

# Maximizing the Utility of English Assessment Scores

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# Overview

- Linking Aptis with the Lexile Framework for Reading
  - Aptis Teens Advanced, Aptis General, Aptis Advanced
  - CEFR
- Aligning Readers and Texts
  - Graded Readers
  - S. Korean Textbooks, U.K. and U.S. texts
  - U.S. text level expectations

# Why Link?

- Provides supplementary information to extend the utility of the test score and CEFR information
- Provides an additional layer of feedback, connecting the test to real-world reading
- Provides a way of benchmarking real-world reading demands and a way to evaluate the gap between reading ability and reading demand of texts

# What is the Lexile Framework?

## HOW TO USE LEXILE MEASURES



The most widely used standard for matching readers with texts, and connecting learners to level-appropriate resources.

# The Lexile Scale & Concept

## Student Measures

### Advanced Readers



1050L

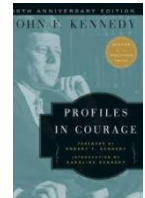
230L



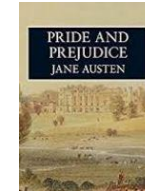
### Beginning Readers

## Book Measures

### More Complex Text



1410L



1190L



940L

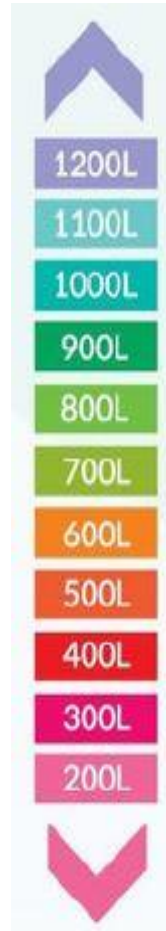


680L

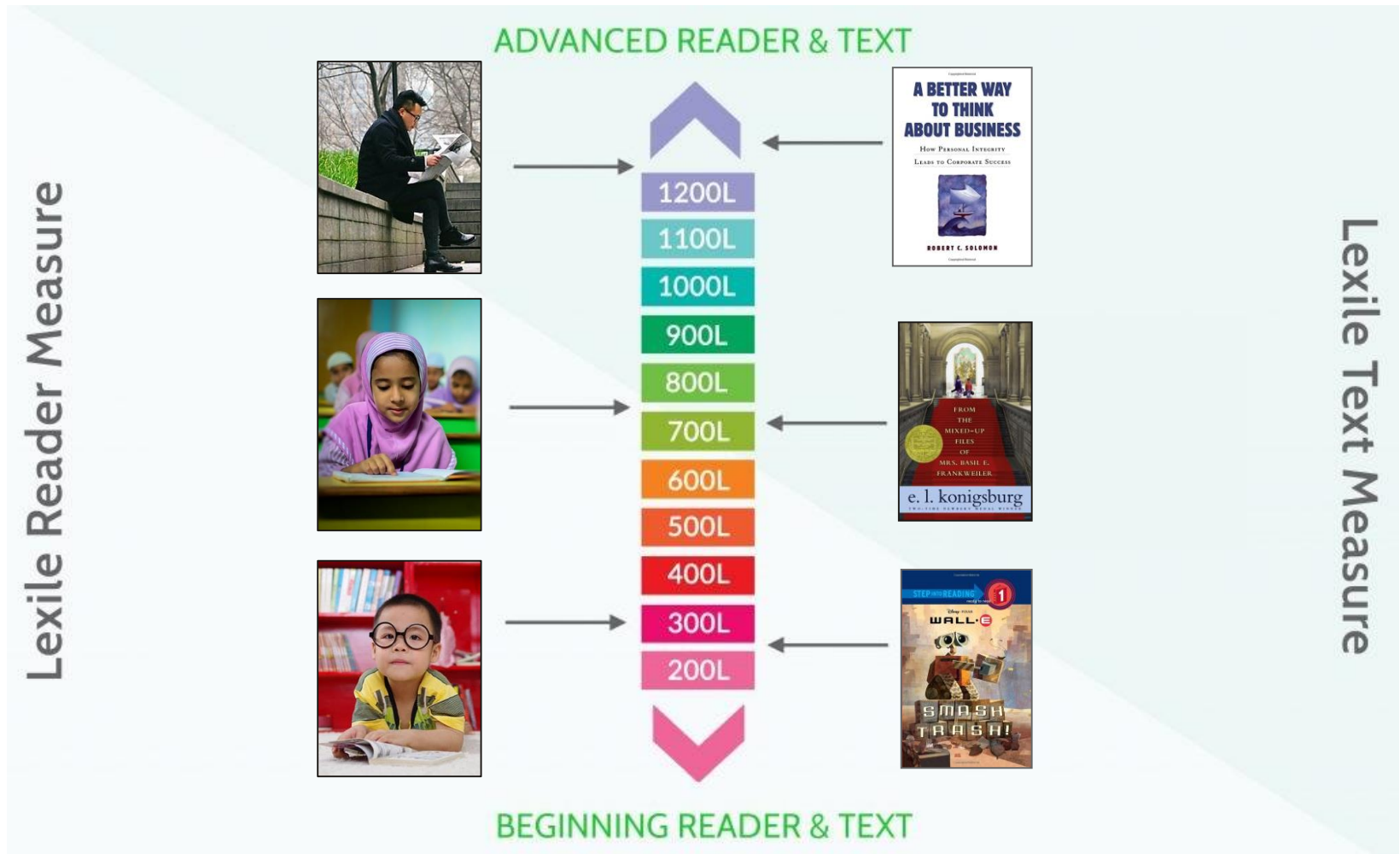


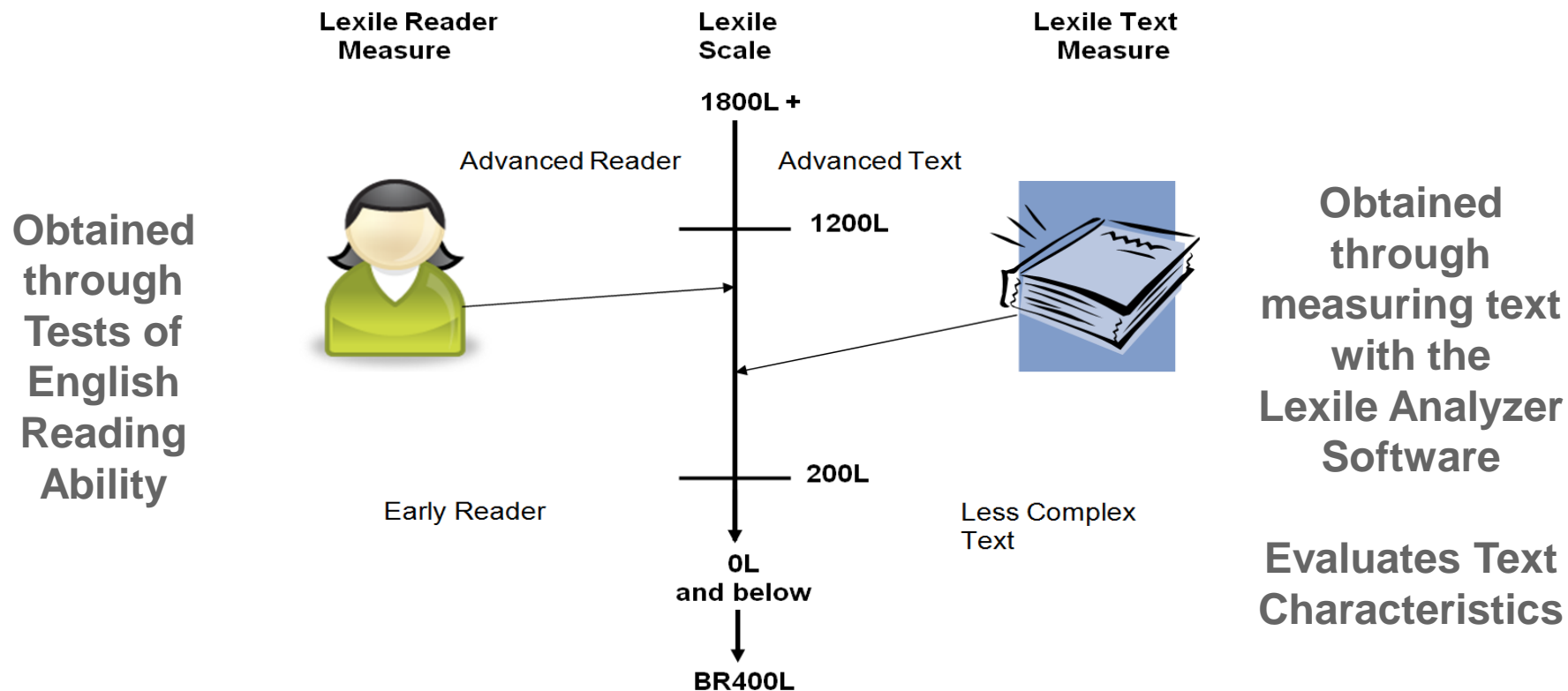
200L

### Less Complex Text



# The Reader & Text Relationship





# What is Aptis?





## Score Reports

- Scaled scores for each component assessed (e.g. Reading, Writing) on a 0-50 score scale
- CEFR levels reported for each skill (e.g. Listening, Reading)
- Overall CEFR level when all 4 skills taken

# Aptis Reading Test – Example Tasks

Skill Focus	CEFR Level	Task Description	Cognitive Processes
