A longitudinal study of learning, progression, and personal growth in Sierra Leone

Annual Report

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1. Introduction

This longitudinal study follows a cohort of students enrolled in the Rising Academy Network over a period of three years and looks at how much they learn in that time. Learning, for the purposes of this study is described as making gains in:

- Reading – that is, in vocabulary and understanding the meaning of words, comprehension (lexical and grammatical knowledge combined with attaching meaning to the written word, sentence or passage), responding (bringing individual experience and knowledge of the world to the text), and analysing (stepping back from the meaning of the text and considering it in relation to other theories and literary traditions and intentions of the author).

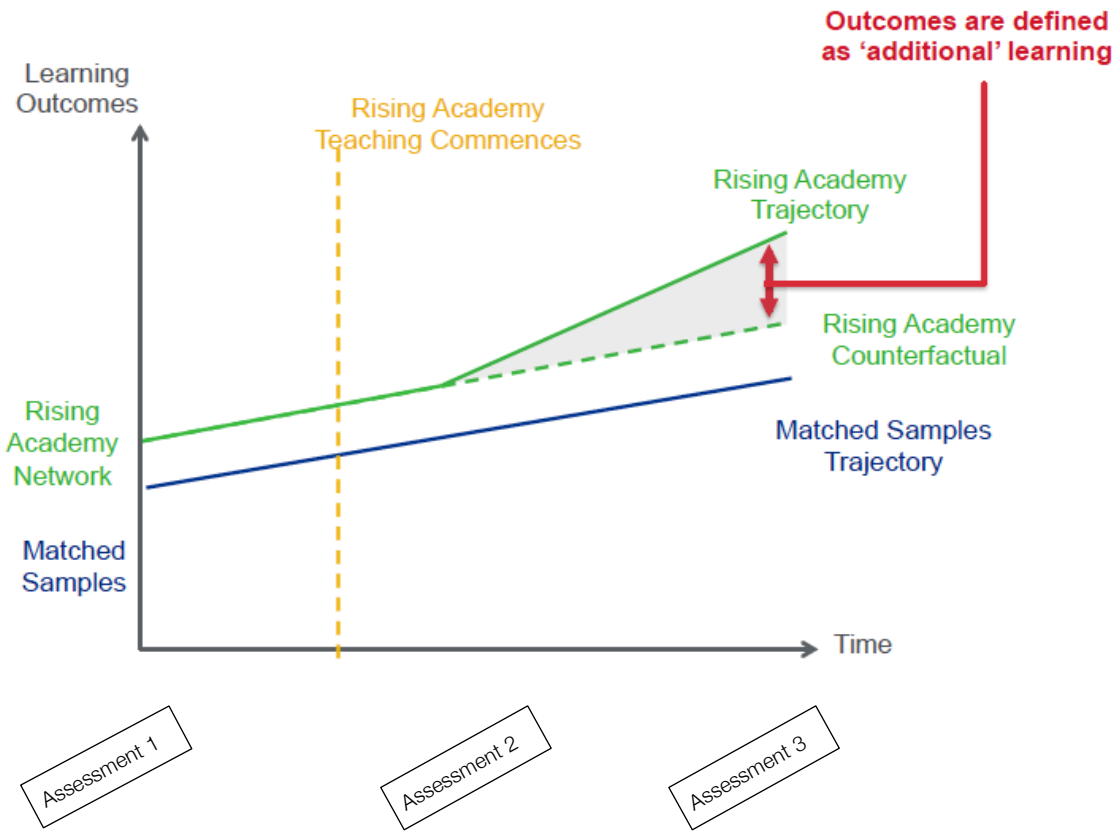
- Mathematics – that is, in operations and algebraic thinking (whole numbers addition, subtraction, multiplication and division, and evaluation of numerical expressions), number and operations (fractions and decimals), and measurement and data (time, money, geometry), amongst others.

- Personal growth and independence – that is, learners engage with the learning process and become more independent, critical and self-aware. They reflect on the teaching they receive, their own attitudes and dispositions towards learning, and their own learning progress.

To get a sense of how much progress students in the Rising Academy Network make over time, their achievements are compared to those of students of similar ages. Comparison groups consisting of matched student samples drawn randomly from government-funded schools and other private schools in the same geographical areas are assessed on the same tests.

Learning gains are calculated by the difference in scores of the Rising Academy Network students and their matched samples over time. This difference is referred to in Figure 1 below as 'additional' learning and is statistically calculated as a difference in standard deviations between the intervention and non-intervention groups.

Figure 1 below shows how we intend to measure the learning improvements of the students in the Rising Academy Network.



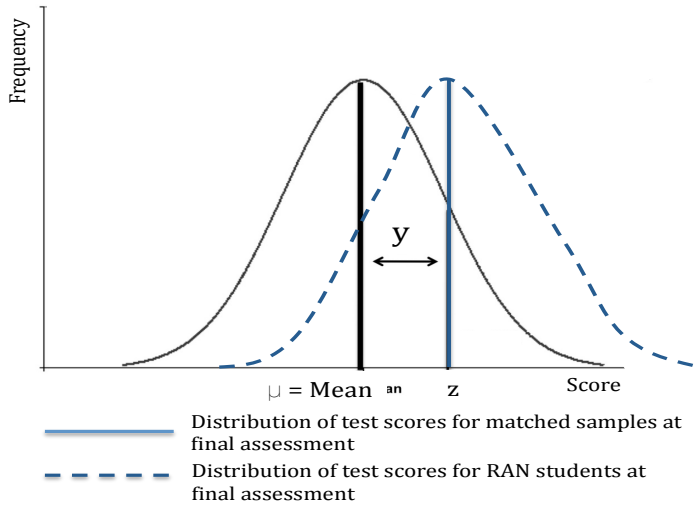
At the beginning of the evaluation – the first time the students in both groups are assessed - we would expect there to be little if any difference between the scores of students in the Rising Academy Network and those of the matched student samples.

At the second assessment we would expect there to be few differences between the scores of the students in the Rising Academy Network and those of the matched samples. This is because it normally takes some time for results of teaching and other interventions to show.

At the third assessment we would expect there to be some discernable difference in the scores of the students in the Rising Academy Network to those of matched samples.

Figure 2 below shows the model that will be used for calculating differences in learning between the students in the Rising Academy Network compared to their matched samples. 'Y' represents the difference in standard deviation between the two groups.

Figure 2 – Model for calculating difference in effect size between groups.



2. Methods

The study employs the use of a computer adaptive test (CAT) to assess progress in reading and mathematics. The software is purchased under licence from a third party provider. There is good evidence that CATs are an efficient tool for monitoring student performance and the achievement of standards. The CAT used in this study has an item bank in Mathematics that contains over 5,000 reliable and valid items across the grade range. The item bank for reading is similar.

Students are tested three times a year and every time a student takes a test, the CAT models the difficulty level. Each assessment item generated is based on the student's performance on the previous items – so difficulty levels are moderated such that they do not frustrate the test-taker. 34 items are generated for each test. The time taken for a student to complete either the mathematics or reading test is 20 minutes.

