ankarhem et al. (2010)
Product/ service	Product diversification	-	Nath and Ramanthan (2010)	-	Niromand et al. (2012)
	Market diversification	-	Nath and Ramanthan (2010) Niromand et al. (2012)	-	-

The research presented here contributes to the existing body of knowledge in three ways. Firstly, it considers organisations that have made a broader range of investments than those in the previous studies identified. Secondly, it shows how these investments impact performance differently in different geographies. Thirdly, it shows how these investments impact performance over time.

Methodology

A case study research method was used as it allows how, why and what questions to be answered as well as richer insights and explanations to be developed (Eisenhardt, 1989). Table 3 summarises how the cases were selected and investigated, findings compared across them, and significant investment-performance relationships identified.

Table 3 - Case study methodology

Step	Summary
1 Definition of research?	What is the impact of investment on organisational performance over time? How does this relationship vary in geographies with different needs?
2 Selecting cases	The research team (working with 4 partnering organisations) identified eight Academy schools operating in different geographies across 2 variables: • Opportunity (total available students) • Competition (number of other schools) Teaching different types of students across 3 variables: • Volume (number of students taught within the year) • Ethnicity (% mix) • Distance (distance students travel to school) With different levels of organisational performance across three variables: • Operational (OfSTED grading and exam results) • Financial (sales revenue and operating profit) • Competitiveness (student applications with respect to geography)
3 Crafting protocol	Existing literature on the relationship between investment and organisational performance was reviewed. Based on this, protocols were developed for the semi-structured interviews, case study write ups and the final cross-case analysis.
4 Entering the field	Each case study started with an initial field visit to review preliminary information, agree access and confidentiality and determine the executives to be interviewed, observations to be made and archival records, documents and reports to be reviewed Subsequent interviews were conducted face-to-face at the companies' facilities. During these interviews, the research team identified further people to interview, observations to make and archival records, documents and reports to be reviewed Each case study took 24 months to complete and involved 12 to 48 visits, 24 to 51 interviews, 124 to 219 observations, analysis of 42 to 127 documents and 81 to 351 archival records
5 Analysing data	Findings were written up for each study using the protocol outlining the school's level of organisational performance, market characteristics, type of students taught and structures, systems and processes used to deliver its services Within each case investments made over the last 5 years and their impact on organisational performance were identified and summarised in a table A 31 to 42 page report was presented back to each participating organisation to help increase the validity of the findings The overall case database was continually reviewed to check it had the necessary characteristics to answer the research questions.
6 Shaping hypotheses	A cross-case analysis was completed across the 8 cases studies to compare their investment and performance journeys over the last five years to identify significant relationships and the different approaches used in different geographies to teach different types of students Data within the case studies was then revisited to help test and explain the significant relationships identified The hypotheses developed were then presented to the 20 steering group members (principals/heads/teachers) working within the 160 academies studied and 16 principals/heads with experience of working in UK schools over the past 20 years (outside of the 160 in our study)
7 Enfolding literature	The emergent findings were then compared with those of previous research into investment and organisational performance and other relevant operations management and organisation theory
8 Reaching closure	Iterative analysis continued until theoretical saturation was reached and new evidence ceased to appear

To answer our research questions, we focused our study on the investment and performance trends in Academies with the greatest scope to change performance. We studied eight Academies that were all given the lowest possible grade by the Office for Standards in Education, Children's

Services and Skills (OfSTED) and put into 'special measures' five years ago. Appendix 1 shows the framework used by OfSTED to assess a school, how they inspect and the definitions of the award.

The research team worked with the steering group who collectively understood how the 160 academies currently performed and the changes they had made after they were put into 'special measures' by OfSTED. These individuals also collectively had 217 years experience working in the UK educational system where they had collectively led over 60 schools. Using the steering group's knowledge and experience, we were able to identify Academy schools who serve different markets, teach different students, and perform differently using the measures shown in Table 4. The eight academies subsequently selected to answer our research questions are shown in Table 5.

Table 4 - Markets served, students taught and organisational performance measures

Dimension and variable	Measure
Geographies served	
Size	Total number of secondary students living within 1 mile from the school
Competing schools	Number of secondary schools within 1 mile from the school
Students taught	
Number	Number or students taught within the year
Ethnicity	Percentage of students taught by ethnicity
Distance	Percentage of students taught who live more than 1 mile from the school
Operational performance	
OfSTED	Grading awarded by OfSTED inspectors during their visit that year
Exam results	Percentage of students graduating Year 11 with five or more Grade C GCSEs
Financial performance	
Sales revenue	Earning for the year
Operating profit	Operating profit as a percentage of earning for the year
Competitiveness	
Student applications	Number of student applications received that year as a percentage of the available teaching capacity
Distance students travel	Percentage of applications from students living more than 1 mile from the school
Market share	Number of students taught as a percentage of the average number taught by competing schools less than 1 mile away

Table 5 - Case study characteristics

Geography, students, and performance	Inner city		Urban		Rural		Coastal	
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
Geography served (<2 miles away)								
Students (000)	11.8	11.3	11.4	10.5	4.6	4.3	6.8	4.3
Growth in last 5 years (%)	13	9	9	12	-	5	(1)	(7)
Competing schools	8	9	6	6	4	5	5	4
Students taught								
Number (000)	0.8	0.9	0.7	1.0	0.9	0.6	0.9	1.1
Ethnicity (% white)	51	35	24	17	80	89	92	78
% living >1 mile away	48	53	51	67	-	35	2	-
Operational performance								
OfSTED (1-4)	-	-	1	1	-	-	2	3
Exam results (%5+ C)	56	53	66	69	68	63	50	36
Financial performance								
Sales revenue (£M)	5.5	6.3	4.8	7.3	5.3	3.6	4.9	5.6
Operating profit (% sales revenue)	14	17	26	34	21	(7)	(29)	18
Competitiveness (student)								
Applications (% capacity)	132	112	137	150	101	79	113	117
Market share (% competitor average)		78		100		63		82
% living >1 mile away	48	53	51	67	-	35	2	-