Inter-sentence cohesion	A2	Reorder jumbled sentences to form a cohesive text	Careful reading, global, inferencing, building a mental model
Reading short paragraphs-main idea	B1	Matching description of person with main idea of paragraph	Careful reading, global
Reading longer text, integrating related propositions	B2	Matching headings to paragraphs within a longer text	Expeditious reading, global Careful reading, global
Reading across extended sections of related text	C1	Select text to complete gaps in texts within two related selections	Careful reading, global

# Aptis-Lexile Linking Studies

- Lexile linking items administered at the same time as Aptis reading items
- Aptis General and Advanced – October - November 2015
- Aptis Teens Advanced – November 2017 - April 2018
- Lexile linking items,  $N = 25$  ranging in difficulty to align with the Aptis test being linked.

# Sample Lexile Item

## 970L

Scientists have made a discovery about the moon. They believe its interior contains much more water than previously thought, though exactly how much is still unclear. If scientists are correct, future astronauts may benefit from this finding. Traveling through the solar system requires extensive supplies, including water. With improved technology, astronauts could extract water from the moon and leave water from Earth off their packing lists.

The discovery could be \_\_\_\_\_.

- A. misleading
- B. advantageous
- C. symbolic
- D. costly

# Aptis-Lexile Linking Studies

## Samples

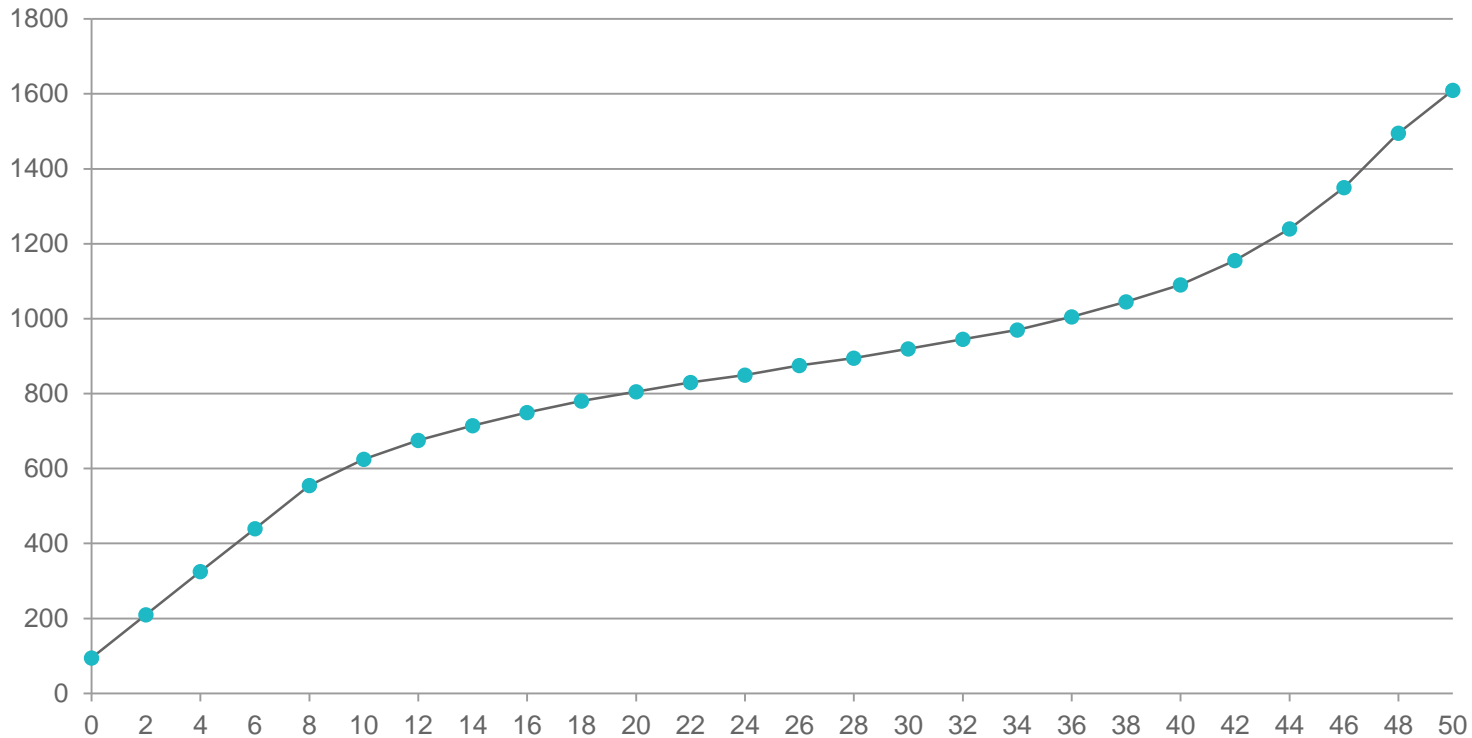
- Aptis General and Advanced
  - 563 examinees from 8 countries
  - Austria, Columbia, Great Britain, Greece, Malaysia, Romania, Turkey, and Vietnam
- Aptis Teens Advanced
  - 1,662 examinees from China