The tests are administered to students on IPADS and individual results are generated and uploaded to a server immediately after the students have taken the assessment.

When a round of testing is completed, the research team uses the data to generate different reports including formative and diagnostic reports on individuals and groups of students that can be used at the school level, and summary reports by school, for use by administrators to compare schools in the network and monitor progression towards their set targets and goals.

Potentially, reports generated for use by the school can have an impact on learning outcomes. The evidence on the importance of assessment and formative feedback in improving student learning outcomes is overwhelming (Black and William, 1998).

This study generates reports on student performance that are diagnostic (they highlight the areas where students encounter the most difficulty in a particular mathematics topic), formative (the reports identify the benchmarks that students should be working towards as the progress towards the attainment target (standard), progressive (they track the rate of progress towards the target), and norm referenced (they group students by achievement allowing for teachers to adopt more targeted strategies to support variance in learning.

3. Findings

This report presents the findings for the first year of the study. It discusses progress that students have made based on the differences in their reading and mathematics scores from the baseline assessments (taken before teaching had begun) and end of year assessments. It compares the results of students in the Rising Academy Network to those achieved by matched samples in comparison schools.

The report also discusses how students have experienced teaching, their impressions of themselves as learners, and their reflections about change.

It is important to note that due to the Ebola crisis in Sierra Leone, the academic year that this report covers was unusually short. It started in January and finished in July. Normally a full academic year runs from September to July. This is bound to have had an effect on the amount of progress that students have been able to make.

In this respect, and in any event, it is a good principle to see annual progress reports as just that – reports that monitor progress and that treat gains as initial rather than conclusive. A more complete understanding of the extent to which learning in the Rising Academy Network has improved is to be gained towards the end of the study.

1. Reading

As discussed above, students in the Rising Academy Network and matched samples in comparison schools were assessed on the progress they made in reading skills such as vocabulary and understanding the meaning of words, comprehension of text, responding to text and analysing text.

Students in the Rising Academy Network were assessed on three occasions during the (truncated[1]) academic year. Matched student samples in comparison schools were assessed at the beginning and the end of the academic year.[2]

As in all cohort studies, there is likely to be attrition (loss of students) due to a number of reasons including those who have left the school or absent on the day of testing. In order to make reliable calculations of learning gains, results are presented for those students who presented themselves for assessment on two occasions – at the beginning of the academic year and at the end of the academic year. The table below shows the number of students for all groups who were present at the start of the academic year but who did not take the reading tests at the end of the academic year. The average scores at baseline for the sub-group not assessed at the end of the academic year (dropped out or absent) suggest that for those in the Rising Academy Network and in other

[1] Schooling was affected by the Ebola crisis. The academic year was unusually short. It ran from January 2016 to July 2016

[2] Matched samples are assessed at the beginning and end of each academic year only. This is because of the logistical demands and expenses involved in testing.

private schools, they are not the poorest performing students (the average mean scores are consistent with that of the entire cohort). Those in government schools not presenting for the assessment at the end of the year are more likely, based on the average mean score of the sub group at baseline, to have dropped out because of reasons related to poor academic performance.

Table 1: Scores of students presenting for assessment at beginning and end of the year and those not presenting at the end of year assessment

		RAN		Other private		Government	
		N	Mean	N	Mean	N	Mean
Scaled score	Assessed at beginning and end of the academic year	157	196	84	191	85	188
	Assessed as part of the cohort at baseline only	25	192	20	195	55	164
Estimated Reading Age	Assessed at beginning and end of the academic year	157	6.8	84	6.8	85	6.8
	Assessed as part of the cohort at baseline only	25	6.9	20	6.9	55	6.6

We can see from Table 2 below the scores for all groups in reading at the beginning of the study in January 2016 (students who did not present at the end of the year assessment are excluded from the data). As expected, students in the Rising Academy Network achieve scores that are very similar to those achieved by matched samples in comparison schools.

This shows that the students are all starting from more or less the same level of learning. This is illustrated well by the similarity in reading ages for all groups.

By the end of the (truncated) academic year in July 2016 the assessments conducted in July 2016 show that on average, students in the Rising Academy Network (RAN) have made significant gains in reading compared to comparison schools.

The scaled scores for RAN students increase by 35 points from 196 to 231 compared to a gain of 13 points on average for matched students in other private schools and a 4 points drop for those in government schools.

The gains for RAN students are also seen in the increase of 4 months in the estimated reading ages – up from 7 years and 3 months to 7 years and 7 months. In other privates schools the average gains in reading age amounted to 2 months and in government schools, there was no significant gain and remained at 7 years and 2 months.

Table 2: Reading (students assessed both in January and July only)

	N		Scaled score	Estimated Reading Age
RAN schools	157	January	196	7:03
		July	231	7:07
		Change	+35	+ 4 months
Other private	84	January	191	7:02
		July	204	7:04
		Change	+13	+ 2 months
Government	85*	January	188	7:02
		July	184	7:02
		Change	-4	+ 0 months

Using the model described in figure 2 above, the statistical significance of the change can be seen in table 3 below.

Table 3 – Effect size

	RAN (N=157)		Other private (N=84)		Government (N=85)	
	January	July	January	July	January	July
Mean Scaled score	196.2	231.2	191.0	204.1	188.4	184.5
Standard Deviation	95.1	115.0	92.3	98.8	107.0	95.8
Standard Errors	7.6	9.2	10.1	10.8	11.6	10.3
Pooled SD Differences	84.33		64.94		63.51	
Pooled SE Mean Differences	6.73		7.09		6.89	
t	5.20		1.86		0.57	
Correlation coefficient (r)	0.693		0.771		0.808	
Effect size d* within school type	0.325		0.159		0.038	
Effect size d** Jan - Jul RAN & other private	0.232					
Effect size d** Jan - Jul RAN & government	0.391					

*Borenstein (2009)
**Morris (2008)

So, on average students in the Rising Academy Network are making better progress than their peers in other schools. But how quickly are they progressing towards the benchmark set for students at their grade level?

We can answer that question by looking at the annual progress reports below. Figures 3, 4 and 5 below show the annual progress for students in the Rising Academy Network and for those in

comparison schools. The trend line in the graph is a representation of the average norm referenced standardised score[3] calculated statistically at the mid-date of the test date range. The band shaded in grey in the graph indicates the range (80 to 120 points) in which 68% of students in the UK will typically be scoring.

Figure 3 below shows that students in the RAN are progressing well in this direction having scored 73, 74, and 76 across three assessments.

