

Summer Reading Project 2012/2013

Summary of Results



Research Questions

1. Do parent prompts add to the effectiveness of a summer programme which introduces to homes books, or books with home visits?
2. Can a summer programme be designed for maths?
3. What characteristics of children and families are associated with higher (or lower) gains?

Executive Summary

- Reading-Significant gains over summer for all three groups (Books, Books + Prompts, Maths), but Books + Prompts group gained more than the Books alone ($d = 0.21$). The Books + Prompts group accelerated 1 stanine over the seven weeks summer holiday.
- Mathematics- Maths and Books + Prompts groups gained but no significant differences in gains over summer but Maths group gained most ($d = 0.10$).
- Decile Levels-the patterns are detectable in the 5 Low SES and 2 High SES schools.
- Ability Groups-the Books + Prompts programme added significantly to the gains for students who were initially behind National levels in reading.

Executive Summary cont...

- Family and student characteristics:
 - Significant difference between families in (self reported) number of books at home- High SES (77books) and Low SES (26 books). Good readers in Low SES have lower numbers (32 books) than good readers in High SES schools (84 books)
 - Amount of time spent reading very similar across groups (around 22 minutes per day)
 - Differences between families in frequency of using library (families in High SES schools generally more frequent)
 - Number of books read (self reported) very similar - around 19 over the summer



Participants

- 454 Year 3 students
 - Five Decile 1 schools-327 students
 - Two Decile 10 schools-127 students
- Randomly assigned to three treatment groups (Books only, Books + Prompts, and Mathematics)

Programme Groups

Books only (B)	Books + Prompts (B+P)	Mathematics (M)
<ul style="list-style-type: none">• 25 self-selected books• reading logs• four home visits• survey(parent and student)	<ul style="list-style-type: none">• 25 self-selected books• reading logs• comprehension card*• four home visits• survey(parent and student)	<ul style="list-style-type: none">• Mathematics workbooks• two/three home visits• survey(parent and student)

* Simple generic questions like:

Before reading the story- "what do you think the story might be about?"

After reading the story-"How did the story end? Can you think of another ending?"



Measures

- STAR Reading Test
- PAT Mathematics Test



Overall Results: Reading

- a) Significant effect of time from pretest to posttest
- b) Each group has significant gains
- c) Books + Prompts group gained 1 stanine over the summer
- d) Books group's gain scale scores = 1.09
- e) Books + Prompts group's gain scale scores = 2.78
- f) B + P vs B (moderate effect size $d = 0.21$)