# Aptis-Lexile Linking Function

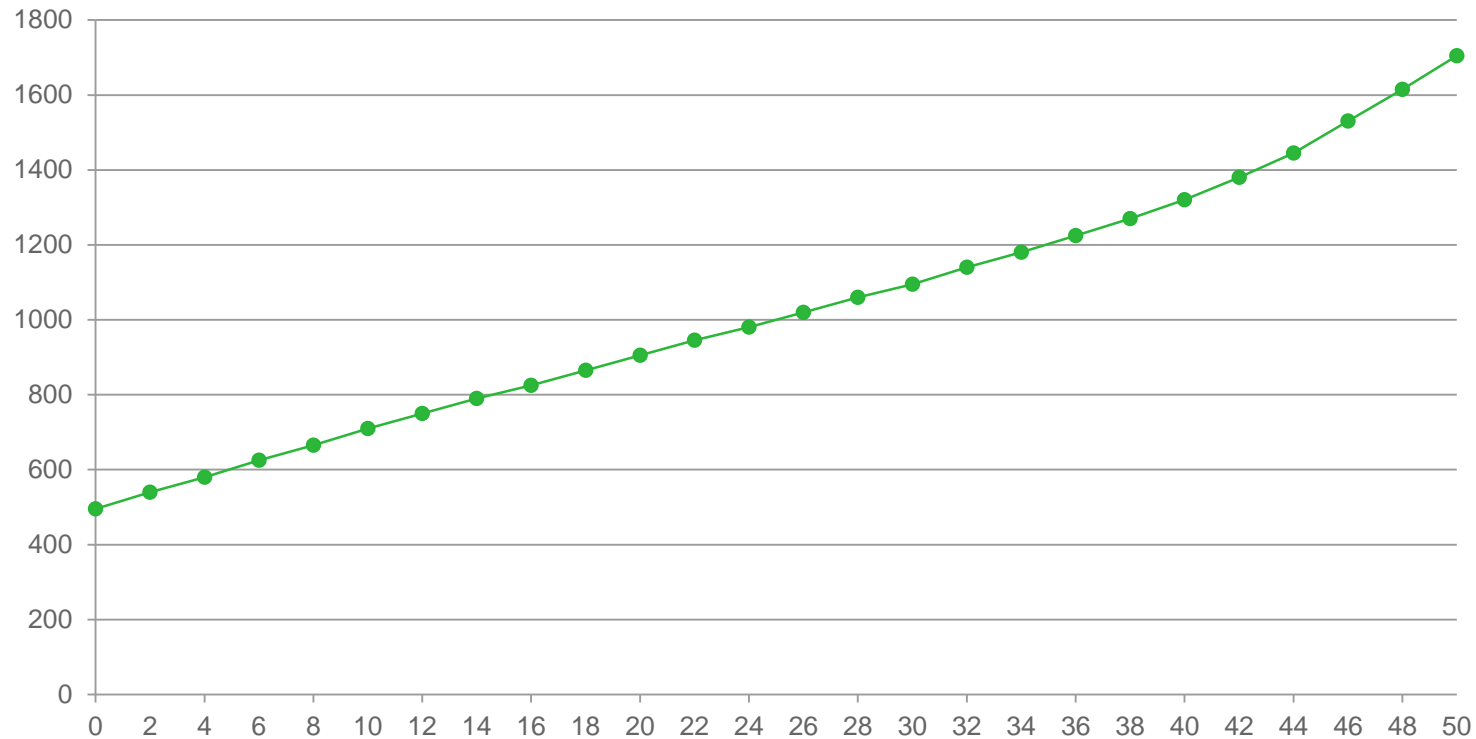
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Linking function determined by Rasch (Winsteps) analysis and then smoothing at the ends of the distribution (when necessary)

