

DANISH PIRLS AND PIRLS LITERACY EXPERIENCES

Comparing 3rd and 4th grade students in Denmark



SHORTLY ABOUT THE PRESENTATION

Jan Mejdning is the NRC in Denmark and we prepared the presentation (mainly Jan) together.

Whereas I have an overall role for the IEA studies in Denmark, I have followed on the side, the discussions, the preparation of the Danish results etc.

A PROBLEM

In Denmark we cannot tell schools that they must participate in PIRLS – we have to ask for their cooperation.

With a growing demand for accountability from school owners, tests have become much more used in recent years – including an obligatory national test in reading at the 4th grade level.

As a result, there have been a growing number of students that are asked to be excluded from the PIRLS test - to protect vulnerable children. But this inflates school results.

A SOLUTION?

If students with reading disabilities could be offered an easier test, then it might be easier to persuade schools to let these students participate.

But to tell what these student are able to read compared to their classmates, we need a test, that is comparable to the PIRLS test (= on the same scale). PIRLS Literacy is such a test, and the desire to develop the PIRLS-scale downwards was one of the major reasons that Denmark participated in PIRLS Literacy with a full sample of 3rd grade classes.

In addition, we would get a solid estimate of the gain in scores between the two grade levels.

SAMPLING

In Denmark, we therefore decided to have a full sample in both PIRLS Literacy and in PIRLS.

Classes were sampled from the same schools – except in two cases.

Grade level	Number of schools participating	Number of students participating
3rd grade (Literacy)	186	3808
4th grade (PIRLS)	185	3716

EXCLUSION STATUS - PIRLS

Statistics

Student Exclusion Status

N	Valid	278
	Missing	3813

Student Exclusion Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student with functional disabilities	6	,1	2,2	2,2
	Student with intellectual disabilities	254	6,2	91,4	93,5
	Non-native language speaker	18	,4	6,5	100,0
	Total	278	6,8	100,0	
Missing	Omitted or invalid	3813	93,2		
Total		4091	100,0		

PIRLS LITERACY READER

Excluded students in PIRLS were offered to participate with the PIRLS Literacy reader instead of using one of the regular PIRLS booklets.

PIRLS
Literacy
2016

PROGRESS IN INTERNATIONAL READING LITERACY STUDY

Læsehæfte



IEA TIMSS & PIRLS
International Study Center
 Lynch School of Education, Boston College

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AARHUS
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SKOLEFORSKNINGSPROGRAMMET

Perlen

Af Mary Joslin
Illustreret af Meile So

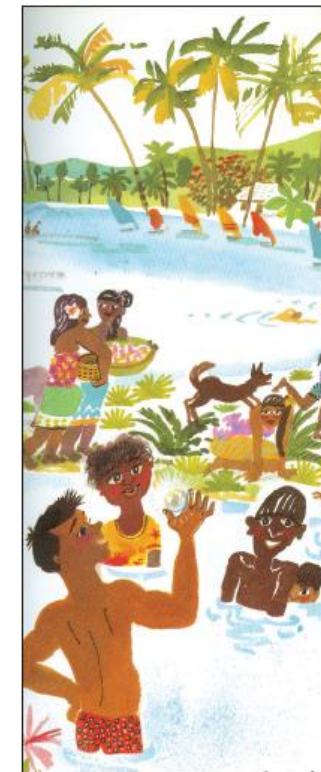
Nede ved havet plejede børnene at lege sammen. Rig eller fattig, de var alle sammen med i de samme lege.

En dag var de ude at dykke i det dybe vand.

“Se!”, råbte en dreng. “Se hvad jeg har fundet!”

“Det er en perle,” sagde en anden. “Den er smuk.”

Børnene samlede sig for at kigge. De var alle sammen ivrige efter at røre ved den, for de kunne se, hvor perfekt og strålende den var. Men hvem ville vove at stille det store spørgsmål ...



PIRLS – EXCLUDED STUDENTS

Of the 278 excluded students in PIRLS (within school exclusion), we convinced 207 of them to participate using the PIRLS Literacy Reader instead.

However these results have not been included in the Danish overall results, but the students were able to participate together with their classmates in the PIRLS activities.

	Frequency	Percent
Student with functional disabilities	6	,1
Student with intellectual disabilities	254	6,2
Non-native language speaker	18	,4
Total	278	6,8
Omitted or invalid	3813	93,2
	4091	100,0

4TH GRADE EXCLUSION-PARTICIPATION

Student Exclusion Status * Student Booklet Participation Indicator
Crosstabulation

Count

		Student Booklet Participation Indicator		Total
		No data available	Data available	
Student Exclusion Status	Student with functional disabilities	0	6	6
	Student with intellectual disabilities	69	185	254
	Non-native language speaker	2	16	18
Total		71	207	278

278 = 6.8%

LOOKING AT RAW DATA

4 passages were used on both grade levels:

Pemba Sherpa

How did we Learn to Fly

PIRLS Literacy Texts
(Easier)