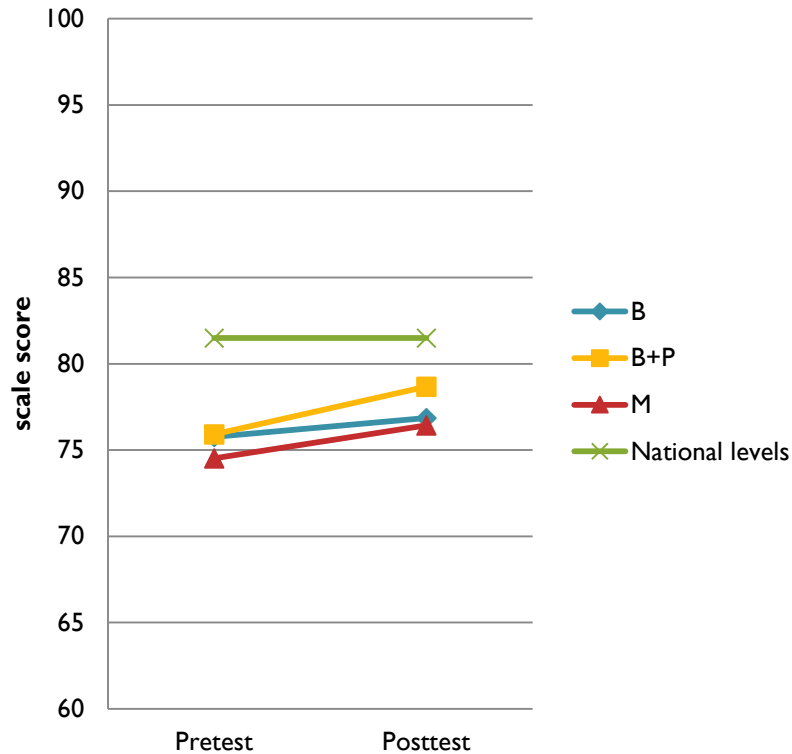


Overall Results: Mathematics

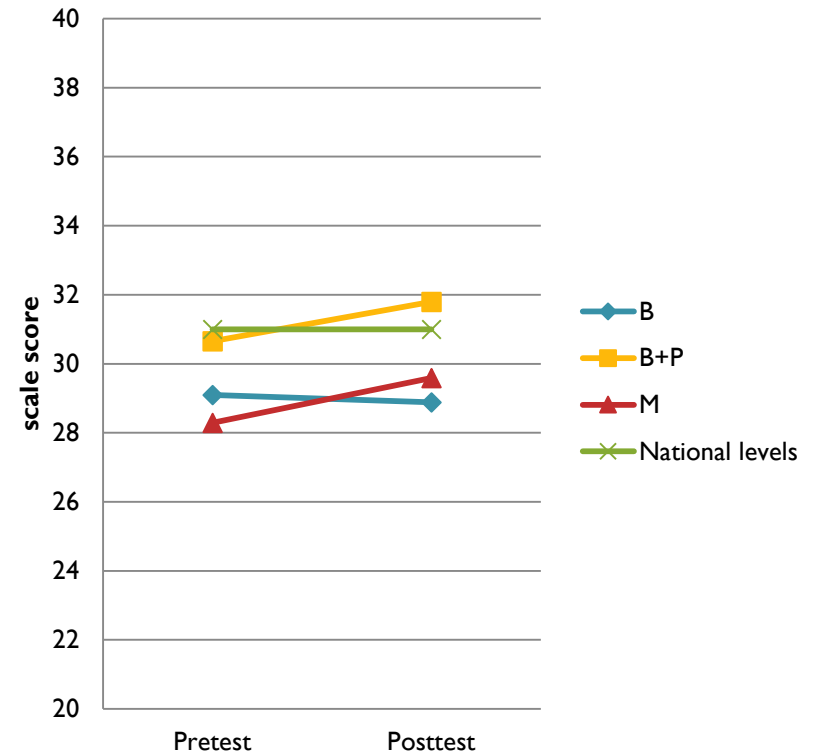
- a) Maths group and Book + Prompt group gained.
- b) No significant differences in gains over the summer, but Maths group gained most.
- c) In terms of scale scores, Maths group gained 1.3; Books + Prompts group gained 1.14; and Books only group dropped -0.21.
- d) M vs B (moderate effect size $d = 0.19$)
- e) M vs B+P (small effect size $d = 0.02$)

Results-STAR and PAT (mean scale score)

STAR (scale scores)



PAT Mathematics



Group	STAR (scale score)			PAT (scale score)		
	Pretest	Posttest	Gains/Losses	Pretest	Posttest	Gains/Losses
B	75.77	76.86	1.09	29.09	28.88	-0.21
B+P	75.91	78.68	2.77	30.66	31.80	1.14
M	74.42	76.42	1.89	28.29	29.59	1.3