# Aptis General Linking Function

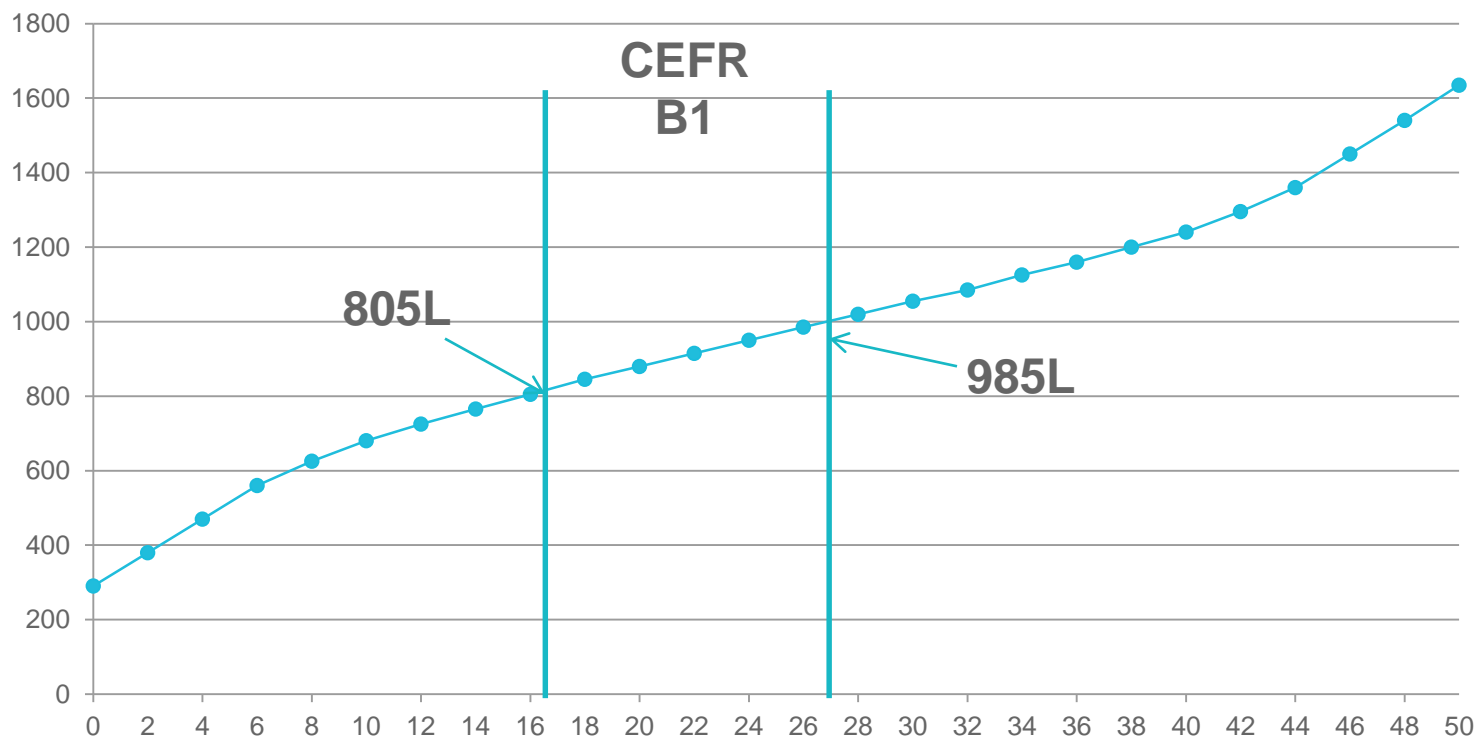


# Aptis Advanced Linking Function

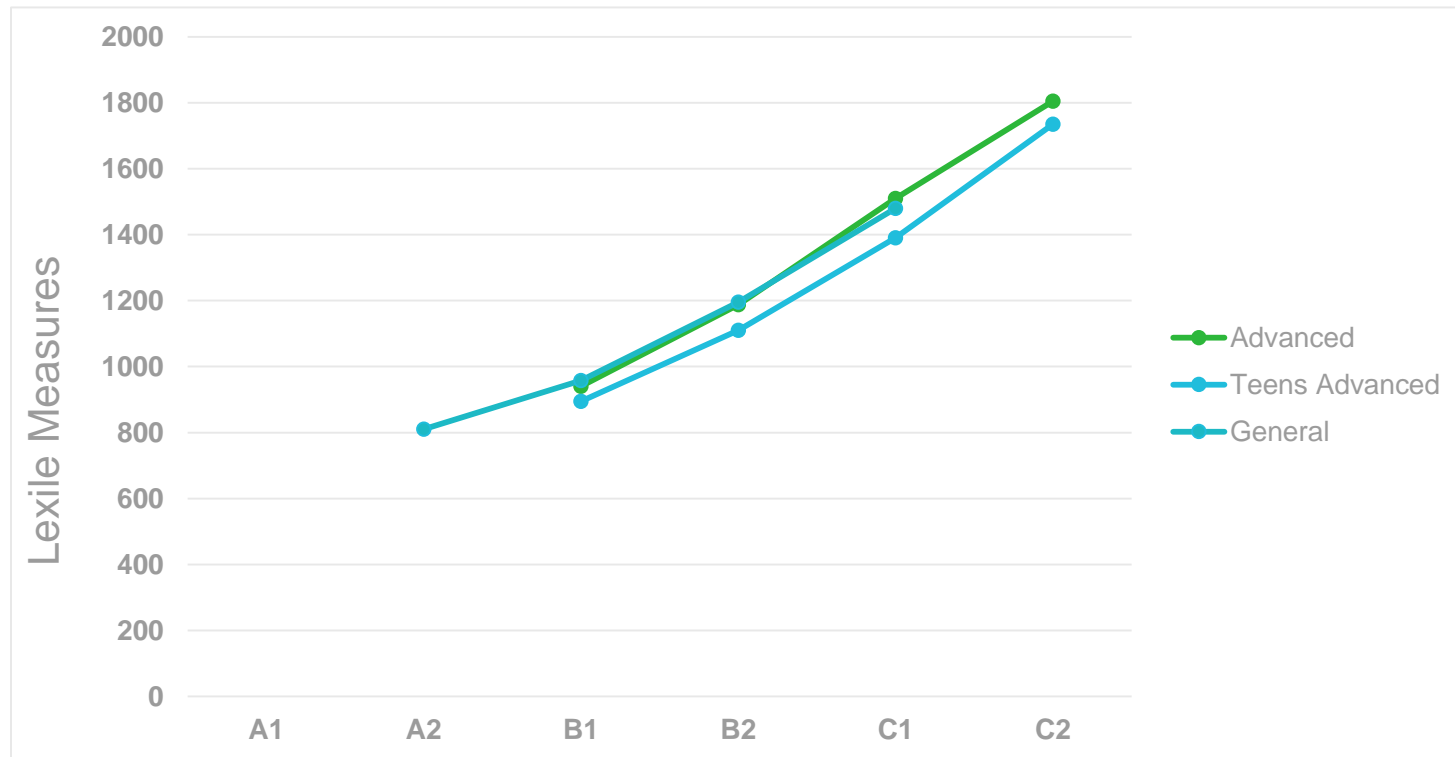




# Aptis Teens Advanced Linking Function



# Aptis CEFR Levels on the Lexile Scale



# Maximizing Utility

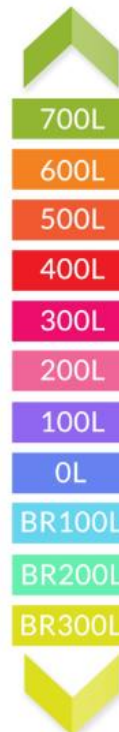
Lexile measures *match readers*  
*and text* on the same scale.

A student's  
Lexile measure  
is her reading  
ability level.

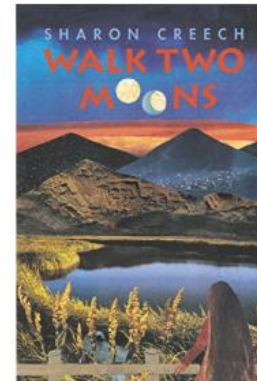
LEXILE READER  
MEASURE



770L



LEXILE TEXT  
MEASURE

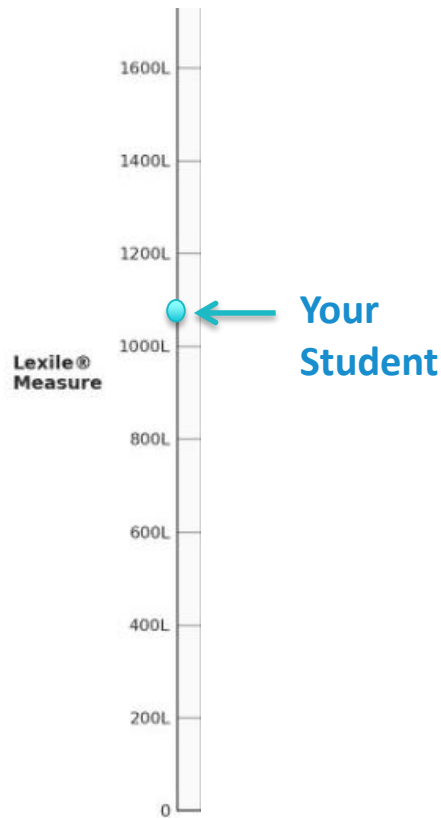


770L

A text's  
Lexile  
measure is  
its reading  
complexity.

# Provide Targeted Practice

A Placement Test places your customer on the Lexile scale



Your measured content provides targeted practice for your customers

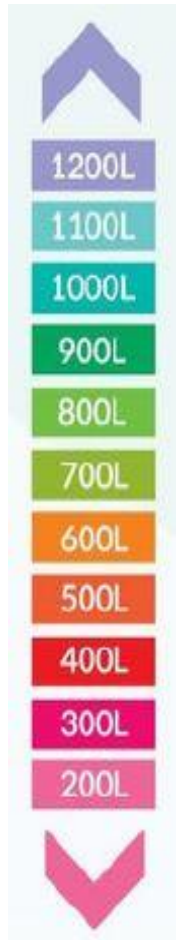


# What Else Do Lexile Measures Tell Us?

Lexile Measures allow a customer to compare their current ability with real world English reading demands and opportunities.