Flowers on the Roof

Sharks

PIRLS Texts
(More difficult)

Here we can compare the general differences between gradelevels

The PIRLS Literacy “Reader”:

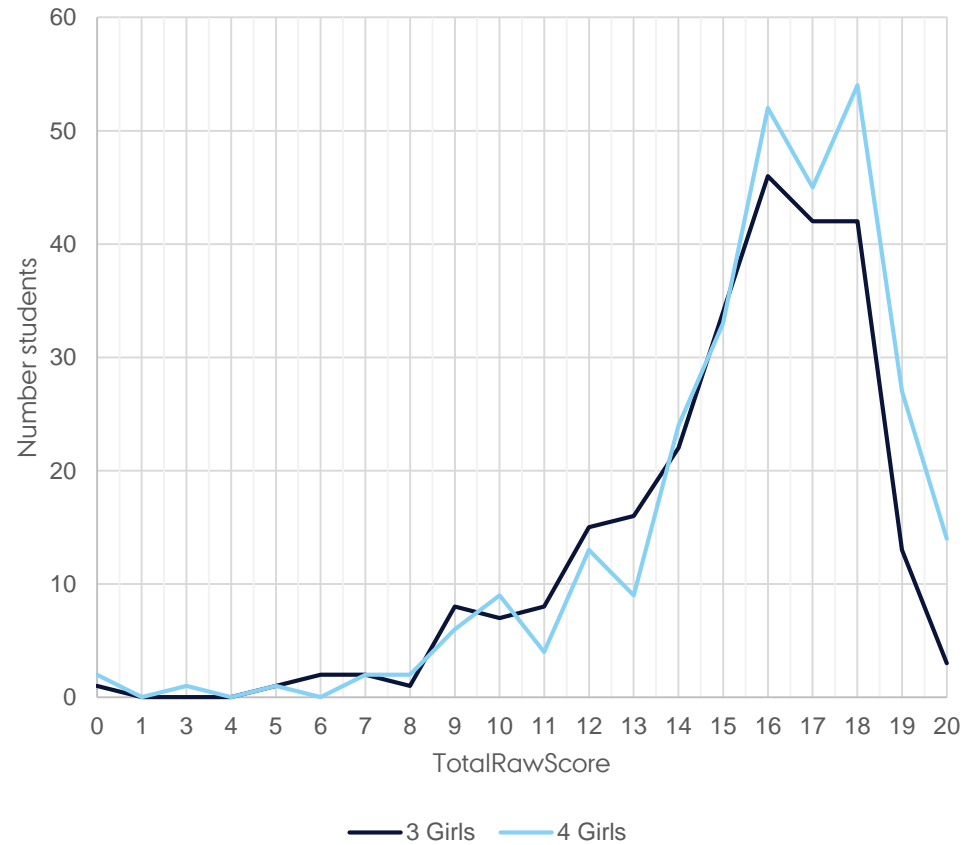
The Pearl

African Rhinos and the Oxpecker Bird

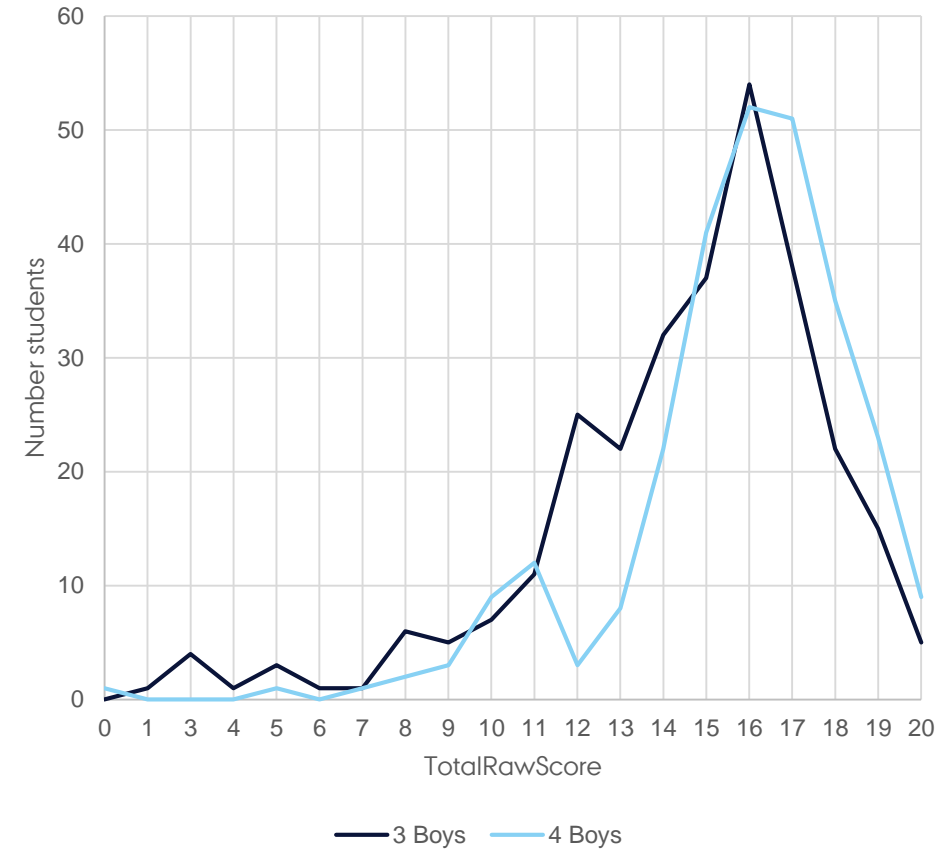
Here we can compare differences between the general 3rd grade level with the level of excluded 4th grade students participating