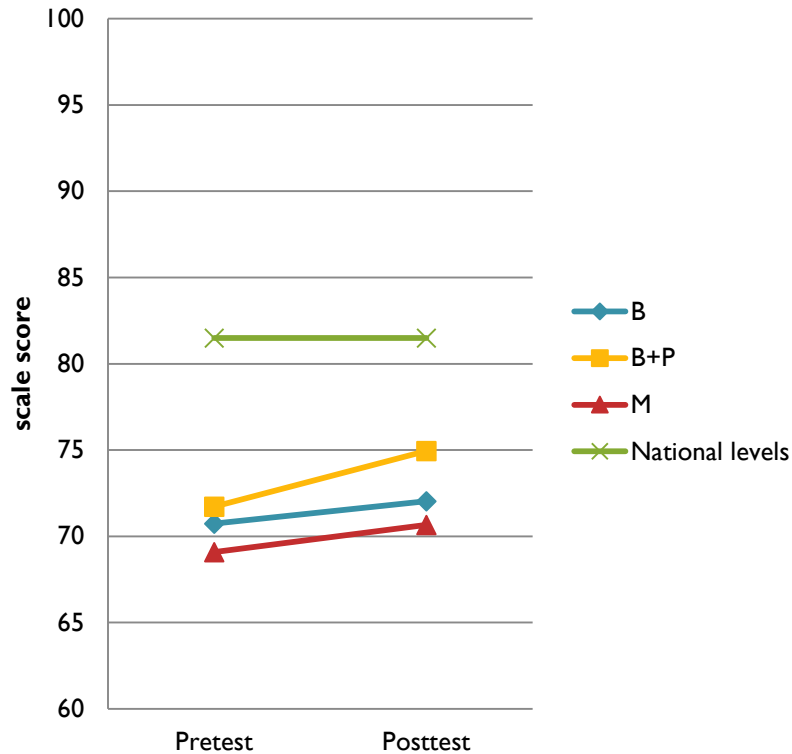


Results (Decile Levels)

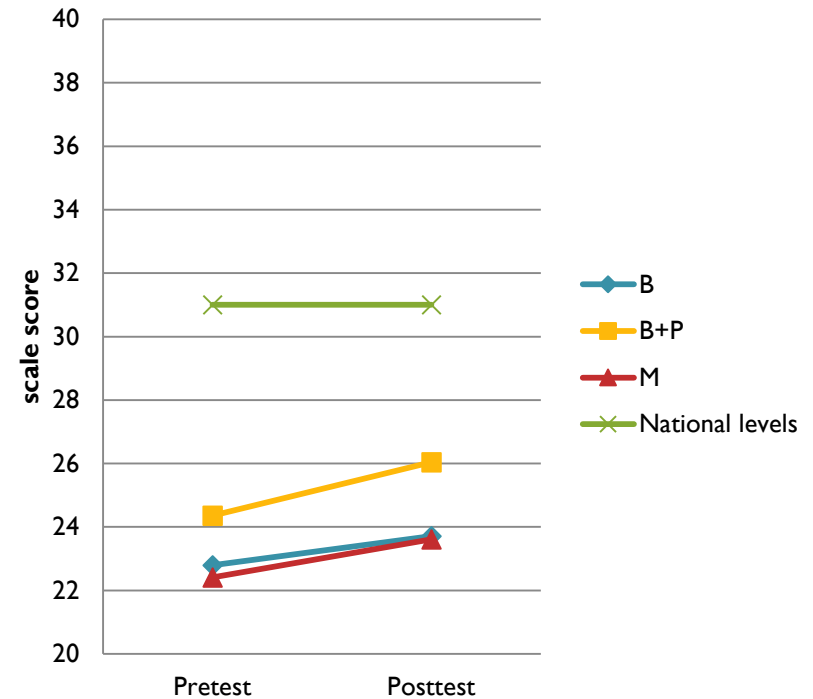
- The patterns are detectable in the Low SES and High SES schools.
- There were significant effects in time for both decile levels from pretest to posttest, but no difference between the groups.
- Reading- large difference at pretest scale scores between low and high decile schools.

Results-STAR and PAT (Low decile schools)

STAR (Low decile schools)



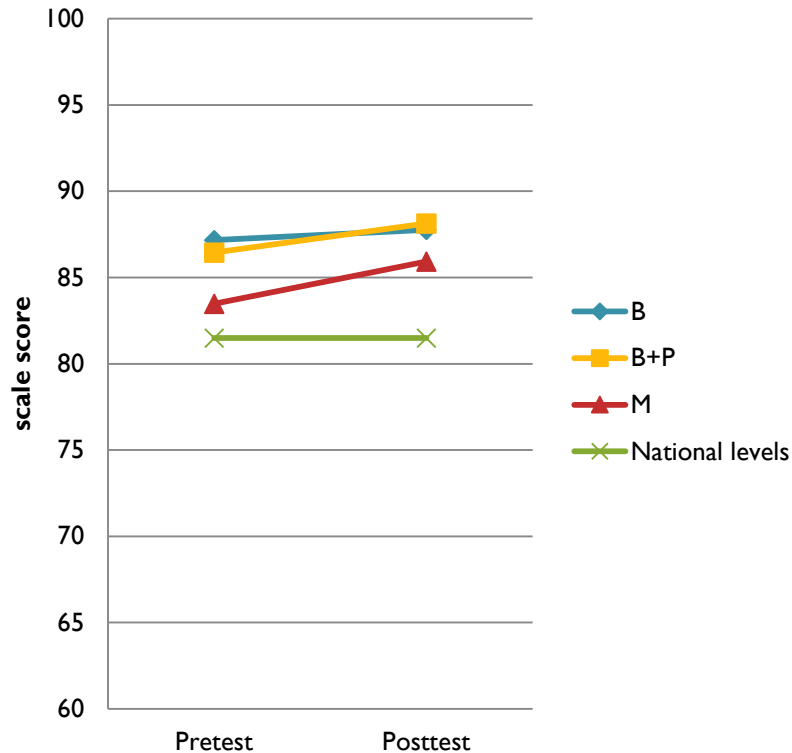
PAT Mathematics (Low decile)