# Lexile Reading Stories: What does reading demand look like around the world?



## Reading Demand Examples in the World

International English Newspapers	Lexile Range 1240L to 1440L
The Straits Times (Singapore)	1410L
The Australian	1390L
The New York Times	1380L
Times of India	1320L
The Guardian (UK)	1310L

Daily Reading

University Entrance Exams	Lexile Range
University Entrance Exams	1200L to 1400L

College Entrance

Career and Workplace Reading Demand	Lexile Range
Law and Public Safety	1420L - 1740L
Education and Training	1320L - 1370L
Business Administration	1210L - 1310L
Sales and Service	1180L - 1270L
Hospitality and Tourism	1230L - 1260L

Career and Workplace Readiness

- Benchmarking
  - Commonly read materials – Lexile map
  - Graded readers
  - Textbooks and exam materials
  - International newspapers
  - U.S. grade level text expectations

# The Lexile Map

1300L–1395L

## 1340L *Silent Spring* CARSON

The basic element, carbon, is one whose atoms have an almost infinite capacity for uniting with each other in chains and rings and various other configurations, and for becoming linked with atoms of other substances. Indeed, the incredible diversity of living creatures from bacteria to the great blue whale is largely due to this capacity of carbon. The complex protein molecule has the carbon atom as its basis, as have molecules of fat, carbohydrates, enzymes, and vitamins. So, too, have enormous numbers of nonliving things, for carbon is not necessarily a symbol of life.



## SAMPLE TITLES

LITERATURE

- 1390L *The Yellow Wallpaper* (GILMAN)
- 1350L *The Secret Sharer* (CONRAD)
- 1330L *The Jungle* (SINCLAIR)
- 1330L *Silas Marner* (ELIOT)
- 1300L *Gulliver's Travels* (SWIFT)

INFORMATIONAL

- 1390L *In Defense of Food: An Eater's Manifesto* (POLLAN)
- 1360L *Anne Frank: The Book, the Life, the Afterlife* (PROSE)
- 1340L *Walden and Civil Disobedience* (THOREAU)
- 1330L *The Professor and the Madman: A Tale of Murder, Insanity, and the Making of the Oxford English Dictionary* (WINCHESTER)
- 1300L *Arctic Dreams: Imagination and Desire in a Northern Landscape* (LOPEZ)



# The Lexile Map

600L-695L

620L *The Year of Billy Miller* HENKES

His heart was pounding.

Once again, he forgot every word of his poem, including the title—but this time he didn't have a copy of it to read from.

He saw Ms. Silver in the fringes of his vision. She was smiling and nodding, urging him on with her wide eyes.

Should he walk over to her to get a copy of his poem? She seemed about a mile away. And he didn't think he could make his legs move.

What should he do?

The air felt weird all of a sudden. As if it had sprouted wings and was brushing against him. The air was fluttering against his arm.

How could that be?

He turned around and Mama was there with a copy of his poem, tapping it lightly against his elbow. "Here," she whispered. "You can do it."



## SAMPLE TITLES

LITERATURE

690L *Firefly Hollow* (MCGHEE)

680L *Charlotte's Web* (WHITE)

670L *A Year Down Yonder* (PECK)

660L *Holes* (SACHAR)

610L *Mountain Bike Mania* (CHRISTOPHER)

INFORMATIONAL

690L *Sadako and the Thousand Paper Cranes* (COERR)

680L *An Eye for Color: The Story of Josef Albers* (WING)

680L *The Moon* (LANDAU)

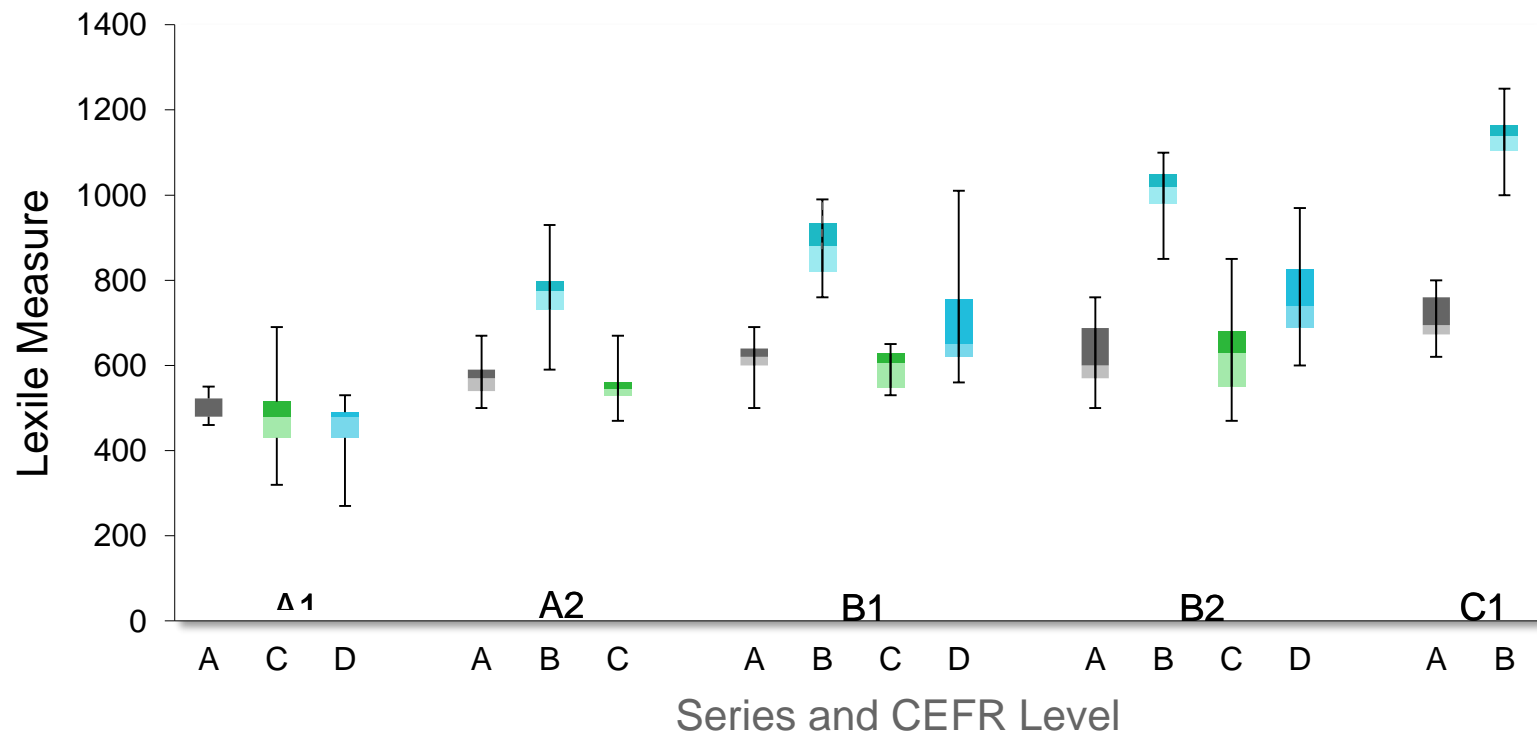
660L *Remember: The Journey to School Integration* (MORRISON)

620L *Crittercam* (EINSBRUCH)

# Graded Readers

- Internationally prominent graded reader publishers
  - Four series
  - 422 graded readers across 7 levels
  - 319 had a single CEFR designation
- Research Questions
  - Is there a systematic increase in reading challenge across graded reader levels and CEFR levels?
  - Is there variation across publishers in the reading challenge of books designated at similar levels?