PEMBA SHERPA RAW SCORE

Pemba - Girls

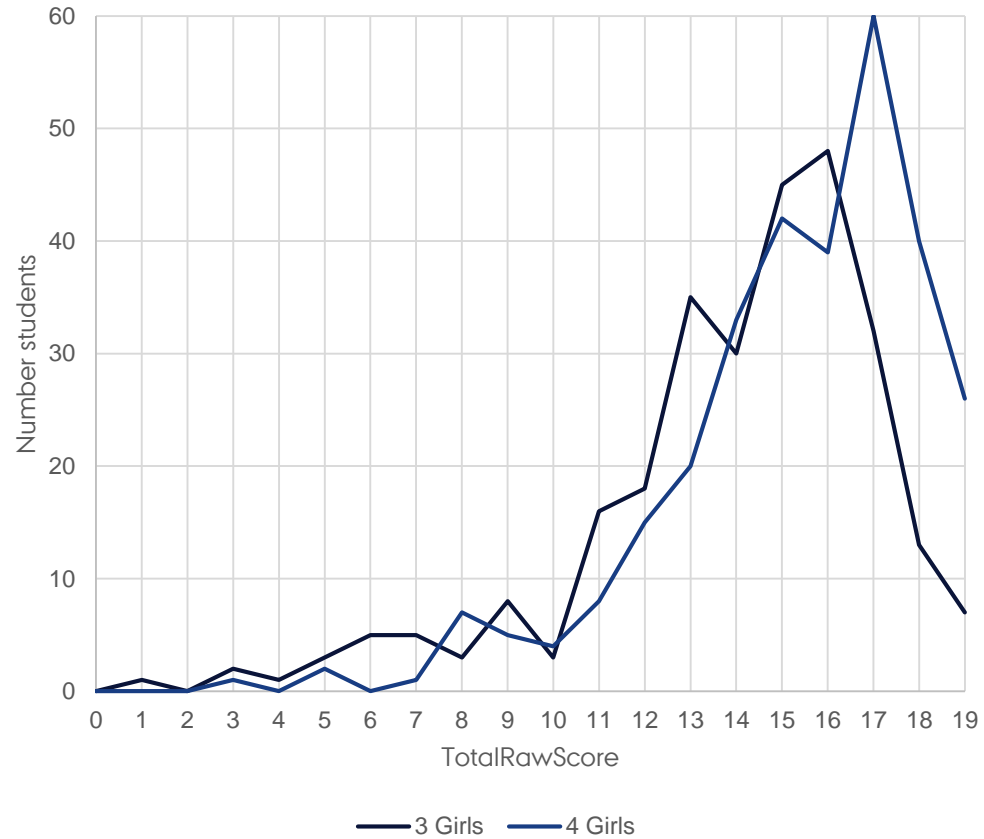


Pemba - Boys