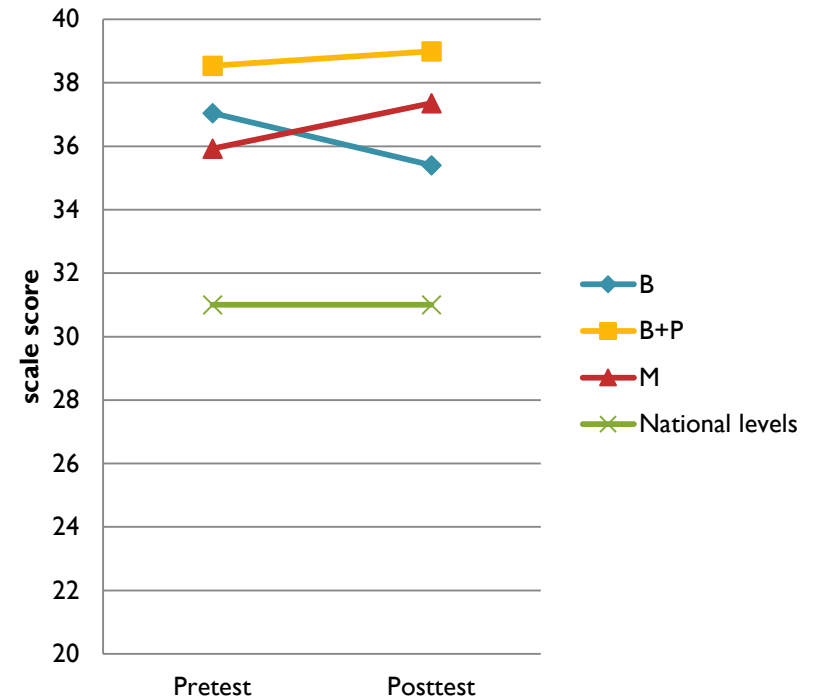
Group	STAR (scale score)			PAT (scale score)		
	Pretest	Posttest	Gains/Losses	Pretest	Posttest	Gains/Losses
B	70.73	72.04	1.31	22.80	23.72	0.92
B+P	71.73	74.94	3.21	24.36	26.04	1.68
M	69.10	70.67	1.57	22.41	23.61	1.2

Results-STAR and PAT (High decile schools)

STAR (High decile schools)



PAT Mathematics (High decile)



Group	STAR (scale score)			PAT (scale score)		
	Pretest	Posttest	Gains/Losses	Pretest	Posttest	Gains/Losses
B	87.17	87.76	0.59	37.04	35.40	-1.64
B+P	86.45	88.13	1.68	38.54	38.99	0.45
M	83.48	85.93	2.45	35.93	37.36	1.43