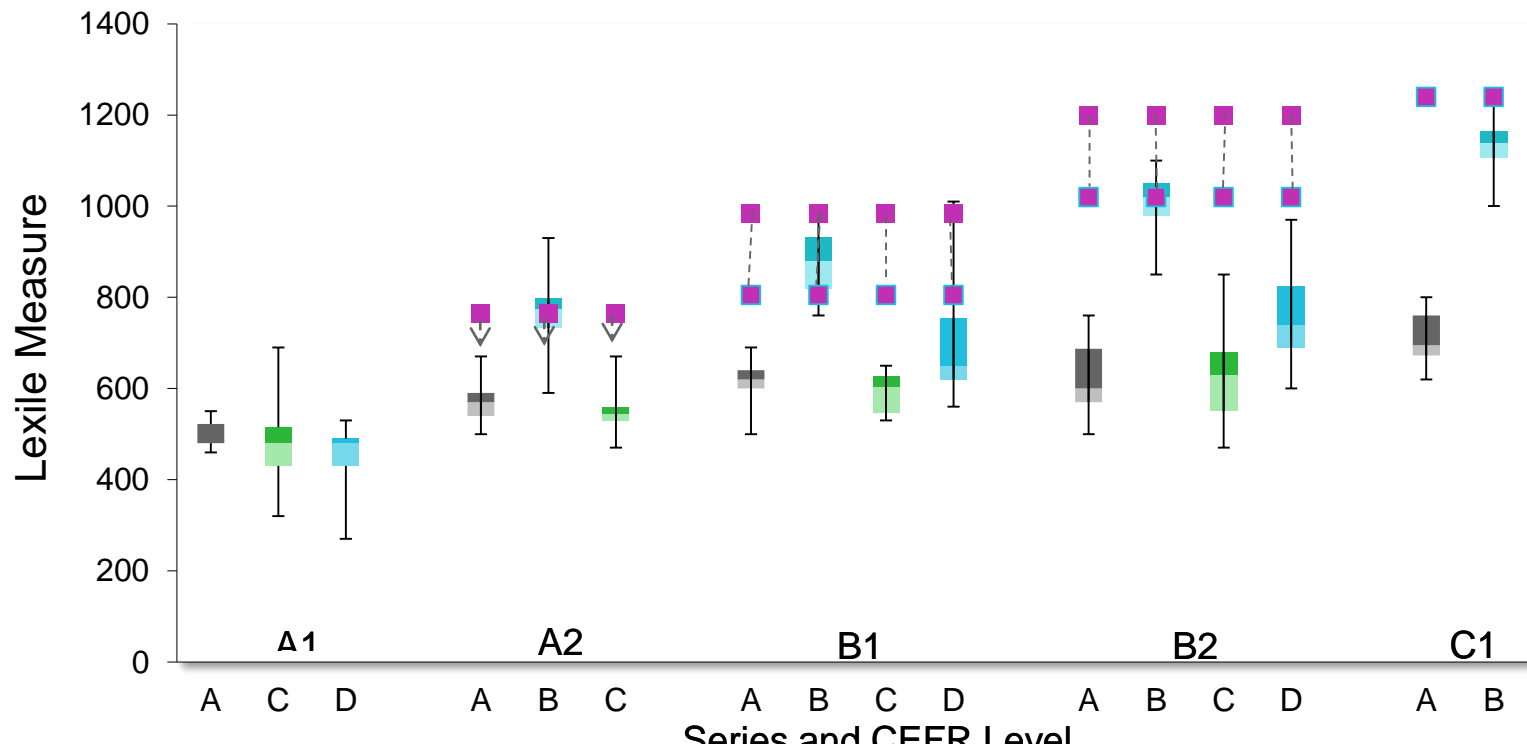
# Graded Readers



# Graded Readers – Aptis Teens CEFR Levels



MetaMetrics.