Figure 3 – Rate of progression in Reading for students in the Rising Academy Network

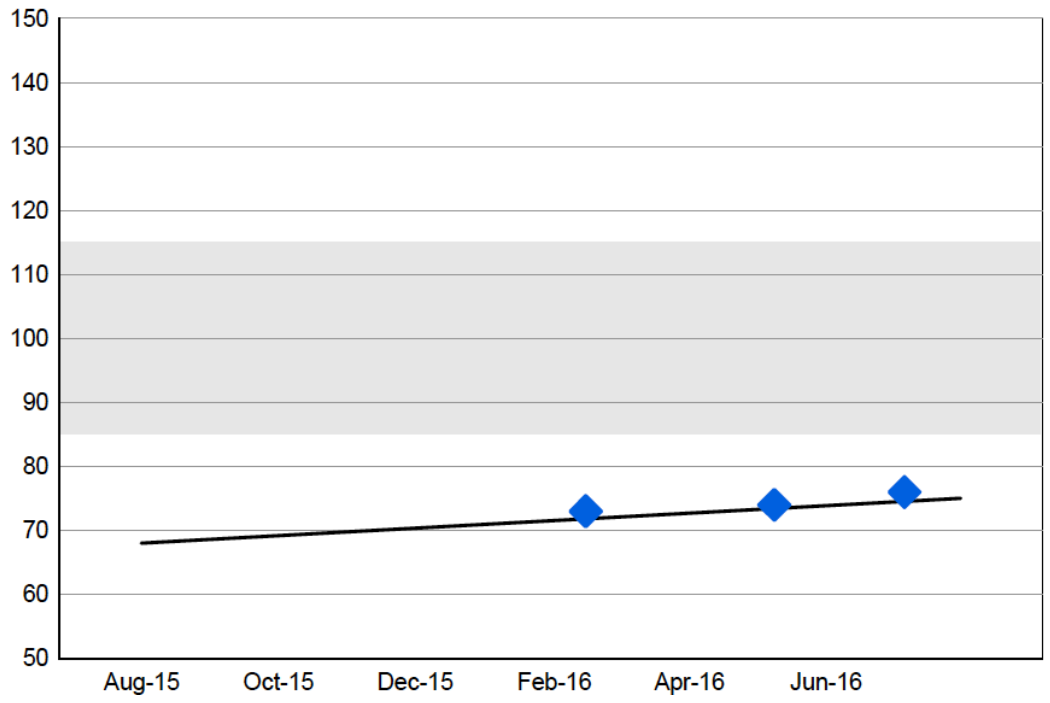


Figure 4 below shows the rate of progression for students in other private schools. They score 73, 71 and 74.

[3] Normed Referenced Standardised Score (NRSS) is an age standardised score that converts a student's "raw score" to a standardised score which takes into account the student's age in years and months and gives an indication of how the student is performing relative to a UK sample of students of the same age. The average score is 100. A higher score is above average and a lower score is below average.

Figure 4 – Rate of progression in Reading for students in other private schools

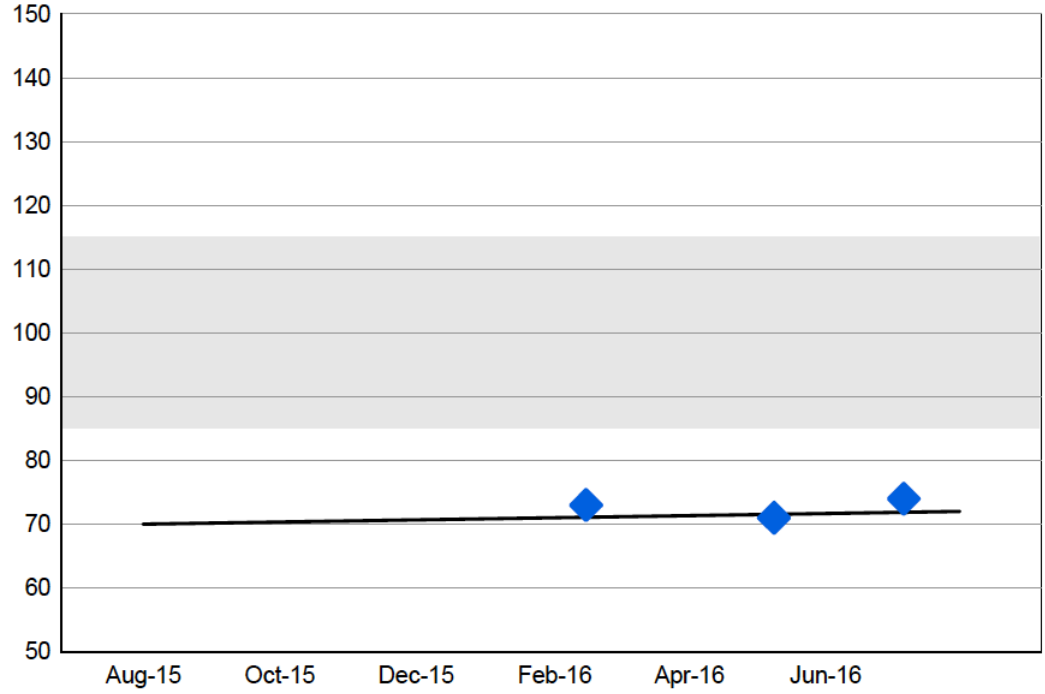
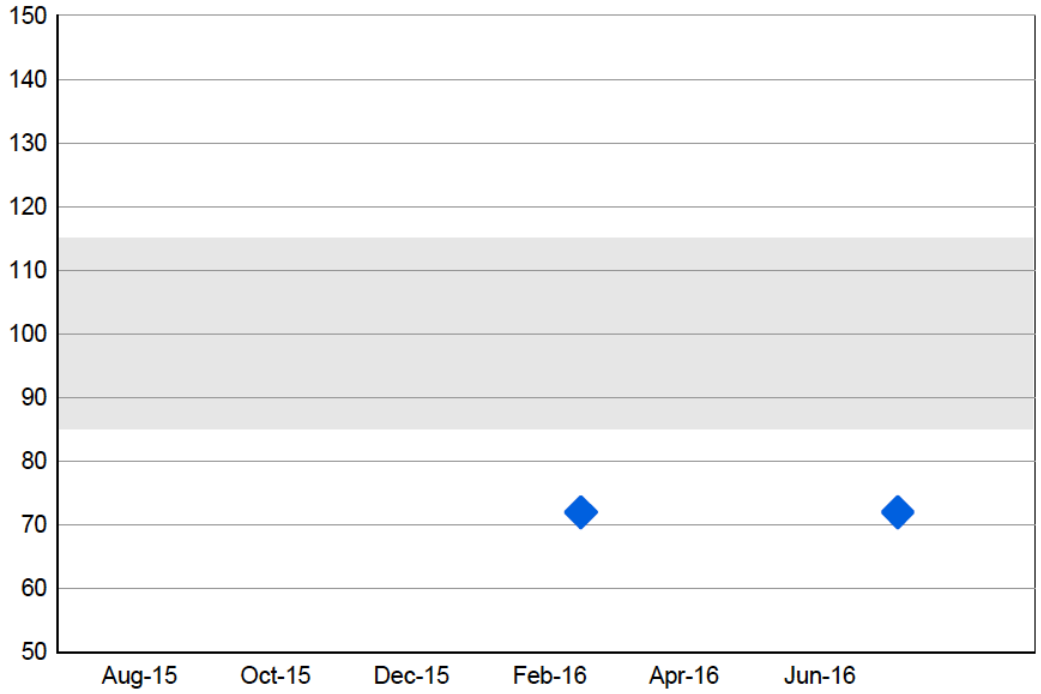


Figure 5 below shows the rate of progression for students in government-funded schools. They score 72 on the first occasion and again on the second.