The research followed the established case study method for data collection and analysis (Eisenhardt, 1989). Research within each case study started with a two-day field visit to review preliminary information, verify access procedures, review background documents, agree confidentiality, and determine the sources of data to be reviewed (executives to be interviewed, observations to be made, documents and archival records to be analysed). At this point, the research team were given access to management information systems to enable them to remotely access and track changes in investment and performance.

All subsequent interviews were then conducted face-to-face at the organisation, which enabled the research team to identify further people to interview and archival records, documents and reports to review. Each case study took two years to complete and involved 12 to 48 company visits, interviews with 24 to 51 executives, 124 to 219 direct observations, analysis of 42 to 127 documents and analysis of 81 to 351 archival records.

The findings from the interviews and analysis of other data sources were written up into a 31 to 42 page report, which was presented back to the participating organisation to help increase the validity of the findings. A cross-case analysis was then completed to identify the different types and sequence of investments made and their performance impact over time. The data within each case study was then revisited to help test and explain the significant relationships identified. This iterative analysis continued until theoretical saturation was reached and new evidence ceased to appear.

Findings

A cross-case analysis of different types and sequences of investments made in the eight academies is shown in Table 6 and summarised in Table 7. Figures 1, 2 and 3 then show how this has impacted their market served, students taught, and performance.

Table 6 - The different types and sequence of investments within each Academy school

Key development stages	Month of changes within each school							
	Inner city		Urban		Rural		Coastal	
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
1. Change leadership and narrow objectives								
Change governing board	1	1	1	1	1	1, 36	1, 25	1, 46
Change school leadership	13	1	2	2, 58	2	1, 23, 59	1	1, 3, 47
Increase focus on financial and operational performance	34	3	1	36	22	12	46	48
Increase focus on Maths and English subjects	19	4	9	5	29, 39	37, 50, 52	30, 41	31, 49
Reduce senior leaders' teaching workload	14	12	12	15	50	59	54	60
2. Improve public image								
Rebrand school and communicate change to general public	12	1	1	1, 12	1, 13, 26	1	1	1
3. Increase service capacity								
Reduce admissions lead-time and enable on-line applications	13	2	3	2	16	2	2, 12	12
Acquire or set up primary school		46	5			58	50	
Set up sixth form	29		48	36				
Expand secondary service offering	29	48	5, 48	36		28	50	
4. Change student admissions								
Change admissions process	8	6	4	7	11	15	20	19
Acquire or set up primary school		46	5			58	50	
5. Change organisational structure								
Open new school to create single site and improve facilities	24	48	5	1		24	24	24
Centralise back office activities	3, 37	8	37, 48	13		49	3, 37	24, 29, 48
Introduce middle management to focus on parents	2, 13	13	12	9, 15	14, 48	1, 60	26, 54	13, 52
Improve back office facilities	27	48	37	3, 37	5	5	4	2
Reduce number of teachers	16	12	28	18, 26	20	26	5, 14, 40	48
Set up 'houses' for students and staff	36	2			15	2		
Reduce number of back office staff	15	25	28	23, 27	20	15, 25	14	49
Centralise front office activities	26	48	37	37	37	60	4	24, 36
Create process management structure	38	56	36			49	38	48
6. Stabilise learning platform								
Focus on student attendance and behaviour	16	1, 12	1, 36	17	3	1, 16, 28	2, 12	1, 14, 25
Introduce 'get ready for learning' to prepare students for class	28	37, 48	36	24	38	48	52	47, 50
Focus on teacher behaviour	18			3	21, 27		29, 40	15, 24, 30, 50