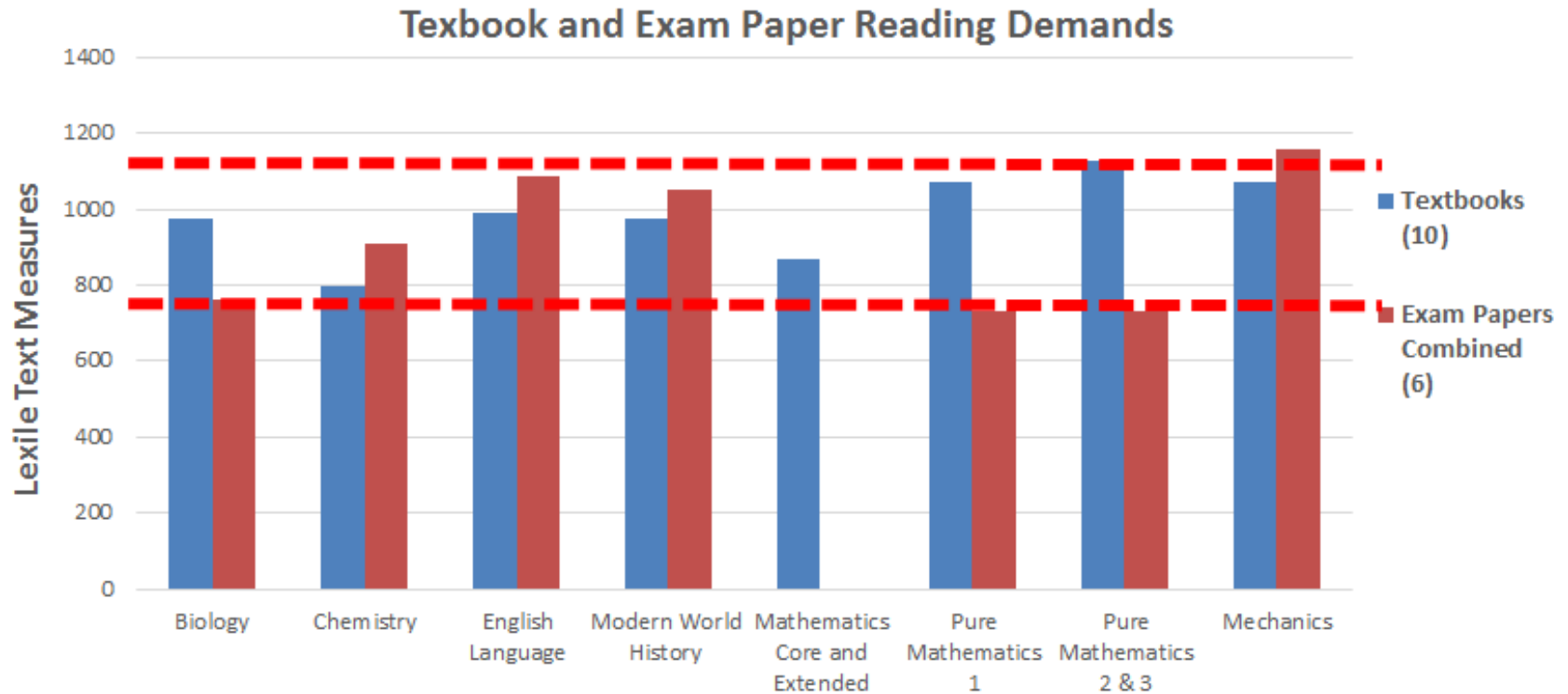


# Textbooks and Exam Materials

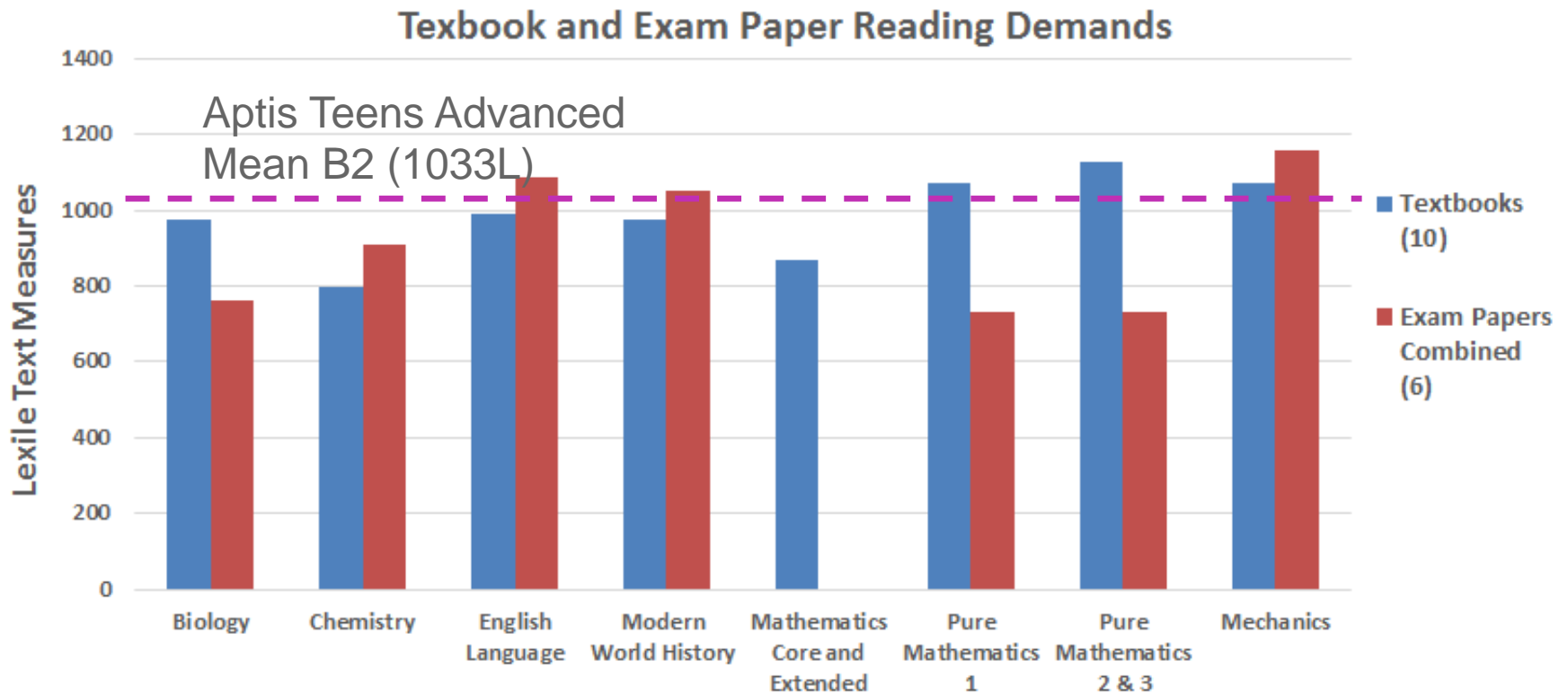
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- English Medium Contexts in China – Research Study
  - 10 textbooks were analyzed for text complexity
    - Biology, chemistry
    - English language, World modern history
    - Maths core and extended, Pure Maths 1, Pure Maths 2 & 3
    - Mechanics
  - 18iGSCE exam papers taken at English medium schools
- Research Questions
  - Does the complexity in the texts match the exam?
  - Is the complexity comparable to the reading material in other English-speaking and non-English speaking countries?

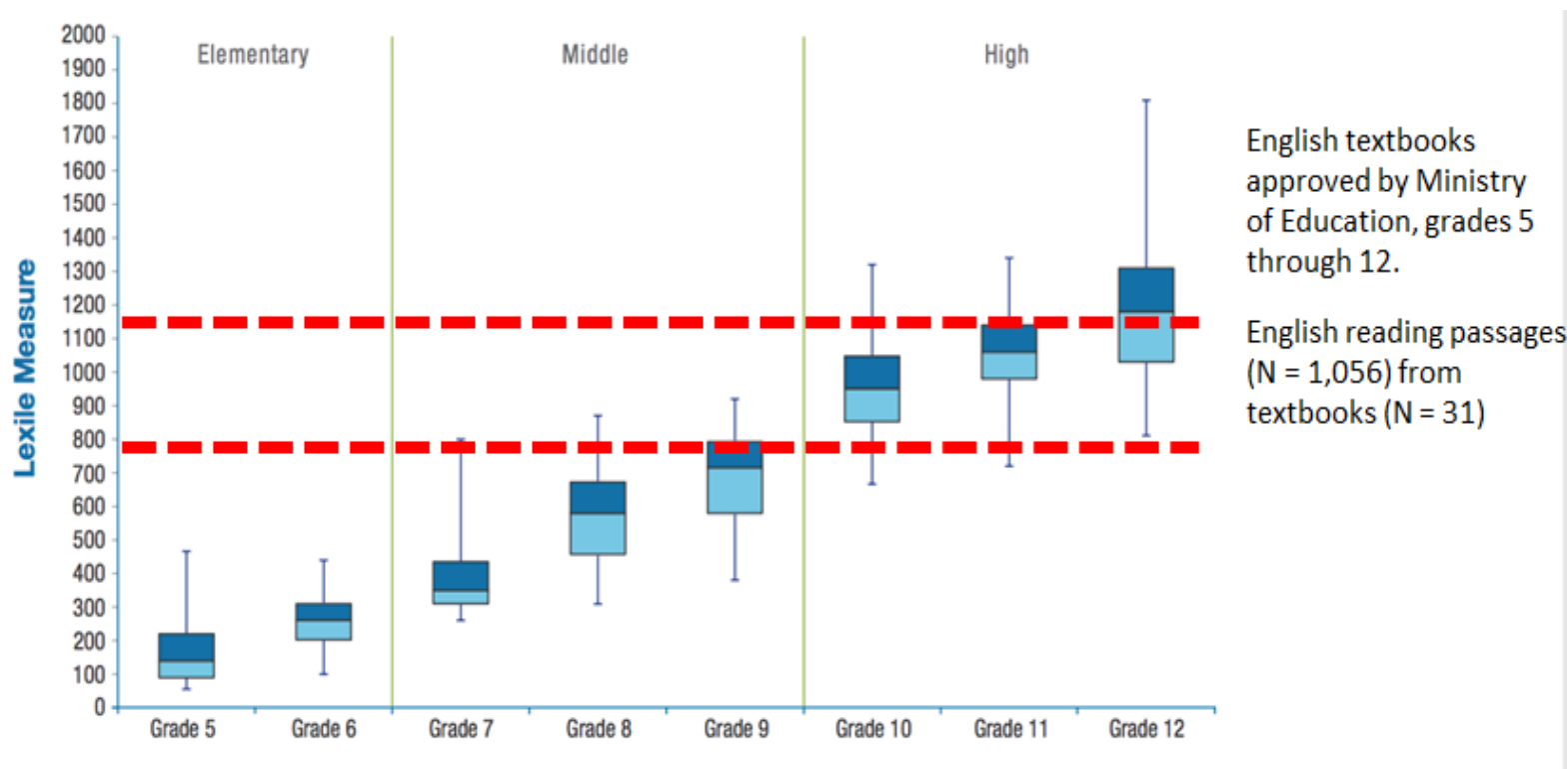
# Comparing with Aptis Teens Examinee Scores