Figure 5 – Rate of progression in Reading for students in Government Schools



We looked at the average annual progress of female students in reading and compared that to the progress made by male students.

Figure 6 below shows that the norm referenced standardised scores for girls in the Rising Academy Network are 73, 73, and 74.

Figure 6 – Rate of progression in Reading for female students in the Rising Academy Network

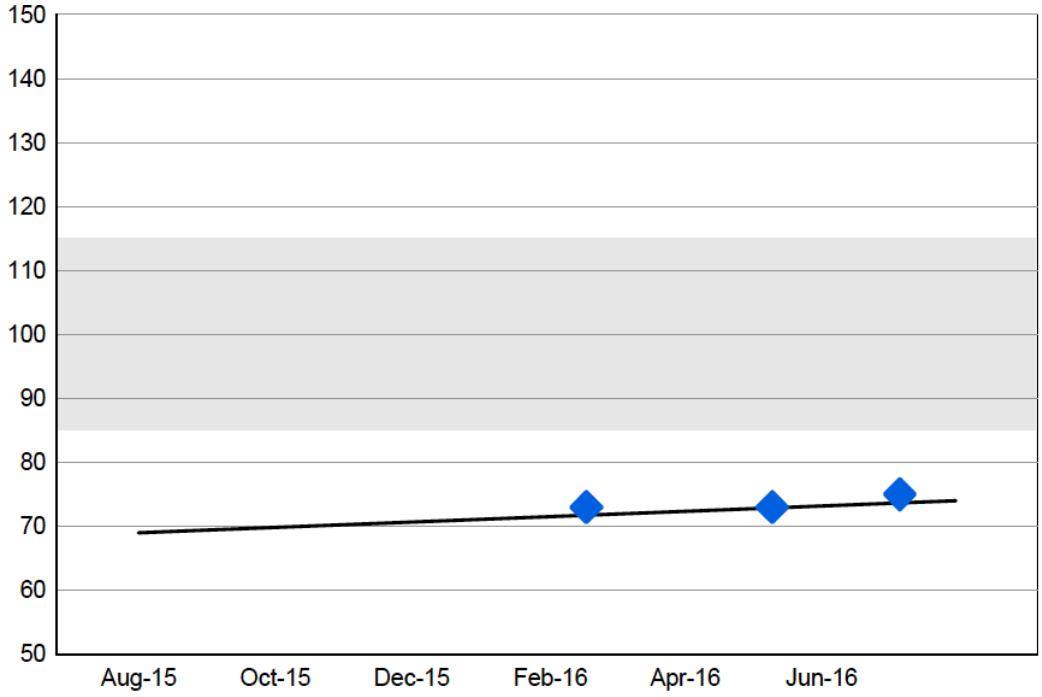
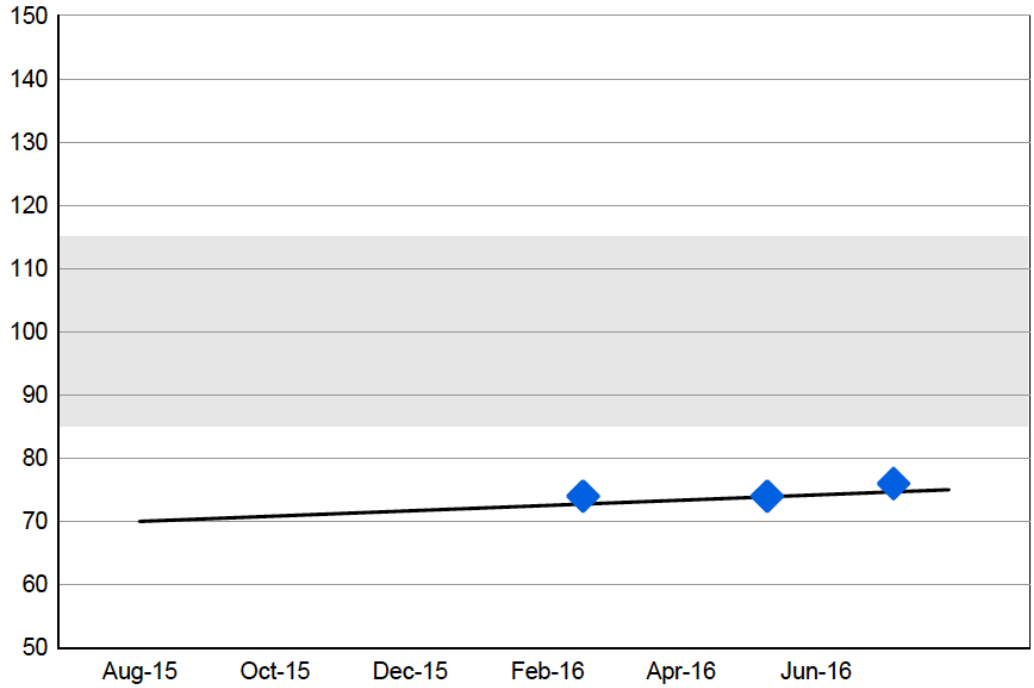


Figure 7 below shows that the norm referenced standardised scores for boys in the Rising Academy Network are 74, 74, and 76. The differences in the norm-referenced standardised scores for girls and boys are not significant. Both groups are making steady progress.

Figure 7 – Rate of progression in Reading for male students in the Rising Academy Network



The second question we must ask is are all students learning? Or are the gains being made attributable only to students who showed better levels of performance at the start?

To answer the question, Table 4 below shows the distribution of students by Levels of Achievement at the beginning of the (truncated) academic year in January 2016 and the end of year assessment in July 2016. Level 4 represents the benchmark and is based on a norm referenced standardised score of 90.

In January 2016, only one student (less than 1%) in the Rising Academy Network achieved the benchmark (Level 4) at the start of the study (before teaching began). 82% achieved Level 1 (very poor performance). This illustrates the scale of the challenge to improve reading skills.

By July 2016, the percentage of students achieving the benchmark increased to 4% and significantly, the number of students with very poor learning levels decreased by 19%. It is clear that a proportion of those at Level 1 in the baseline assessment have distributed across the higher band levels.

By contrast the distribution of scores across achievement levels is less evident in government and other private schools. It is particularly noteworthy that the number of students learning at Level 1 has not decreased as sharply as for those students in RAN schools. It is reasonable to conclude that the learning gains made by RAN students are more evenly distributed – in other words even those performing at the lowest levels of achievement are making gains.