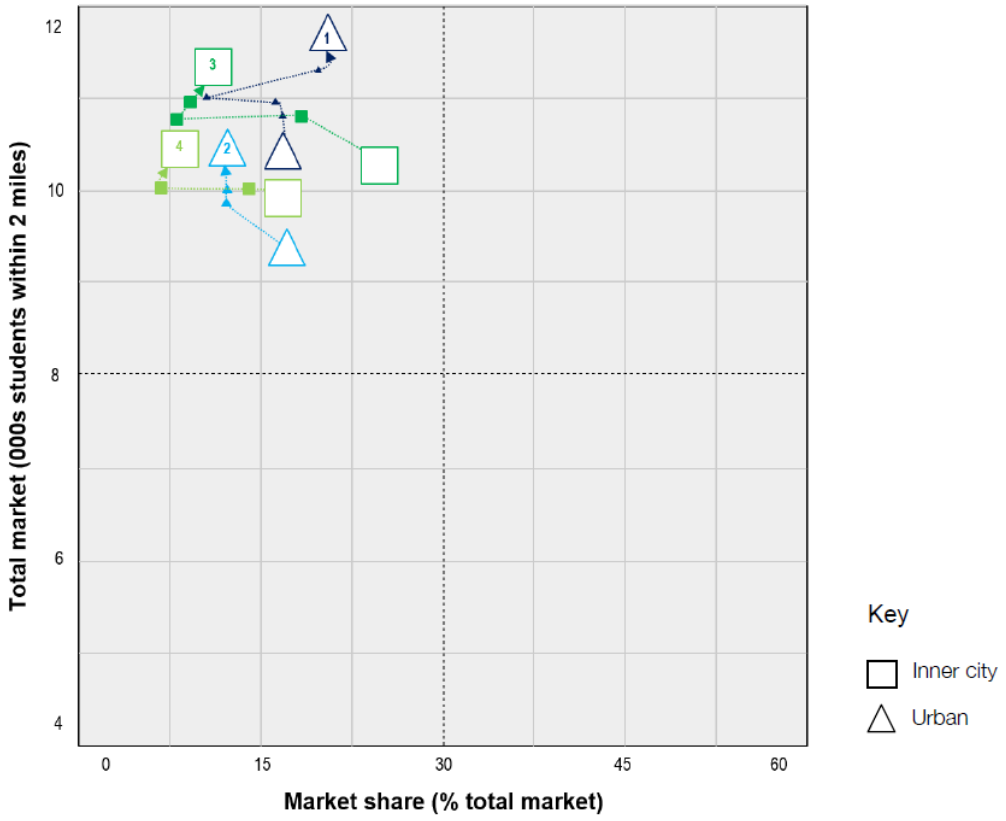
Key development stages	Month of changes within each school							
	Inner city		Urban		Rural		Coastal	
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
7. Focus on teaching								
Increase performance targets, introduce 'capability system' and manage out perceived poor performers	17	12	12	18	20	27	2, 39	46
Increase teaching observations	17	12	13	16	19	27	28, 55	49, 60
Allocate best teachers to Year 11 and worst performing students			47			50		
Increase senior leaders' teaching workload	3	2	13	3		2, 26	27	3, 25
Increase salary to attract better Year 11 teachers	35, 48	24, 36	36, 48	36, 48, 60	12	25	36	47, 59
8. Change development systems								
Introduce standard performance measures and display real-time performance	30	37	38	28	10, 29	36	15, 31	16, 32
Develop teamwork and middle management capability	39	14, 38	39	27	30	13, 37	56	50, 60
Introduce 360 feedback, mentoring and coaching	51	40	46	29, 38	40	53	57, 59	60
Train staff in quality improvement tools and techniques	39	39, 58	41, 49	27	30	39, 60	56	60
Develop senior leader capability	51	12	40, 48	29, 38	40	14, 25	57, 59	46

Table 7 - Summary of investments made in each school over the last five years

Key development stages	Month when changes were made							
	Inner city		Urban		Rural		Coastal	
	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6	Case 7	Case 8
1. Leadership and objectives	1, 12, 13, 14, 19, 34	1, 1, 3, 4, 12	1, 2, 2, 9, 12	1, 2, 5, 15, 36, 58	1, 2, 22, 29, 39, 50	1, 1, 12, 23, 36, 37, 50, 52, 59, 59	1, 1, 25, 30, 41, 46, 54	1, 1, 3, 31, 46, 47, 48, 49, 60
2. Public perception	12	1	1	1, 12	1, 13, 26	1	1	1
3. Service capacity	13, 29, 29	2, 46, 48	3, 5, 5, 48, 48	2, 36, 36	16	2, 28, 58	2, 12, 50, 50	12
4. Student admissions	8	6, 46	4, 5	7	11	15, 58	20, 50	19
5. Organisational structures	2, 3, 13, 15, 16, 24, 26, 27, 36, 37, 38	2, 12, 13, 25, 48, 48, 48, 48, 56	5, 12, 38, 38, 36, 37, 37, 37, 48	1, 3, 9, 13, 15, 18, 23, 26, 27, 37, 37	5, 14, 15, 20, 20, 37, 48	1, 2, 5, 15, 25, 26, 49, 60, 60	3, 4, 4, 5, 14, 14, 24, 26, 37, 38, 40, 54	2, 13, 24, 24, 24, 29, 36, 48, 48, 48, 49, 52
6. Learning platform	16, 18, 28	1, 12, 37, 48	1, 36, 36	3, 17, 24	3, 21, 27, 38	1, 16, 28, 48	2, 12, 29, 40, 52	1, 14, 15, 24, 25, 30, 47, 50, 50
7. Teaching	3, 17, 17, 35, 48	2, 12, 12, 24, 36	12, 13, 23, 36, 47, 48	3, 16, 18, 36, 48, 60	12, 19, 20	2, 25, 26, 27, 27, 50	2, 27, 28, 36, 39, 55	3, 25, 46, 47, 49, 59, 60
8. Development systems	30, 39, 51	12, 14, 37, 38, 39, 40, 58	38, 39, 40, 41, 46, 48, 49	27, 28, 29, 38	10, 29, 30, 40	13, 14, 25, 36, 37, 39, 53, 60	15, 31, 56, 57, 59	16, 32, 46, 50, 60, 60, 60