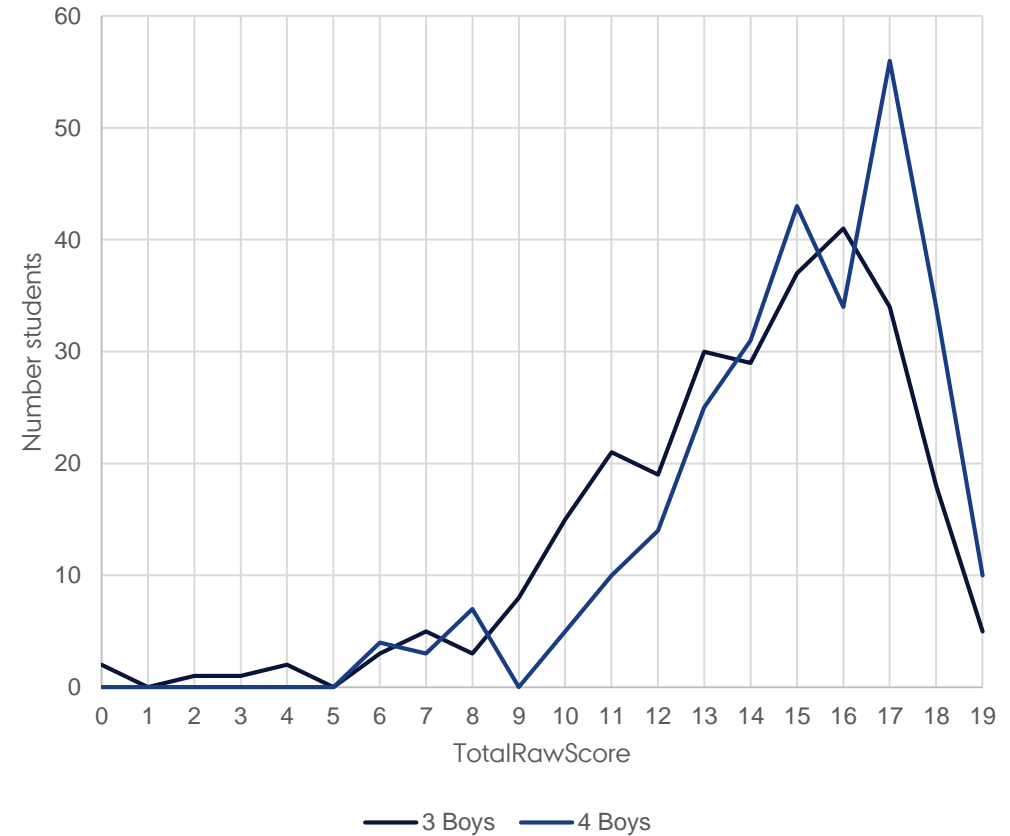


HOW DID WE LEARN TO FLY RAW SCORE

Learn to fly - Girls

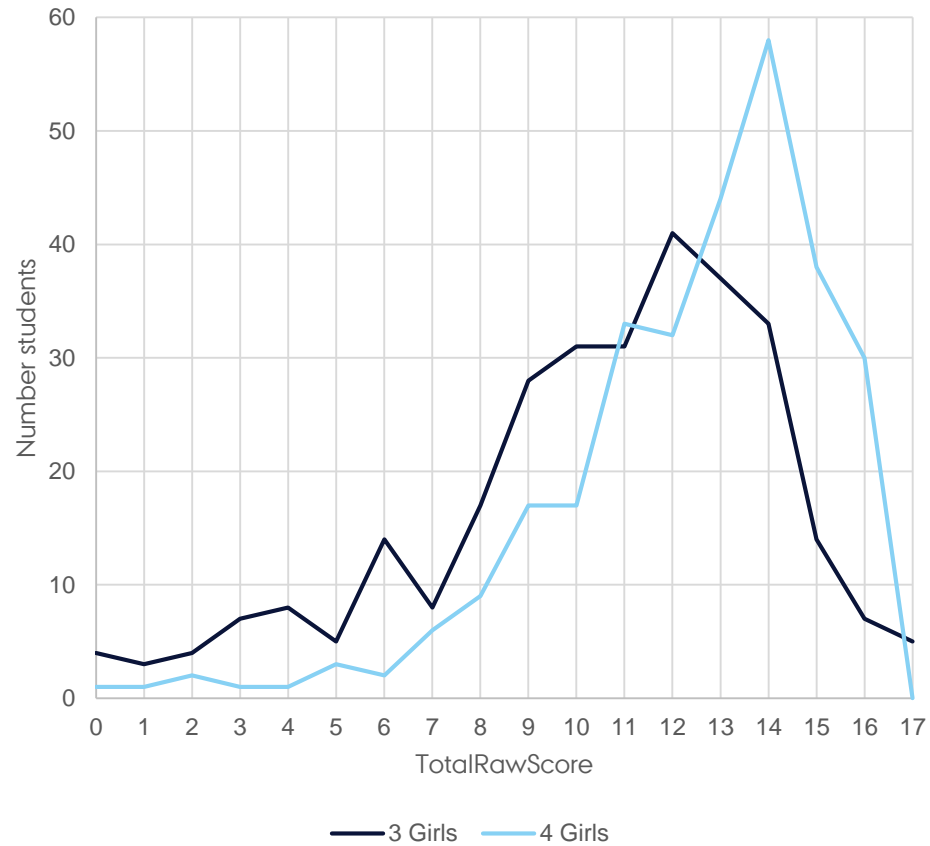