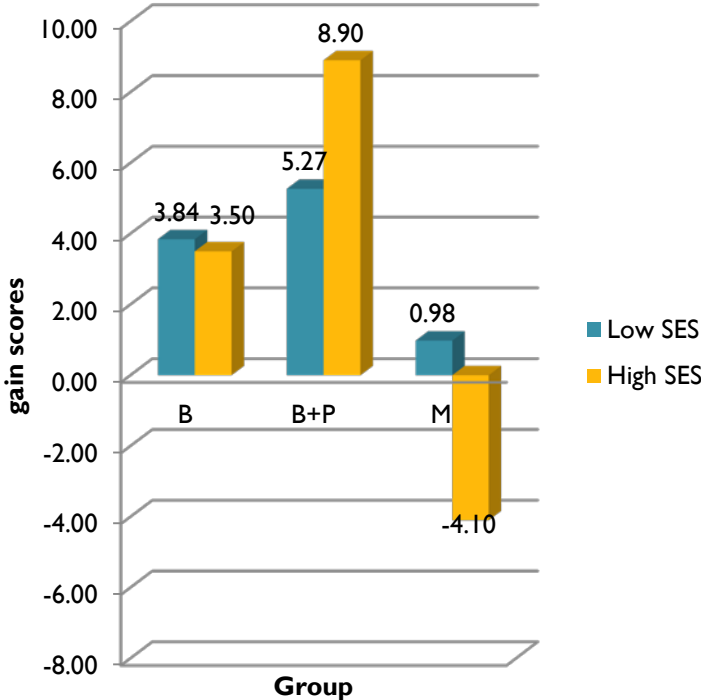


Results (Ability Groups)

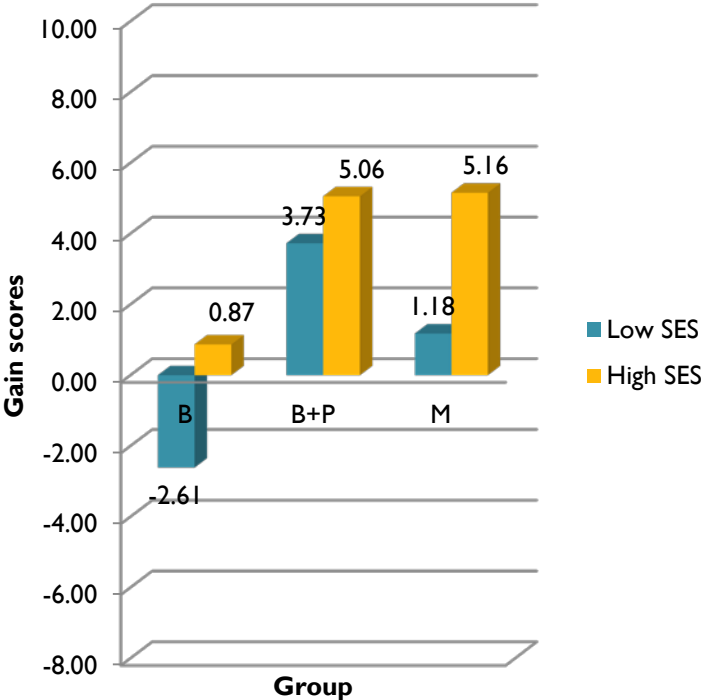
- “well below”, “just below”, “at” and “above” groups made large gains in reading test
- The Books + Prompts programme added significantly to the gains for “well below” and “just below” groups (medium effect size $d = 0.41$)

Results-Reading between Ability Groups and Decile Levels

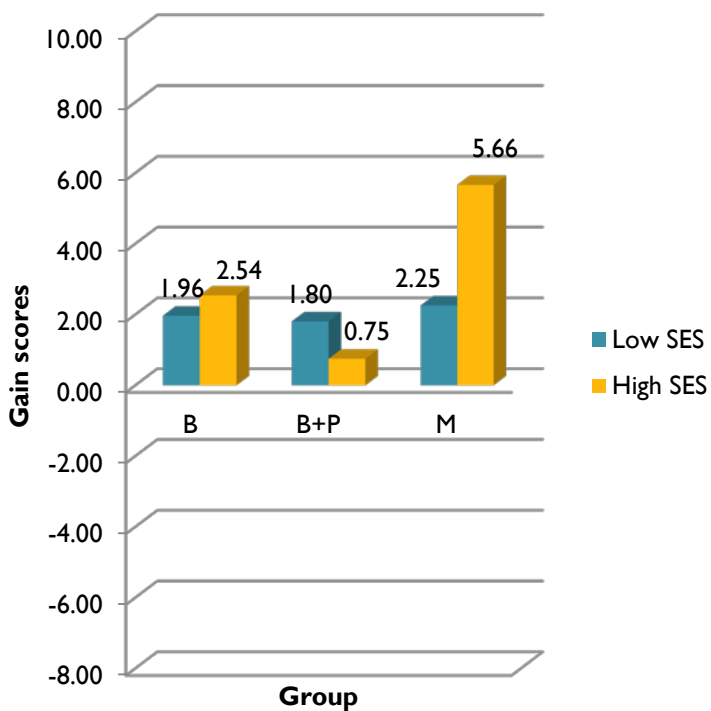
STAR
(mean gain scores-"well below" group)