Table 4: Transitions across performance levels for Reading (students presenting for assessment in both January and July only)

School	Level 4		Level 3		Level 2		Level 1		Total
	Jan	Jul	Jan	Jul	Jan	Jul	Jan	Jul	
All RAN students	1 (0.6%)	6 (4%)	5 (3%)	6 (4%)	19 (12%)	43 (27%)	132 (84%)	102 (65%)	157 (100%)
All private comparison	0	0	3 (4%)	3 (4%)	16 (19%)	20 (24%)	65 (77%)	61 (73%)	80 (100%)
All government comparison	1 (1%)	0 (0%)	3 (3.5%)	1 (1%)	11 (13%)	18 (21%)	70 (82%)	66 (78%)	87 (100%)

Level 4: Good performance. Working at or above the benchmark
Level 3: Moderately good performance. Working just below the benchmark
Level 2: Poor performance. Working well below the benchmark
Level 1: Very poor performance and in need of urgent intervention

The greatest transition at this stage is for students performing at the lowest levels of achievement (Level 1). Figure 8 below illustrates the movement between the two assessments for students in the Rising Academy Network and Figure 9 below draws a comparison between students in RAN and those in other schools.

Figure 8 below shows the degree of movement between levels for RAN students

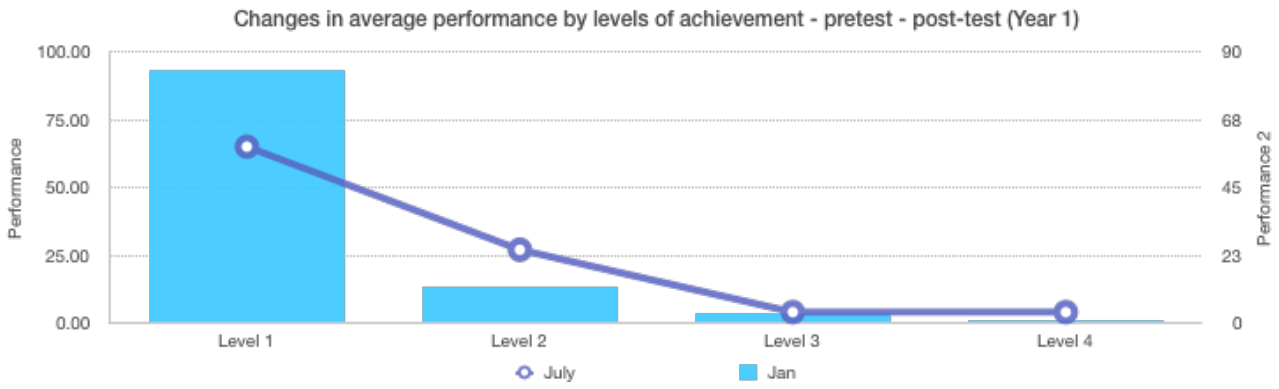
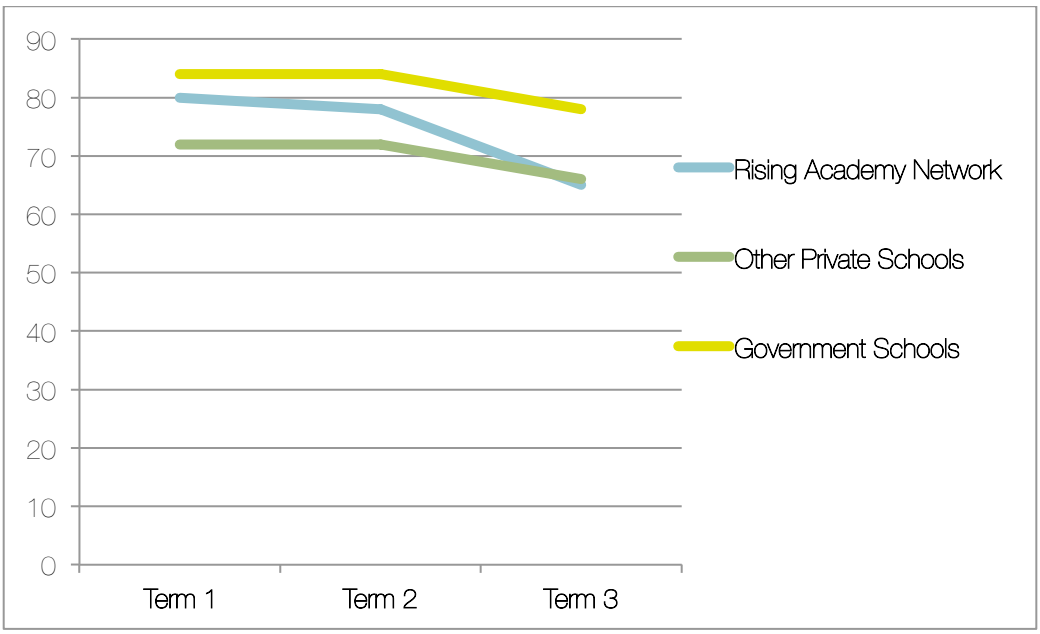
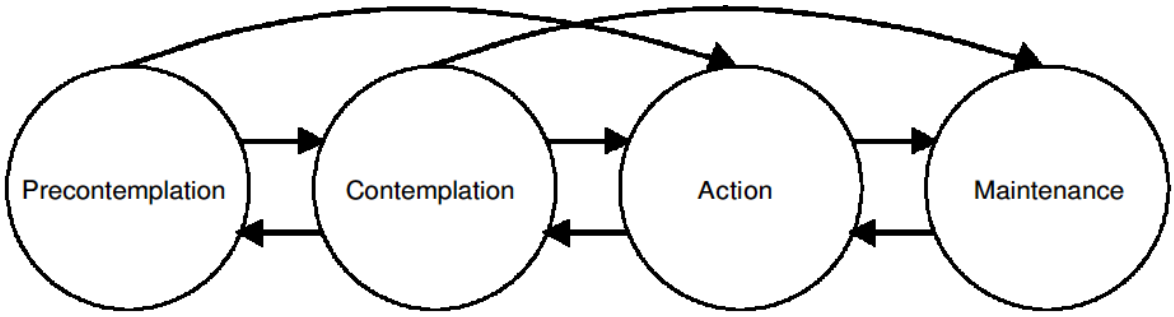


Figure 9 below shows the degree of movement between levels for RAN students compared to matched samples from other schools



It is to be expected that there will also be evidence of 'backward movement' – that is some students doing less well on a later test than in a former test. A more accurate indication of student transition will be given in later reports. This will be based on the technique of Latent Transition Analysis as shown the example below.

Figure 10 – An example of a Latent Transition Analysis to be employed as the study progresses



2. Mathematics

Table 5 below shows the scores for mathematics at the first assessment (before the start of teaching) and at the end of the year in July 2016. As expected student scores are very similar at the start of the (truncated) academic year. But by the end of the year, students in the Rising Academy Network have made significant gains in their learning of mathematics. The average scaled score at the start of the year was 480. By the end of the year, on the final test, the average scaled score increased to 516, a gain of 36 points.