Figure 1
Catchment area (markets) served by the schools over the five years

Inner city and Urban schools



Rural and Coastal schools

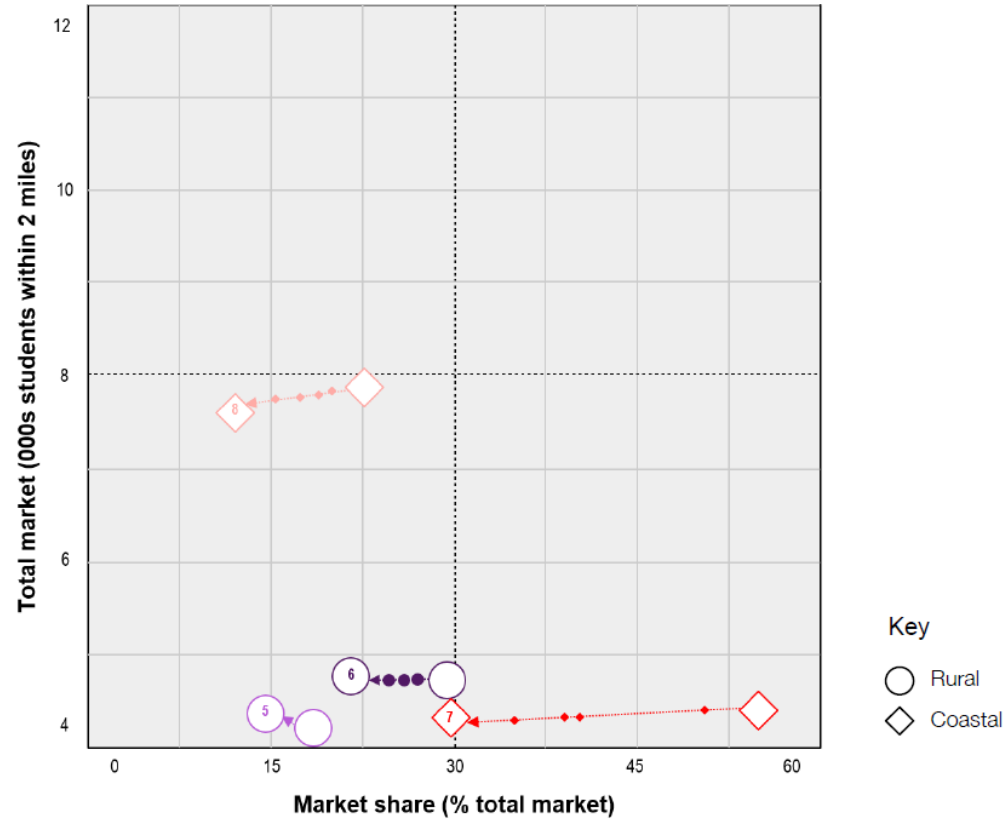
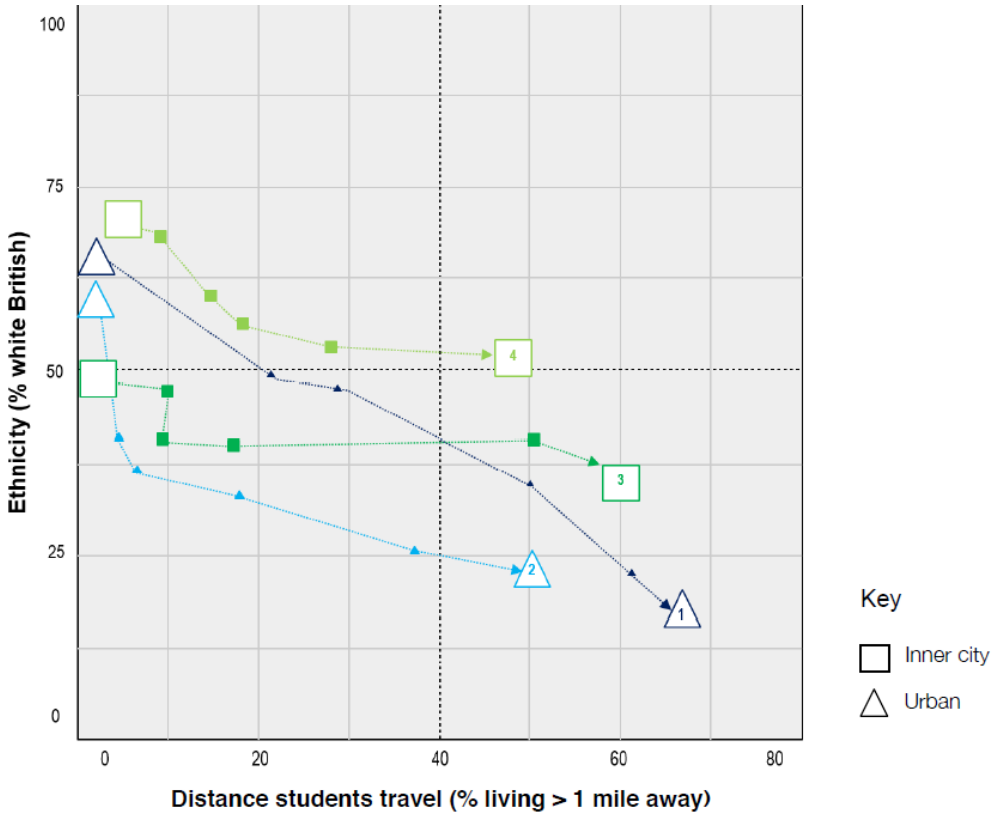
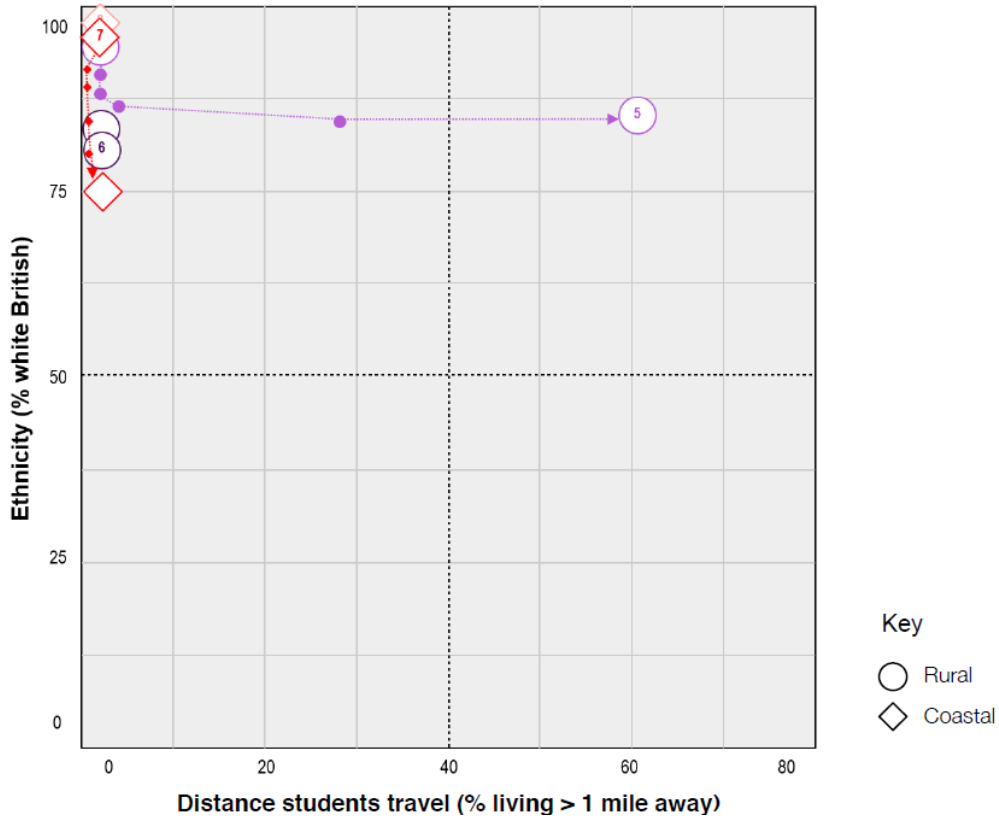