Learn to fly - Boys

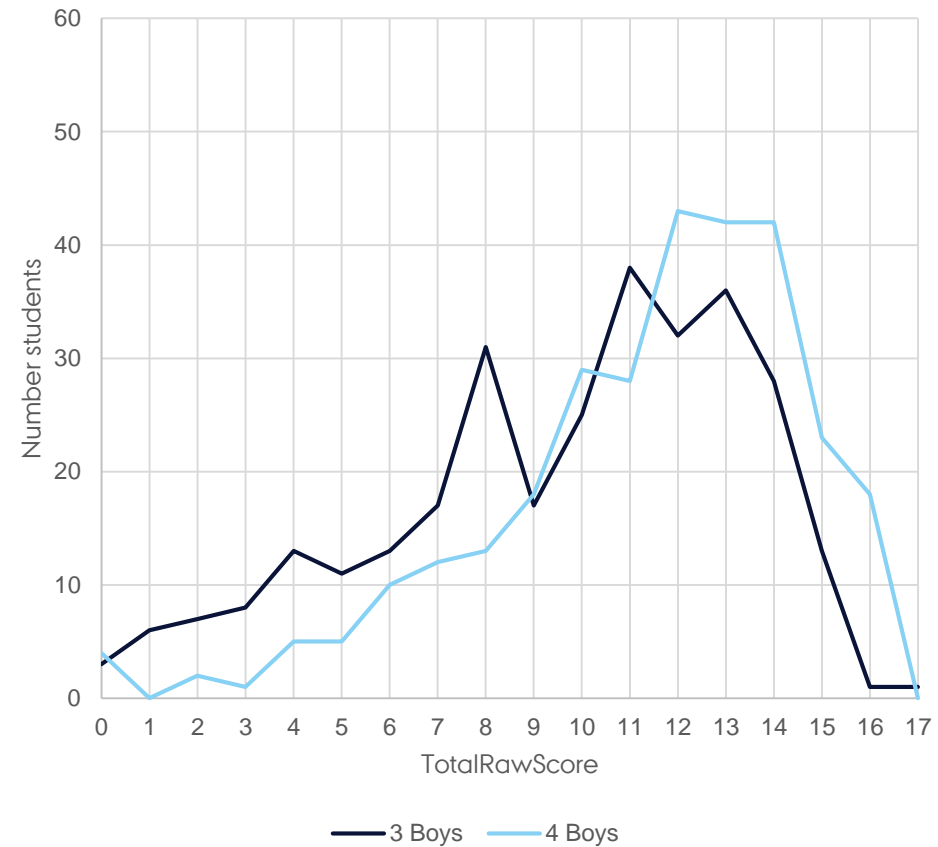


FLOWERS ON THE ROOF RAW SCORE