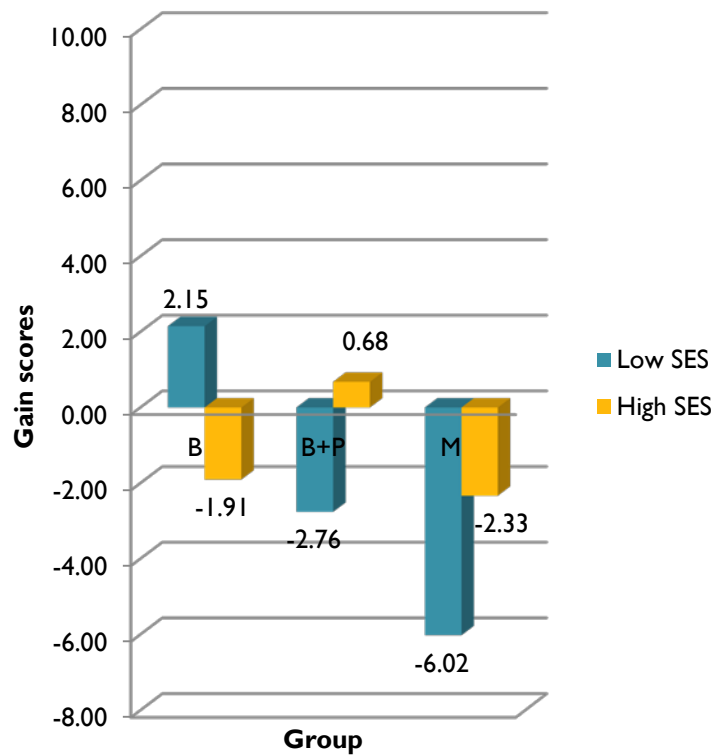
STAR
(mean gain scores -"just below" group)



STAR
(mean gain scores-"at"
group)



STAR
(mean gain scores-"above")





Parent and Student Survey

Student-Reading Attitude Survey

- 12 questions on how students feel about their own reading at home and in school

Parent-Home Literacy Survey

- 16 multiple choice questions, some with open-ended questions on child's home reading practice



Student Survey

- Return rate (53%)
239 students completed the survey
 - Books only - 42%
 - Books + Prompts- 41%
 - Mathematics - 18%
- Students scored 30-31 out of 36
- Generally happy with their reading at home and in school (low and high SES schools)



Parent Survey

- Return rate (67%)

302 parents completed the survey

- Book only - 38%
- Books + Prompts- 37%
- Mathematics - 25%

Parent Survey

Q: How many children's books do you have at home?

- 246 parents responded to this questions
- Significant difference between high and low SES schools
 - Low SES: 26 books
 - High SES: 77 books



Low SES schools

- Good readers: 32 books (N=41)
- Poor readers: 24 books (N=103)

High SES schools

- Good readers: 84 books (N=84)
- Poor readers: 43 books (N=18)



Parent Survey (self-report)

- Amount of time reading to the children each day



Parent Survey

- Amount of time reading to the children each day
219 parents answered this question
 - 23 minutes in Low SES
 - 21 minutes in High SES