Figure 2
Students taught by the schools over the five years

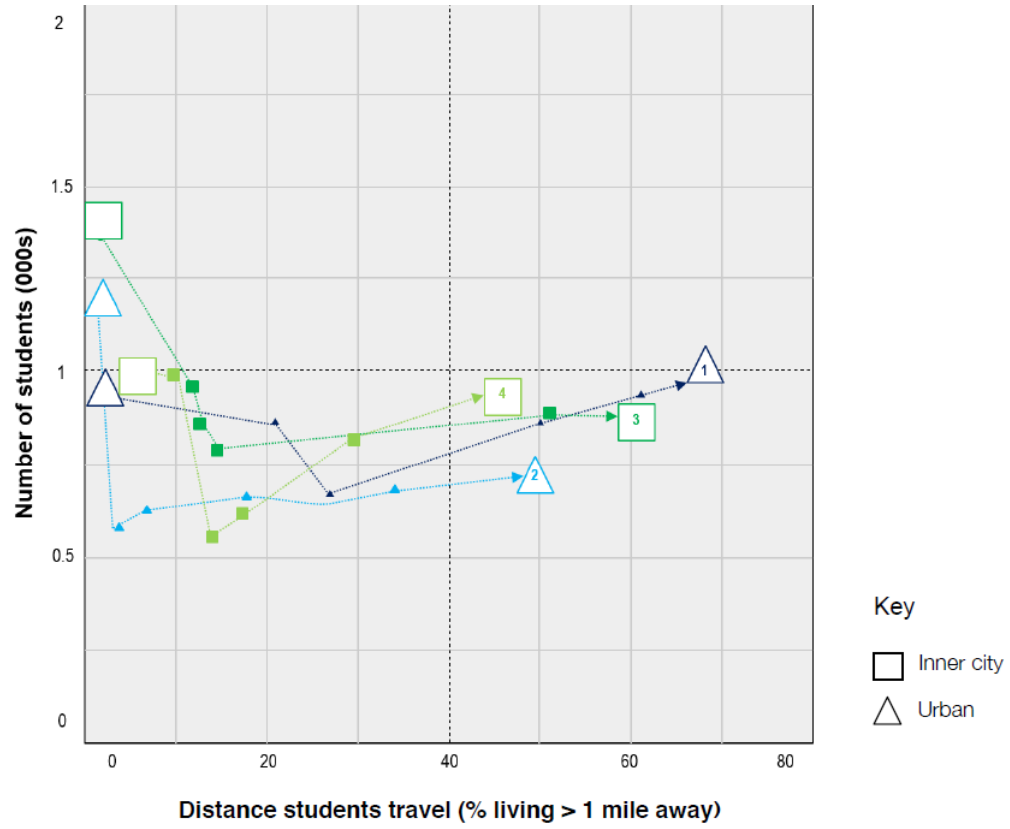
Inner city and Urban schools: Ethnicity and distance travelled