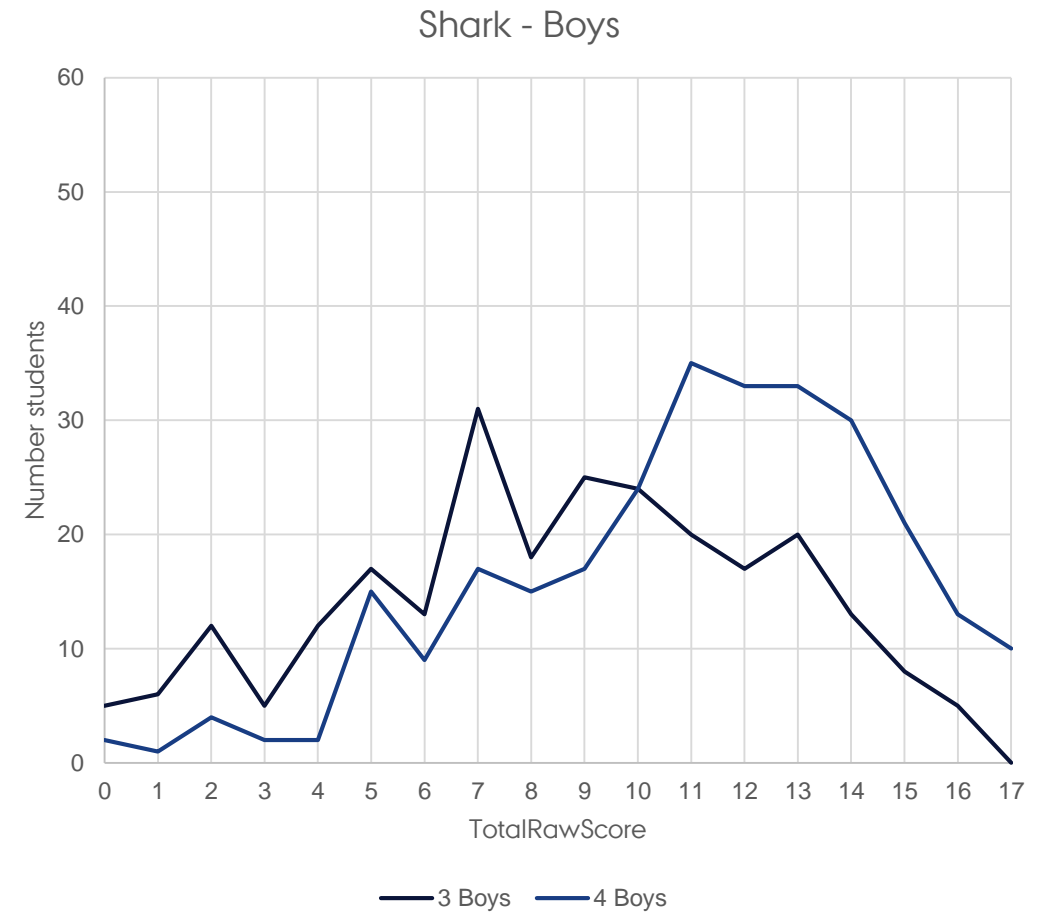
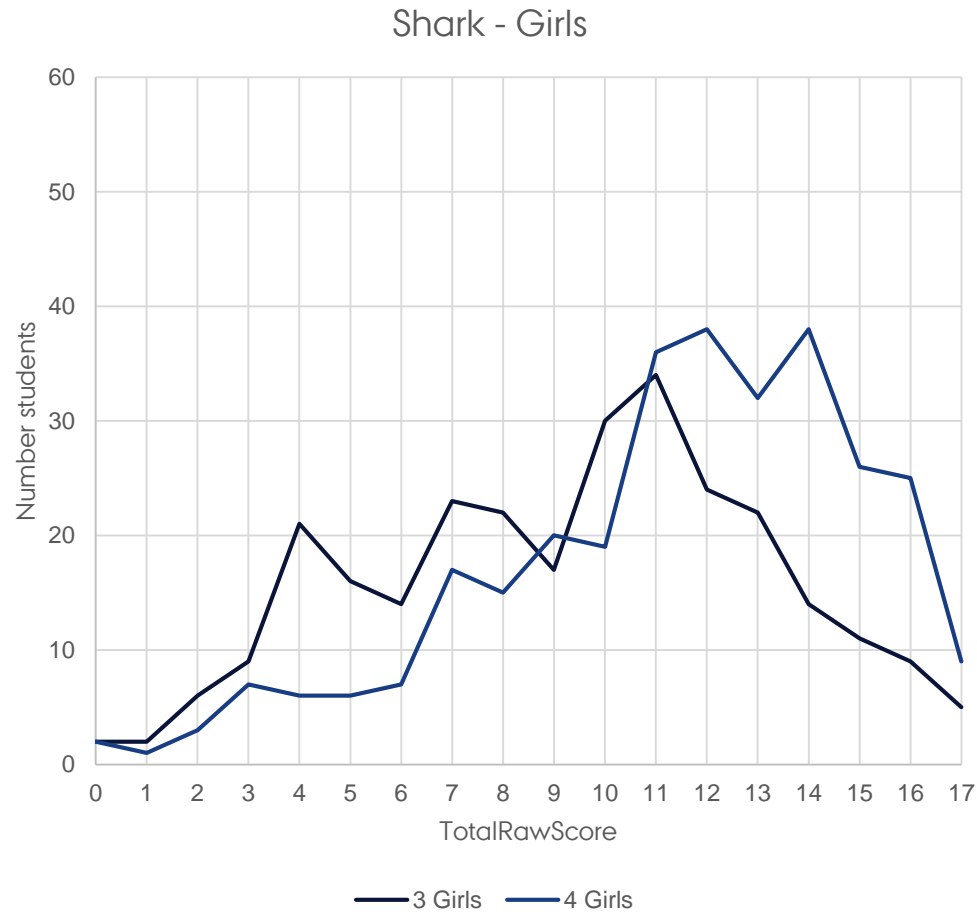
Flowers on the roof - Girls