The extent of the learning gain is significant when compared to matched samples at control schools. The learning gain in other private schools amounted to 4 points – an increase in the scaled score from 471 in the first test to 475 in the last.

Table 5: Mathematics (students assessed both in January and July only)

	N		Scaled score	Estimated UK curriculum level**
RAN schools	113	January Average	480	2a/3c
		July Average	516	2a/3c
		Change	+36	
Other private	87	January Average	471	2b
		July Average	475	2b
		Change	+4	
Government	70*	January Average	468	2b
		July Average	463	2b
		Change	-5	

**for reference only

Using the model described in figure 2 above, the statistical significance of the change can be seen in table 6 below.

Table 6: Effect size - Mathematics

	RAN (N=113)		Other private (N=60)		Government (N=70)	
	January	July	January	July	January	July
Mean Scaled score	480.5	516.4	470.9	475.2	468.4	462.7
Standard Deviation	111.3	105.2	105.3	106.8	104.1	104.6
Standard Errors	10.5	9.9	13.6	13.8	12.4	12.5
Pooled SD Differences	82.23		81.65		79.57	
Pooled SE Mean Differences	7.74		10.54		9.51	
t	4.64		0.41		0.60	
Correlation coefficient ®	0.713		0.704		0.709	
Effect size d* within school type	0.331		0.041		0.055	
Effect size d** Jan - Jul RAN & other private	0.289					
Effect size d** Jan - Jul RAN & government	0.382					

As in the discussion of Reading achievement above, we can see that on average students in the Rising Academy Network are making better progress than their peers in other schools. Once again we can ask the question how quickly are they progressing towards the mathematics benchmark set for students at their grade level?

We look at the annual progress reports below.

Figure 11 below shows the annual progress in mathematics for students in the Rising Academy Network. The trend line in the graph represents the average norm referenced standardised score calculated statistically at the mid-date of the test date range. The band shaded in grey in the graph indicates the range (80 to 120 points) in which 68% of students in the UK will typically be scoring.

We can see in Figure 11 below that students in the RAN are progressing well in this direction having scored 78, 79 and 81.

Figure 11 – Rate of progression in Mathematics for students in the Rising Academy Network

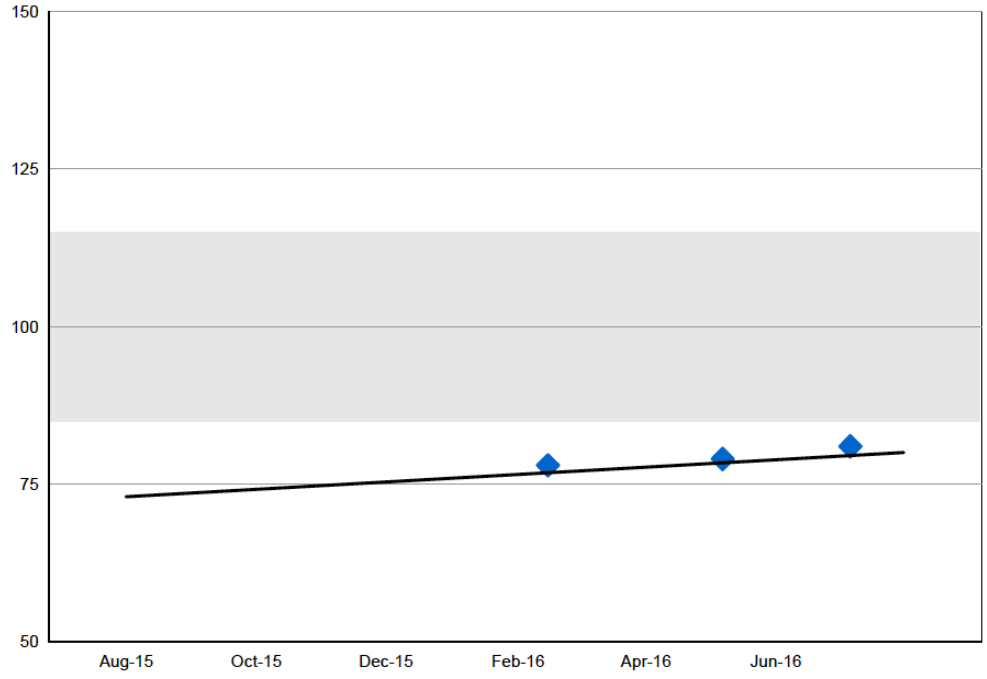


Figure 12 below shows the annual progress of students in other private schools. The average growth rate is slower than that of RAN schools. 76, 77, 77.

Figure 12 - Rate of progression in Mathematics for students in other private schools

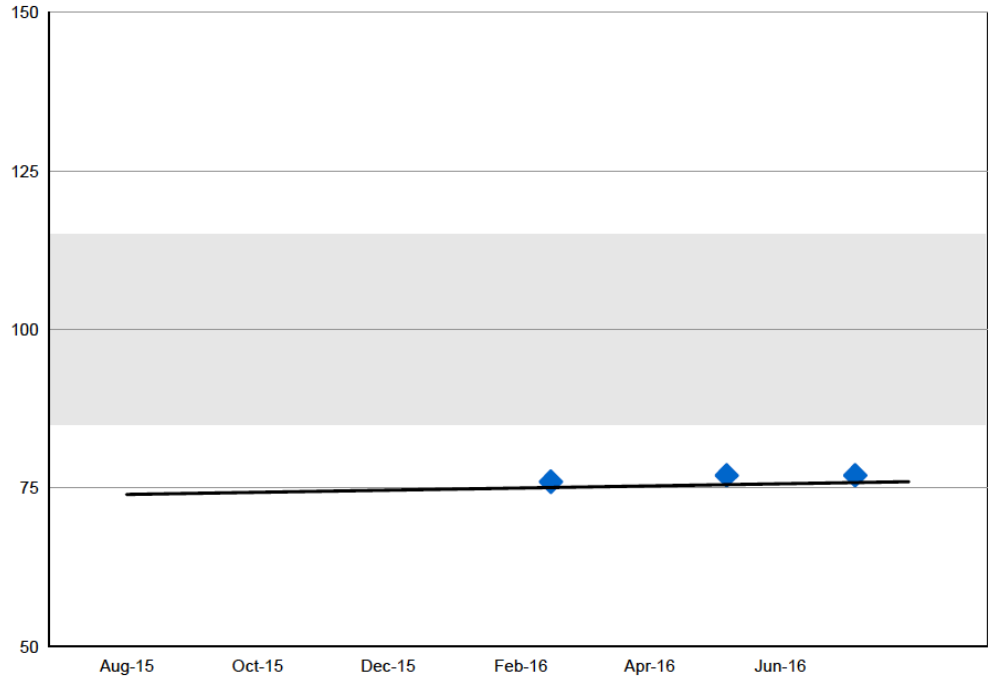
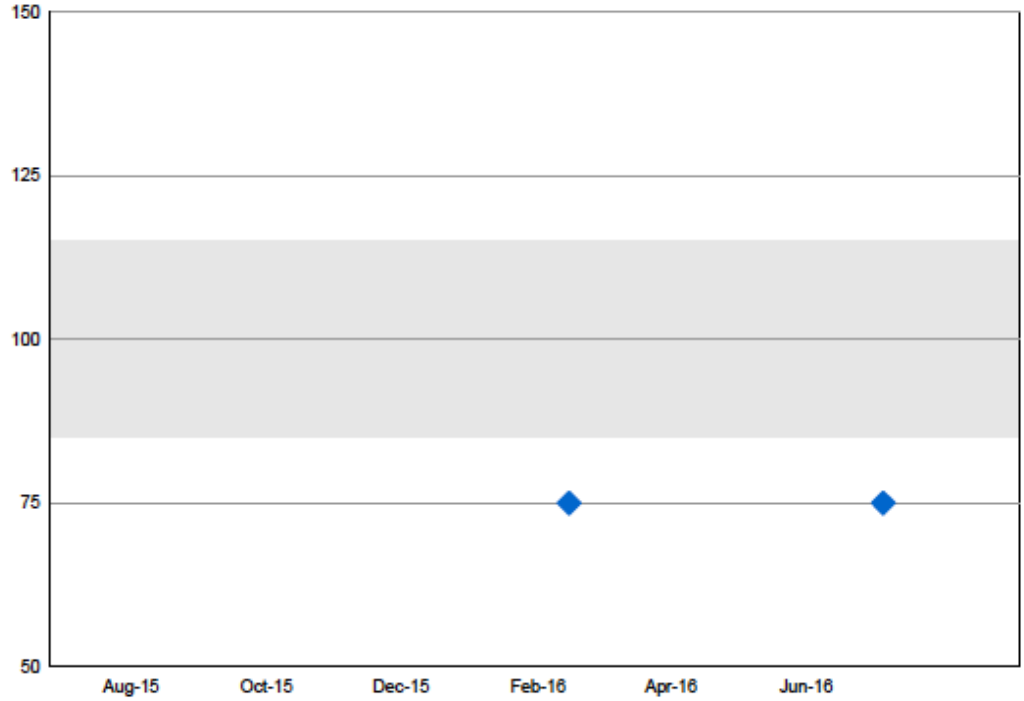