Rural and Coastal schools: Ethnicity and distance travelled



Inner city and Urban schools: Number and distance travelled



Rural and Coastal schools: Number and motivation

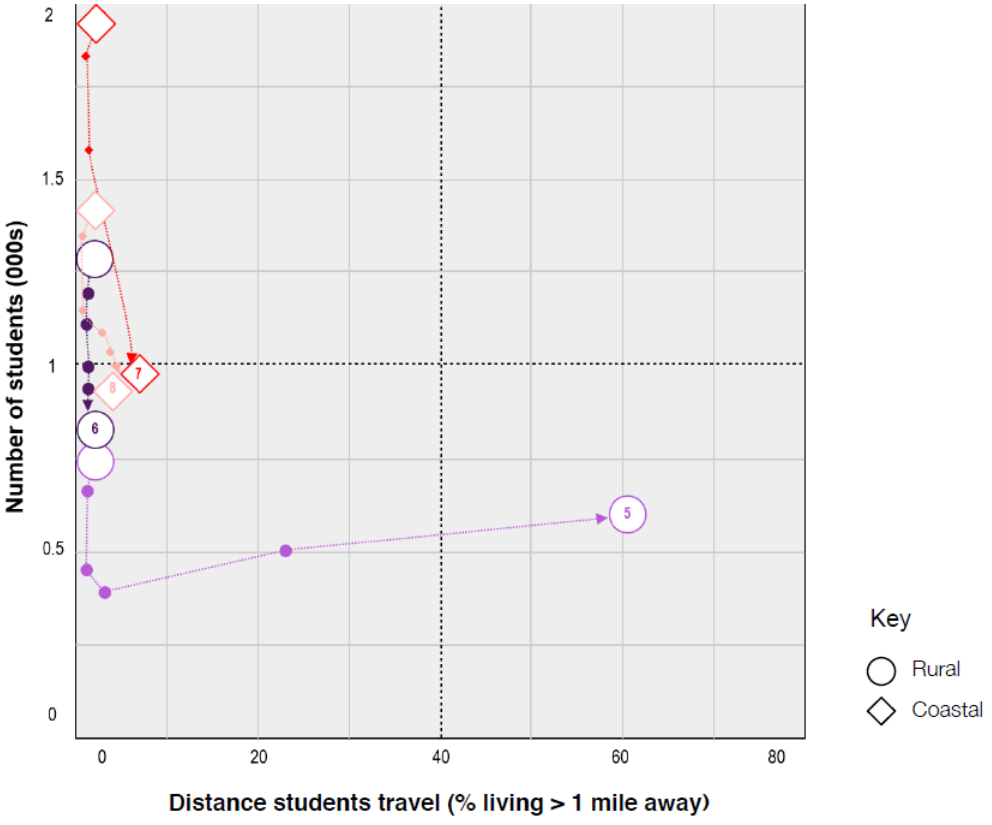
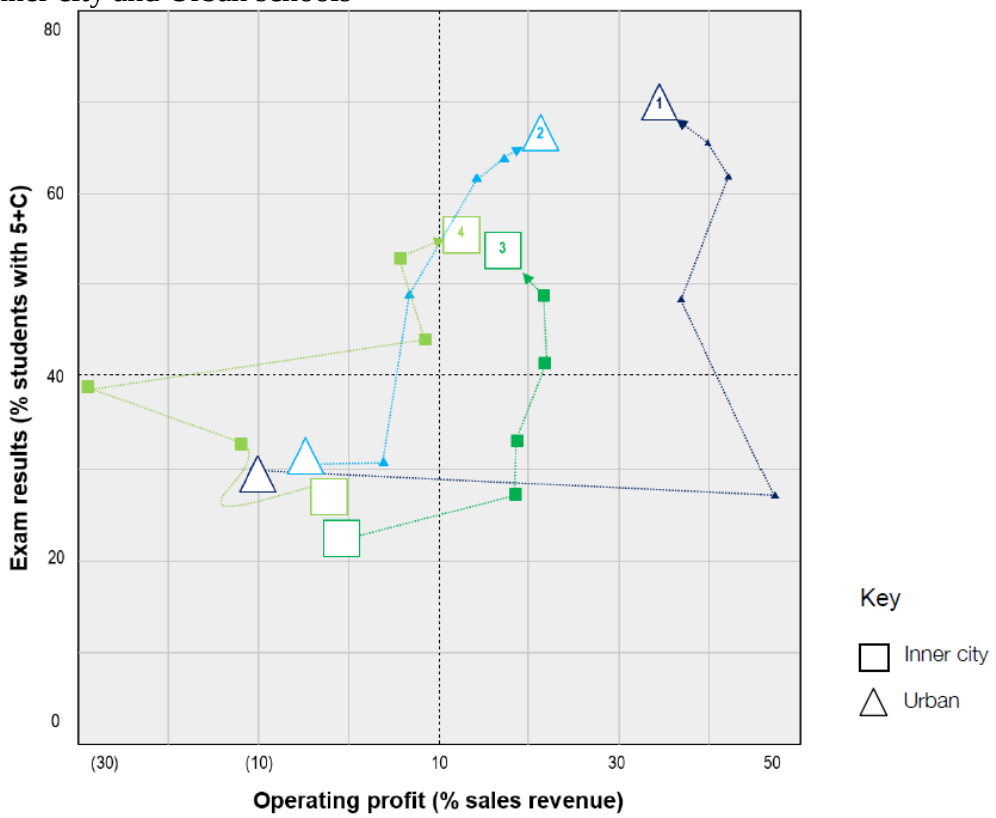
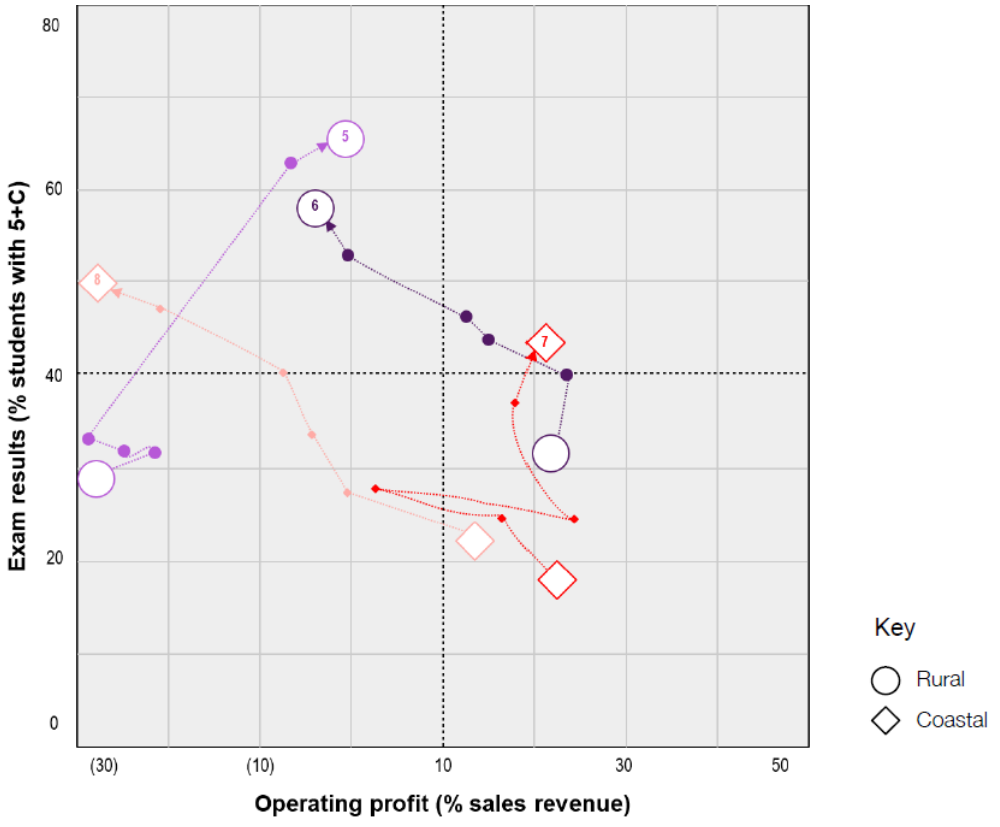