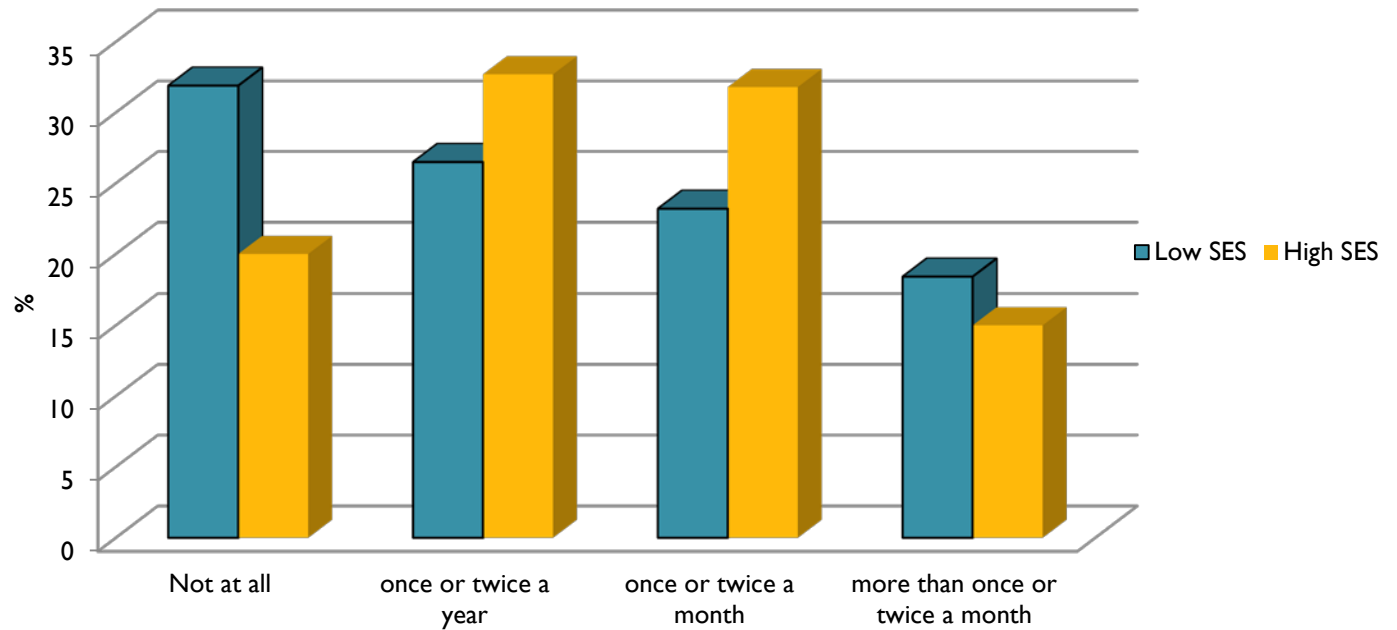
Low SES schools

- Good readers: 23 minutes (N=41)
- Poor readers: 22 minutes (N=85)

High SES schools

- Good readers: 21 minutes (N=77)
- Poor readers: 23 minutes (N=16)

How often does your child go with you or someone in your family to the public library?