Flowers on the roof - Boys



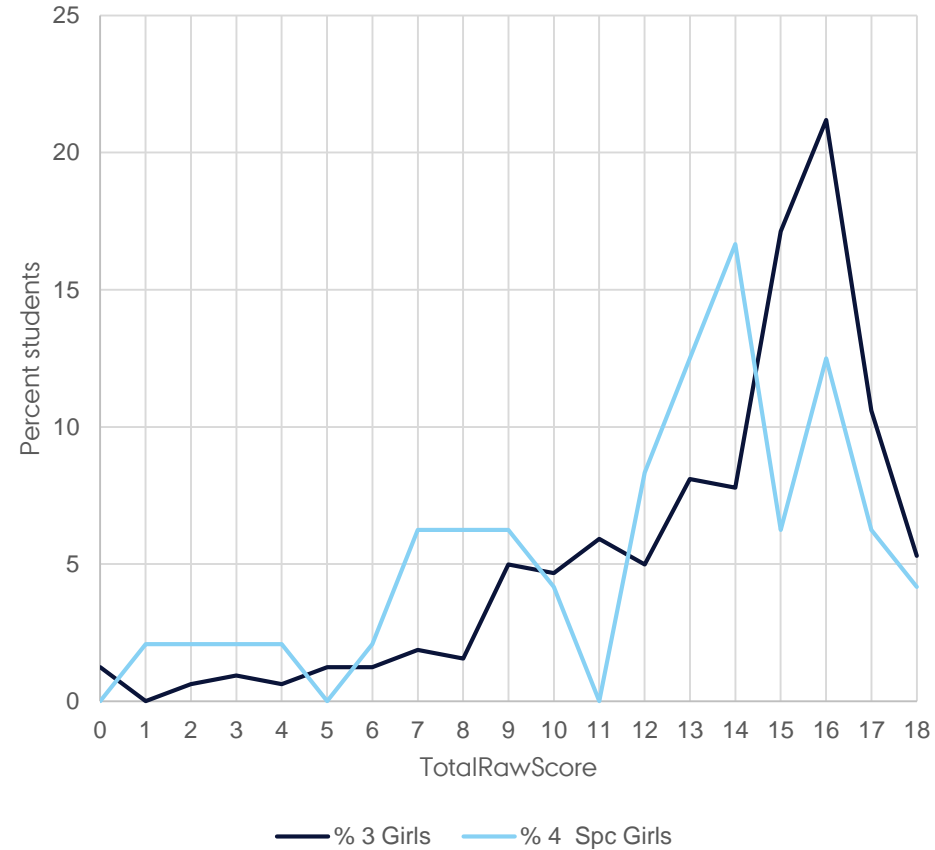
SHARKS RAW SCORE



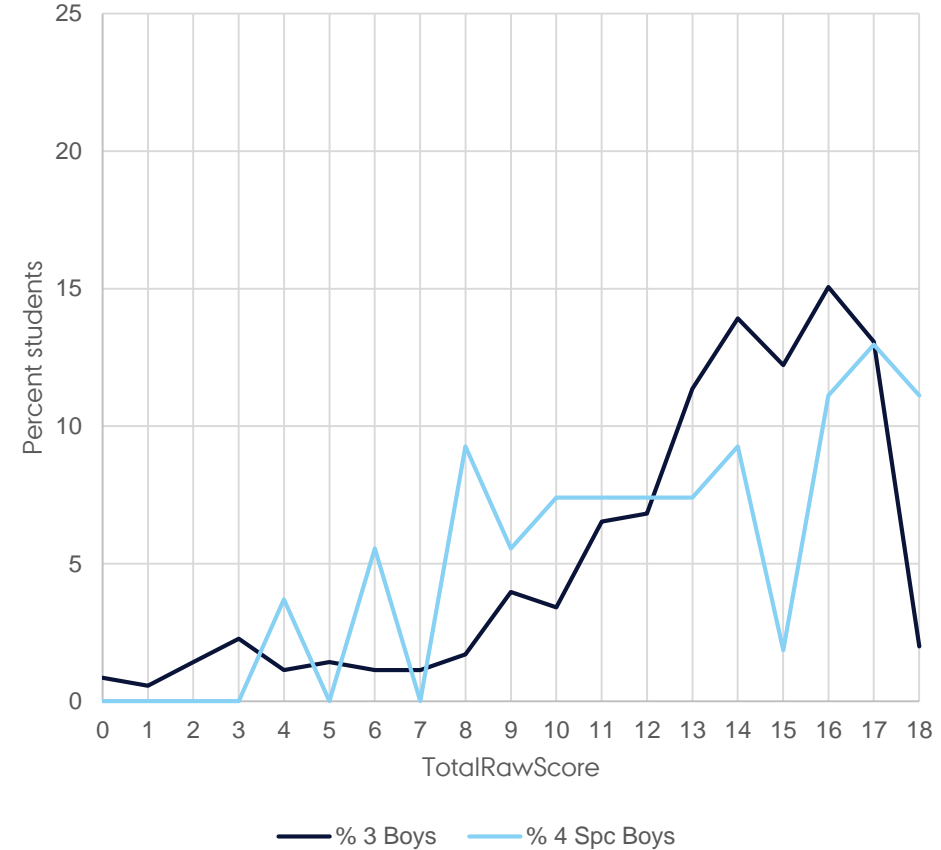
THE PEARL

RAW SCORE / EXCL. 4TH VERSUS 3RD GRADE STUDENTS

The Pearl - Girls



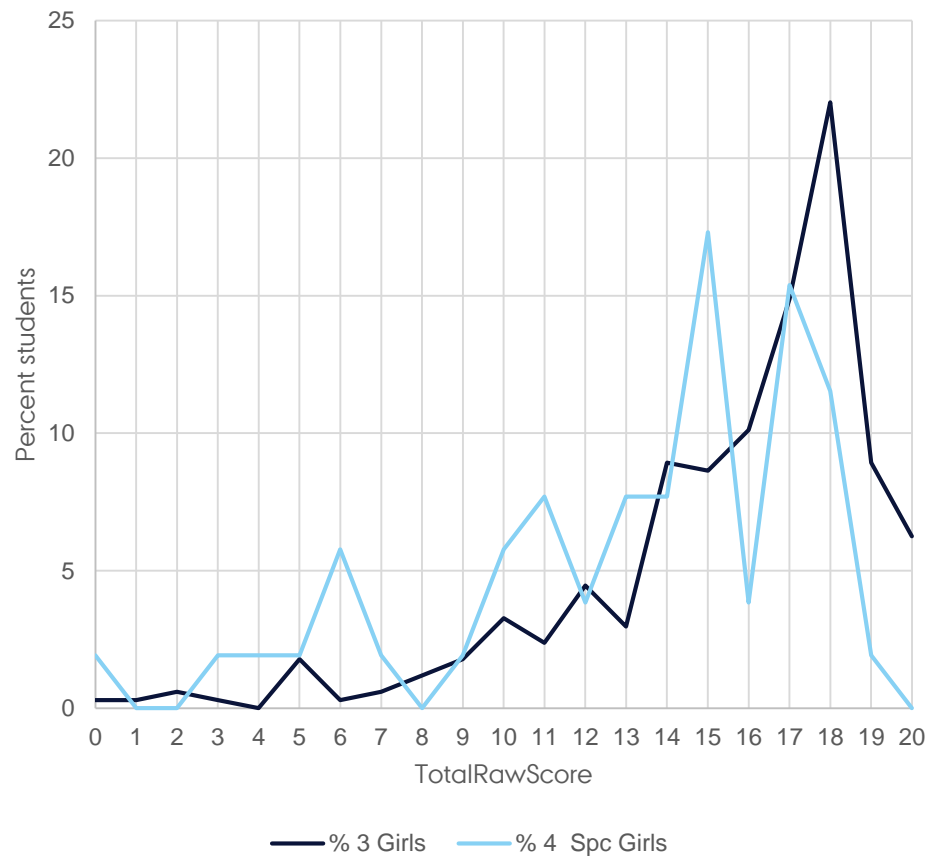
The Pearl - Boys



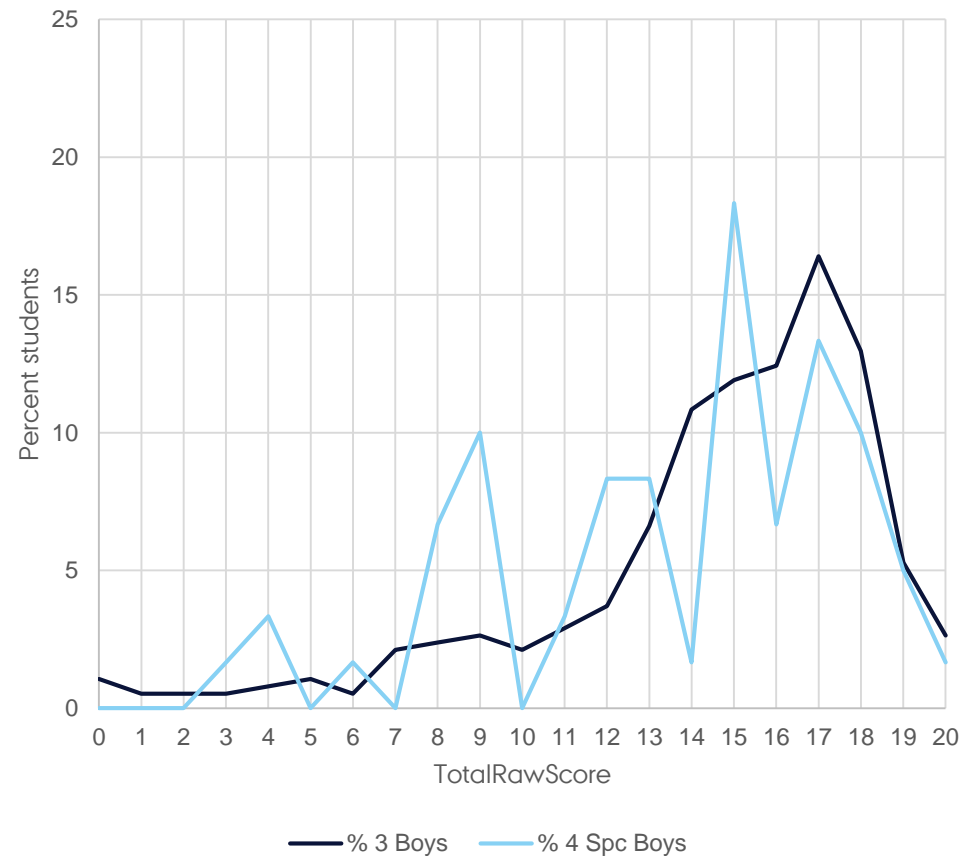
AFRICAN RHINO

EXCL. 4TH VERSUS 3RD GRADE STUDENTS

African Rhino ... - Girls



African Rhino ... - Boys



CONCLUSION

Analysis of the raw scores show that students with reading disabilities in 4th grade are able to work successfully on PIRLS Literacy material.

As we now know the actual difference in reading scores between the 3rd and 4th grade level (= 45 score points) this provides us with important information about what kind of teaching these students need.

Moreover, we will be able to offer meaningful and useful material **to all students** in the classes participating in PIRLS.

Therefore it would be of great help in the future recruitment of schools to PIRLS if we are able to provide them with meaningful material for all their students!



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