Figure 3
Performance of the schools over the five years

Inner city and Urban schools



Rural and Coastal schools



Tables 6 and 7 show that each of the eight schools made investments in eight main steps: (1) narrow objectives, (2) improve public image, (3) expand capacity, (4) focus on student admissions, (5) concentrate organisational structure, (6) stabilise behaviours, (7) focus on teaching and (8) develop management systems. However, the schools made these changes in different orders and some changes had to be made more than once.

Figures 1, 2 and 3 show the changes in catchment area (market) served, students taught, and performance over the five years since they became an Academy (Y1 to Y5) for each school. The significant points that emerge from these analyses in relation to management literature are now discussed in more detail.

Change governance and leadership. The first step for all the schools was the appointment of a new governing board with members selected based on their previous experience of improving an organisation's performance. Their meeting minutes also showed that the board took more decisions after it became an Academy and that these were more focused on performance than they had been before.

Expand service capacity. All schools improved their admissions process early on to help attract new students, but three of the schools also acquired a primary school as soon as they became an academy. This increased revenues and created the funds required to make changes within the secondary school. By contrast, the other five schools did not expand their service offering until much later on in their development, which reduced their financial performance and limited their ability to invest in long term initiatives.

Create the right structure before improving processes. The structures within the school are used to focus management attention and determine where resources are located. All the schools found it very difficult to stabilise the learning platform and focus on teaching before they had the right structures in place.

Delay overhead investment. All the schools introduced middle management to help manage parent relationships, but one of the Rural schools (Case 5) did this too early in their development before they had the revenue to support this additional overhead cost. As a result, they had to then make 75% of these managers redundant in the following year. By contrast the other schools delayed this investment until they had the revenue and volume of students to support this change.

Increase scope for change. As the schools improved their operational performance, they were able to increase the catchment area served by attracting more students who lived more than one mile from the school. The broader student base allowed them more scope in student admissions to recruit in order to develop a stable learning platform. This, in turn, then improved their operational and financial performance. By contrast, the Rural and Coastal schools struggled to change the catchment area that they served as it was restricted by geography. In order to provide more scope for change in student admissions, they reduced the number of students that they recruited.

Stabilise the platform for change before focusing on performance. All eight schools found that teaching could not be improved before the learning platform was stabilised. All the schools struggled to improve the level of student attendance and behaviour, but three schools managed it faster than the others by acquiring primary schools early on and attracting students from farther afield to their school. The other three schools all found that their attempts to improve teaching failed when the platform for learning was still unstable.

Vertically integrate. Acquiring a primary school early on led to four main benefits. Firstly, it created a wider pool of funds for investment. Secondly, it created the opportunity for greater administrative efficiency, for example by combining back office activities across primary and secondary schools. Thirdly, behavioural expectations for learning were more easily understood by both students and management and, fourthly, demographic and social trends became more visible earlier on. The three schools that did not do this had much lower financial performance and found it more difficult to improve student attendance and behaviour.

Geography (market) affects performance. The possibility for change is affected by factors such as demographic stability and level of competition, which in turn affects how quickly and how much

performance targets can be achieved after investments are made. For example, it has taken the Rural and Coastal schools much longer to change performance as their geographies (markets) are subject to less change.