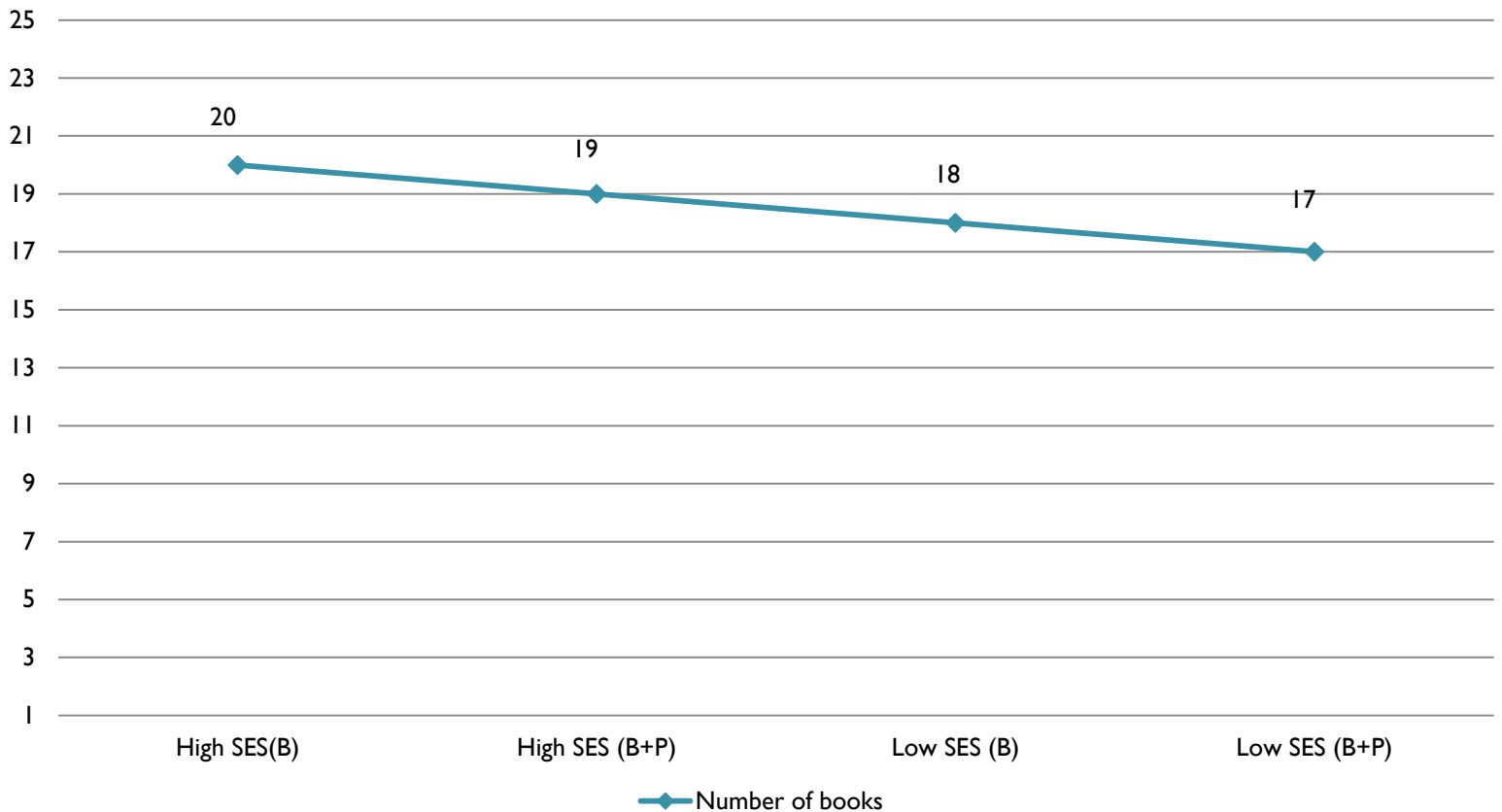
Reading Logs

226 students returned their reading logs

- Books only (111 students)
 - Low SES- 71 students (64%)
 - High SES- 40 students (36%)
- Books + Prompts (115 students)
 - Low SES- 78 students (68%)
 - High SES- 37 students (32%)

Reading Logs

Total number of books students read over the summer



Books At Home & Library Visits

	Parents read to child everyday + frequent library visits	Parents do not read to child everyday + few library visits (≤ 3 times a year)
Books at home	32 books	13 books
STAR gains in reading (scale scores)	+ 5.01	+ 1.01



What have we learned....

- Promising direction for further programme development indicated by having parent prompts and explicit support.
- May need "targeting" for families who don't have books, don't go to the library, don't read often; these families may require deliberate focus
- Further analyses needed to understand these patterns
- Why did Maths group make gains in reading?



Summer Reading 2013/2014

- Parent and student survey (Term 3)
- Teacher preparation: revise reading comprehension strategies (Books Groups) and mathematics strategies (Mathematics Groups) at the end of Term 4
- Parent pre-summer training
- Parent support during summer

Summer Reading 2013/2014

Books		Mathematics	
Group 1	Group 2	Group 3	Group 4
Books + Prompts (generic)	Books + Prompts (generic & support)	Math + Prompts (generic)	Math + Prompts (generic & support)
<ul style="list-style-type: none"> • Books • Comprehension card • Reading logs • Student pre-summer reading session • Home visits (no explicit support) 	<ul style="list-style-type: none"> • Books • Comprehension card • Reading logs • Student pre-summer reading session • Parent pre-summer reading session • Home visits 	<ul style="list-style-type: none"> • Mathematics workbook(s) • Maths prompt cards • Reading logs • Student pre-summer maths session • Home visits (no explicit support) 	<ul style="list-style-type: none"> • Mathematics workbook(s) • Maths prompt cards • Reading logs • Student pre-summer maths session • Parent pre-summer maths session • Home visits



Follow up study from Summer Project 2012/2013

- Re-test STAR and PAT mathematics