Figure 13 below shows the annual progress of students in government-funded schools. The average growth rate is 75 on the first and on the second occasion.

Figure 13 - Rate of progression in Mathematics for students in other private schools



As before, the next question we must ask is are all students learning? Or are the gains being made attributable only to students who showed better levels of performance at the start?

The study looked at whether the teaching in Mathematics over the course of the year benefitted those in the cohort that are weakest in the subject. Table 7 below shows the distribution of students by Levels of Achievement at the beginning of the (truncated) academic year in January 2016 and the end of year assessment in July 2016. Level 4 represents the benchmark and is based on a norm referenced standardised score of 90.

Table 7 shows that at the beginning of the school year 58% of students in the cohort were profiled as not learning sufficiently well (Level 1). This subgroup performed well below the benchmark.

At the end of the academic year, the percentage of students in Level 4 reduced by 17%. Now only 41% of students in the RAN cohort were performing at the weakest level. Over the course of the year, the schools made significant gains in the reduction of the numbers of students not learning.

Table 7 Movement in performance levels- Maths (students assessed in both January and July only)

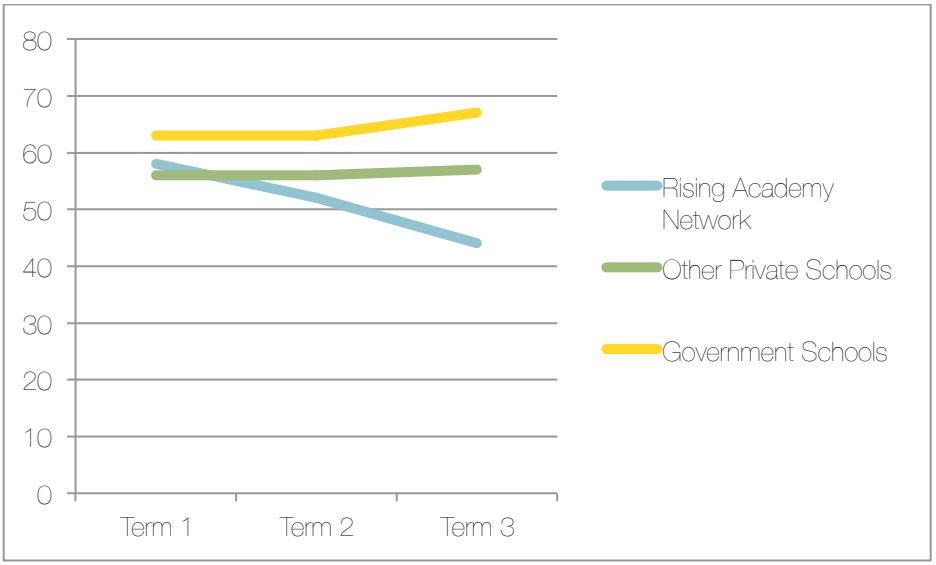
School	Level 4		Level 3		Level 2		Level 1		Total
	Jan	Jul	Jan	Jul	Jan	Jul	Jan	Jul	
All RAN students	5 (4%)	12 (11%)	25 (22%)	22 (20%)	17 (15%)	33 (30%)	66 (58%)	46 (41%)	113 (100%)
All private comparison	2 (3%)	3 (5%)	11 (18%)	9 (15%)	13 (22%)	8 (13%)	34 (57%)	40 (67%)	60 (100%)
All government comparison	2 (3%)	4 (6%)	10 (14%)	4 (6%)	19 (27%)	11 (16%)	39 (56%)	51 (73%)	70 (100%)

Level 4: Good performance. Working at or above the benchmark
Level 3: Moderately good performance. Working just below the benchmark
Level 2: Poor performance. Working well below the benchmark
Level 1: Very poor performance and in need of urgent intervention

The greatest transition at this stage is for students performing at the lowest levels of achievement (Level 1). Figure 14 below compares the movement between the two assessments for students in the Rising Academy compared to students in other schools. There is a sharp decrease in the numbers of weak performers in the Rising Academy Network. This shows that the teaching of mathematics is benefitting all, including the weakest performers.

The extent of the gain is significant when compared to the matched samples in government-funded and other private schools. In both, the numbers of those performing weakest have increased over the course of the year.

Figure 14 - Change in percentage of students at Level 1) - Mathematics



3. Growth and independence in learning

This element of the study looked at student perceptions of the learning process and their impressions of their own progression and growth.

Students completed a questionnaire. The first set of questions explored student experiences of the learning process. The questions included whether students were exposed to learning opportunities that allowed them to work and learn in groups and also the whether they encountered a variety of learning modes such as role play, group discussion, and problem solving.