Implications

Those schools most successfully achieving the performance metrics set by the government through OfSTED tended to make eight changes in a particular order: narrow objectives; improve public image; develop capacity; focus on student admissions; concentrate organisational structures; stabilise behaviours; focus on teaching; and develop management systems. Academies that followed these steps in this order generally achieved their performance goals faster and used fewer resources. However, it must be recognised that this approach is quicker to succeed where there is greater scope to change. Hence, Rural and Coastal schools took much longer to achieve improvements in the performance metrics than Urban and Inner City schools.

While these management practices appear to be effective in individual schools achieving the performance metrics set, they raise broader questions for the longer term. In particular, the focus on the single set of performance targets has encouraged: a focus on the subjects of Maths and English; more focus on perceived borderline students, just below Grade C; and less focus on students perceived to be well above Grade C. While these effects may seem obvious given the performance metrics set, they also appear to be having broader societal impacts. In particular, the ethic mix of students has changed with a reduction in those classed as White British. Students are also drawn from a much wider area and so potentially bypassing more local students.

These societal issues are of particular concern in two ways. Firstly, they call in to question the ability of all schools to become academies as they cannot all focus on one segment of students. A focus on one set of performance metrics suggests a uniform market where students and teachers are interchangeable. It is worth noting that in a commercial marketplace, competing organisations employ a different mix of performance metrics to suit the requirements of their particular customer segment(s) and other stakeholders. Secondly, performance metrics may need to change as the environment changes. The current set of performance metrics may have helped create change but how is this sustained and improved upon? Further research is required to test these findings against a wider sample of academies and other service organisations, and to consider future developments.

Conclusions

These findings may help practitioners to better understand how and where to make investments within their organisations to achieve specific performance objectives, focusing on building a stable platform for change (possibly using different performance metrics) before focusing on the prescribed performance targets. As a result, these findings build on the work of others (such as Angel and Rock, 2005; Brown, 2001; Ike et al., 2010; Iwata and Okada, 2011 and Morita et al., 2011) and start to address the call for longitudinal studies to help service organisations better understand how to improve organisational performance over time (Gammeltoft et al., 2010; Jonas, 2010; Hill and Cuthbertson, 2011).

Moreover, the findings also highlight the importance of understanding any unintended consequences of setting performance metrics and that these need to be monitored and reviewed over time. This is a common criticism of applying performance metrics in that the metrics may fail to adequately reflect the needs of all stakeholders. In particular, the move from creating initial performance improvements to sustaining and improving performance further is challenging as the performance metrics may need to change. This is a rich area for future research.

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Appendix 1 - OfSTED inspection process, framework and grading

Process

- Inspectors observed lessons, often jointly observed with senior employees.
- Meetings were held with the Academy Board and with senior employees from the Academy sponsors. Meetings held with six different student groups and with many different staff including the principal, the heads of both schools and other leaders.
- Analyse responses to the on-line questionnaire Parent View in planning the inspection. Responses to staff questionnaires are also considered.
- Look at samples of students' past and present work and scrutinised various documents. These included the academy's checks on how well it is doing and planning and extensive information on students' academic progress and records relating to behaviour, attendance and safeguarding.

Framework

Schools are inspected on four aspects:

- **Achievement of pupils** - 'is one of the key issues we examine. In judging achievement, we look at pupils' levels of attainment when they join the school, the progress they make during their time at the school through to the standards they reach by the time they leave, compared with all pupils nationally.' (OfSTED, 2012).
- **Teaching quality** - 'In our new inspection approach, inspectors spend even more time in classrooms observing lessons. They look at how well pupils are learning and how effectively teachers assess and give feedback to children on their work. Inspectors focus closely on how effectively literacy and numeracy skills are taught, talk to pupils about their work and, in primary schools, inspectors will also listen to pupils read. We continue to listen to the views of parents, pupils and staff by inviting them to complete questionnaires. Inspectors provide feedback to teachers and other staff about the quality of the lessons observed and give points for improvement, where appropriate.' (OfSTED, 2012).
- **Behaviour and safety of pupils** - 'we judge how well the school manages pupils' behaviour and attendance and promotes and ensures their safety from bullying and harassment. Particular attention is given to pupils' attitudes to learning, as well as to their conduct in lessons and around the school. Inspectors take into account the views of pupils, staff, parents and carers, and governors to get a view of what behaviour is typically like at the school.' (OfSTED, 2012).
- **Leadership and management** - 'good school leadership is essential if a school is to perform well. Inspectors judge the effectiveness of leaders and managers of the school, (including, where relevant, governors) in improving the quality of teaching and learning, raising standards and ensuring the health, safety and wellbeing of pupils at the school. They judge how well leaders and managers ensure that the curriculum meets the learning needs of the pupils and how effectively they lead and manage school improvement.' (OfSTED, 2012).

Grading

Based on their inspection, a school is graded from 1 to 4 using the following definitions:

- **Grade 1: Outstanding** - An outstanding school is highly effective in delivering outcomes that provide exceptionally well for all its pupils' needs. This ensures that pupils are very well equipped for the next stage of their education, training or employment.
- **Grade 2: Good** - A good school is effective in delivering outcomes that provide well for all its pupils' needs. Pupils are well prepared for the next stage of their education, training or employment.
- **Grade 3: Requires improvement (Formally known as Satisfactory)** - A school that requires improvement is not yet a good school, but it is not inadequate. This school will receive a full inspection within 24 months from the date of this inspection.
- **Grade 4: Inadequate (Formally known as Special measures)** - A school that has serious weaknesses is inadequate overall and requires significant improvement but leadership and management are judged to be Grade 3 or better. This school will receive regular monitoring by OfSTED inspectors.