Table 8 below shows that RAN students spent much more time working in groups, much more than comparison groups. They also spent more time than other groups working with others to solve problems, and carrying out learning activities outside the classroom. RAN students also reported that they got on well with other students more frequently than those in comparison schools and that they cooperated well and helped others who were struggling with a topic more of the time.

Table 8 - Schooling experiences of the learning process - 2016

		RAN	Other private	Government	All Schools
Work in groups to prepare a group discussion.	Most of the time	76.2%	15.7%	15.0%	56.9%
	Sometimes	23.8%	55.7%	38.8%	31.1%
	Never	0.0%	28.6%	46.3%	12.1%
Work with another person to solve a problem in Maths.	Most of the time	66.0%	44.3%	35.0%	57.6%
	Sometimes	33.3%	50.0%	58.8%	40.1%
	Never	0.6%	5.7%	6.3%	2.3%
Do activities outside the class to help learning.	Most of the time	19.8%	25.7%	20.0%	20.7%
	Sometimes	74.1%	37.1%	52.5%	65.0%
	Never	6.2%	37.1%	27.5%	14.3%
Class do role-plays to help learn about topics in English.	Most of the time	32.7%	24.3%	20.0%	29.3%
	Sometimes	60.2%	48.6%	53.8%	57.4%
	Never	7.1%	27.1%	26.3%	13.3%
Getting on well with other students in the class.	Most of the time	73.5%	64.3%	51.3%	68.4%
	Sometimes	23.8%	30.0%	45.0%	28.3%
	Never	1.9%	2.9%	3.8%	2.3%
Helping other students when they struggle with a topic.	Quite a lot	51.4%	31.4%	35.0%	45.7%
	A little	46.7%	64.3%	36.3%	47.6%
	Not at all	1.2%	4.3%	27.5%	6.1%

The questionnaire explored too student perceptions of the teaching that they received over the course of the year.

Table 9 below shows that according to students, teachers in RAN schools relied less on the textbook in their teaching than those in other schools and were better prepared to teach more of the time. They also received praise from their teachers more often than those in comparison schools. Importantly, RAN students received feedback on their work more frequently than students in comparison schools. Teachers in RAN schools were more likely to offer help when students are

stuck on a problem and engage in one-to-one discussion with them - a good basis for formative assessment.

Table 9 - Schooling experiences of pedagogy

		RAN	Other private	Government	All
Teachers rely only on the textbook to teach.	Most of the time	37.0%	45.7%	20.0%	35.4%
	Sometimes	40.4%	52.9%	65.0%	46.4%
	Never	21.6%		15.0%	17.3%
Teachers give praise when students do good work.	Most of the time	52.2%	38.6%	33.8%	47.0%
	Sometimes	45.7%	55.7%	66.3%	50.6%
	Never	1.5%	4.3%		1.7%
Teachers give feedback about students' work.	Most of the time	44.4%	17.1%	18.8%	36.1%
	Sometimes	53.1%	68.6%	63.8%	57.2%
	Never	2.2%	12.9%	17.5%	6.3%
Teachers well prepared for lessons.	Most of the time	94.8%	74.3%	78.8%	89.0%
	Sometimes	4.6%	22.9%	17.5%	9.5%
	Never		1.4%	2.5%	0.6%
Teacher offer help when stuck on a problem.	Most of the time	64.5%	37.1%	16.3%	52.3%
	Sometimes	34.3%	51.4%	38.8%	37.6%
	Never	1.2%	11.4%	45.0%	10.1%
One-to-one discussion about work with teachers.	Most of the time	23.2%	35.7%	21.3%	24.7%
	Sometimes	65.3%	50.0%	37.5%	58.4%
	Never	11.5%	14.3%	41.3%	16.9%

The questionnaire looked at student reflections of their own progress and development as learners.

Table 10 below shows that students in the Rising Academy Network experienced a bigger increase in confidence in their abilities to do mathematics, give answers to questions asked in class and to share ideas with the whole class, than did students in comparison schools.

Table 10 – Student impressions of their own growth and development as learners

		RAN	Other private	Government	All
Increase in confidence in Maths ability. (q7)	A lot	77.5%	38.6%	21.3%	62.2%
	A little	21.0%	57.1%	73.8%	35.2%
	Not at all	1.5%	4.3%	5.0%	2.5%
Increase in ability to speak well in English. (q8)	A lot	61.1%	52.9%	61.3%	59.9%
	A little	37.7%	41.4%	38.8%	38.4%
	Not at all	1.2%	5.7%	0	1.7%
Improve in confidence in giving answers to questions ask by teachers in class. (q9)	A lot	67.3%	57.1%	43.8%	61.8%
	A little	29.9%	42.9%	55.0%	36.1%
	Not at all	2.8%	0	1.3%	2.1%
Increase in confidence to share ideas with the whole class. (q16)	A lot	63.9%	34.3%	33.8%	54.4%
	A little	33.6%	51.4%	57.5%	40.3%
	Not at all	2.2%	12.9%	8.8%	4.9%

Table 11 below shows that fewer students in the Rising Academy Network thought that their relationships with other students had improved over the course of the year than those in comparisons schools. But more reported that their relationships with teachers got better and that their confidence in mathematics increased. More students in other private schools reported higher levels of confidence in their ability to speak in English, that they read more, spent more time doing homework and were more determined to succeed.

Table 11 – Student determination to succeed.

		RAN (n=324)	Other private	Government
Relationship with other students	Got better	84.6	90.0	86.2
	Got worse	7.4	7.1	8.8
Relationship with teachers	Got better	88.3	84.3	81.2
	Got worse	5.5	11.4	15.0
Confidence in Maths	Got better	86.7	80.0	85.0
	Got worse	6.2	18.6	10.0
Confidence in English	Got better	87.3	94.3	76.2
	Got worse	5.9	2.8	18.8
Amount of time spent reading	Got better	79.0	92.9	88.7
	Got worse	10.4	4.2	8.8
Amount of time spent doing homework	Got better	80.6	85.7	83.7
	Got worse	12.0	10.0	11.3
Determination to succeed	Got better	84.0	90.0	87.5
	Got worse	5.8	7.1	7.5
Belief in one selves	Got better	86.4	91.4	90.0
	Got worse	5.0	5.7	10.0

4. Conclusions

This annual report shows that students in the Rising Academy Network are making steady progress in reading and mathematics when compared to their peers in comparison groups.

The annual progress is encouraging especially in mathematics where students are working just below a performance band that 68% of students of a similar age in the UK would be working within.

There is no difference in the overall performance of boys and girls.

An interesting observation is that in the Rising Academy Network more of the weakest performing students are have made transitions into higher bands of performance than is the case for students from comparison groups in both reading and mathematics.

Students in the Rising Academy Network are more likely to report more variety in the modes of learning that they are exposed to and improved relationships with teachers. They are also more confident in the abilities to do mathematics and respond to questions in the classroom.

Despite it being an unusually short academic year (because of the Ebola crisis) students in the Rising Academy Network have made good progress.