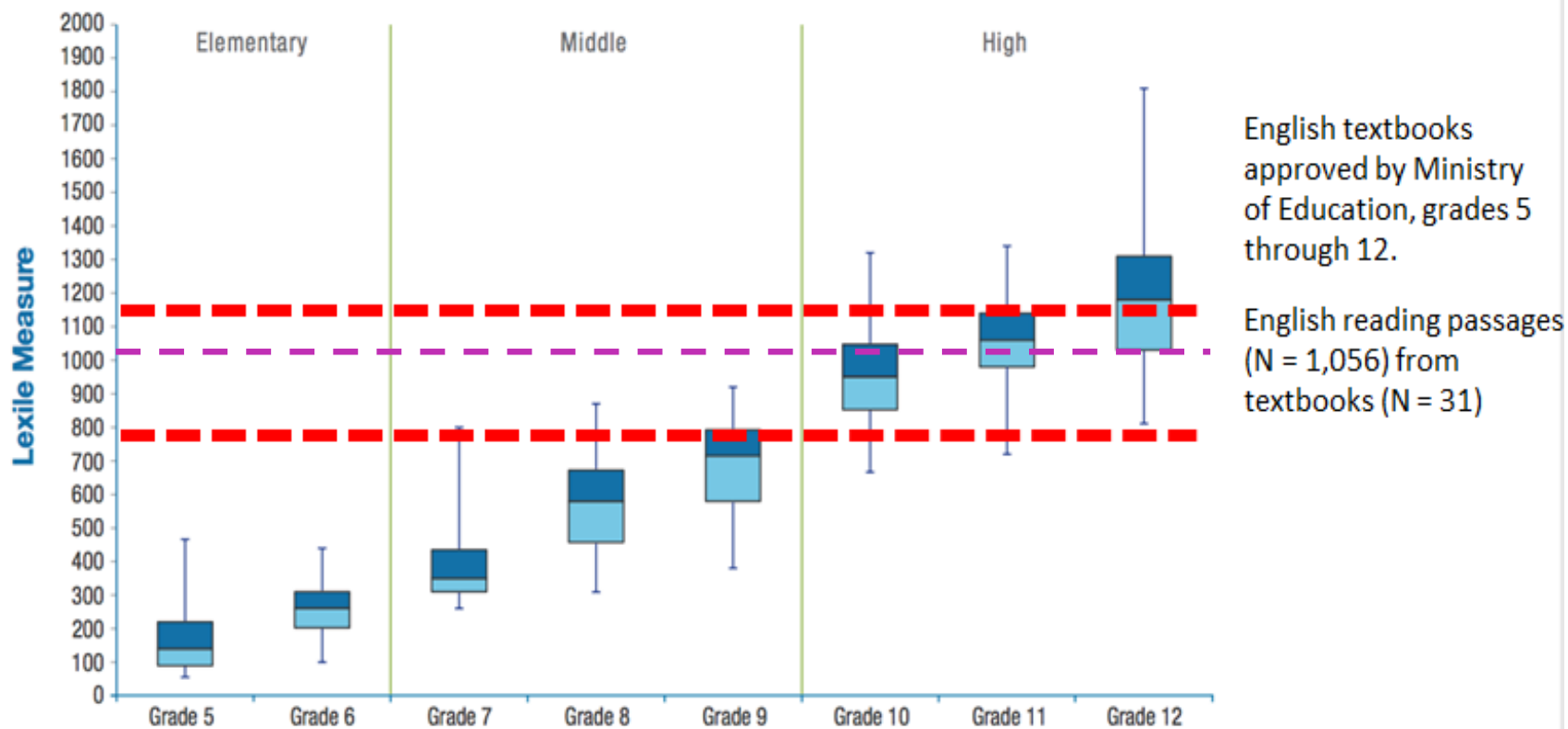
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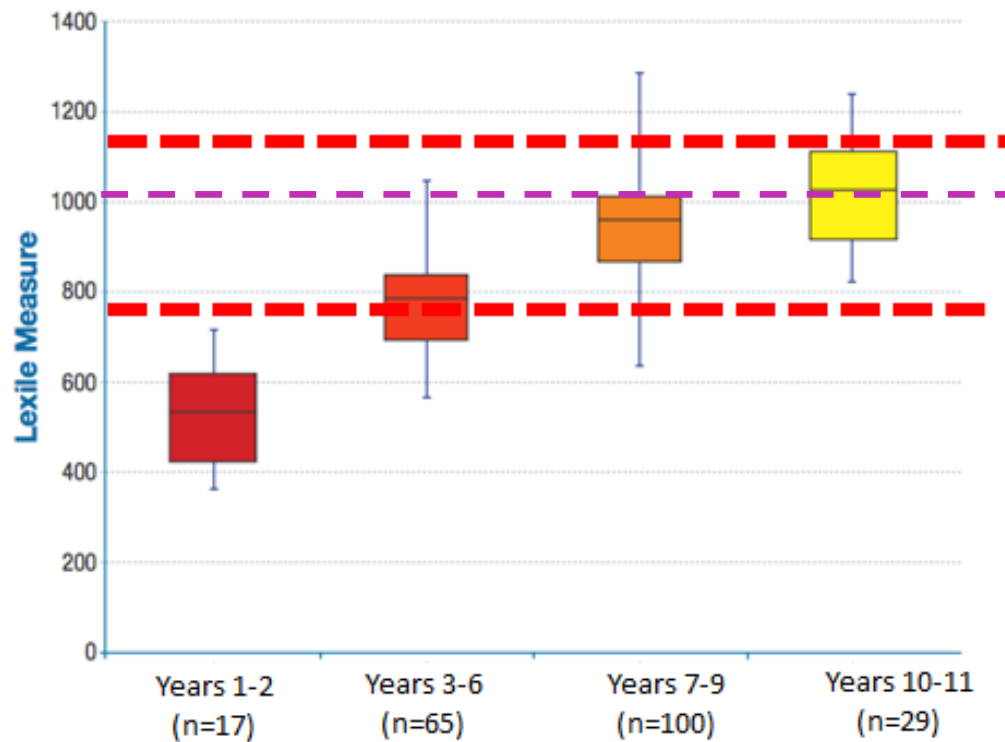


# English Textbooks used in South Korea

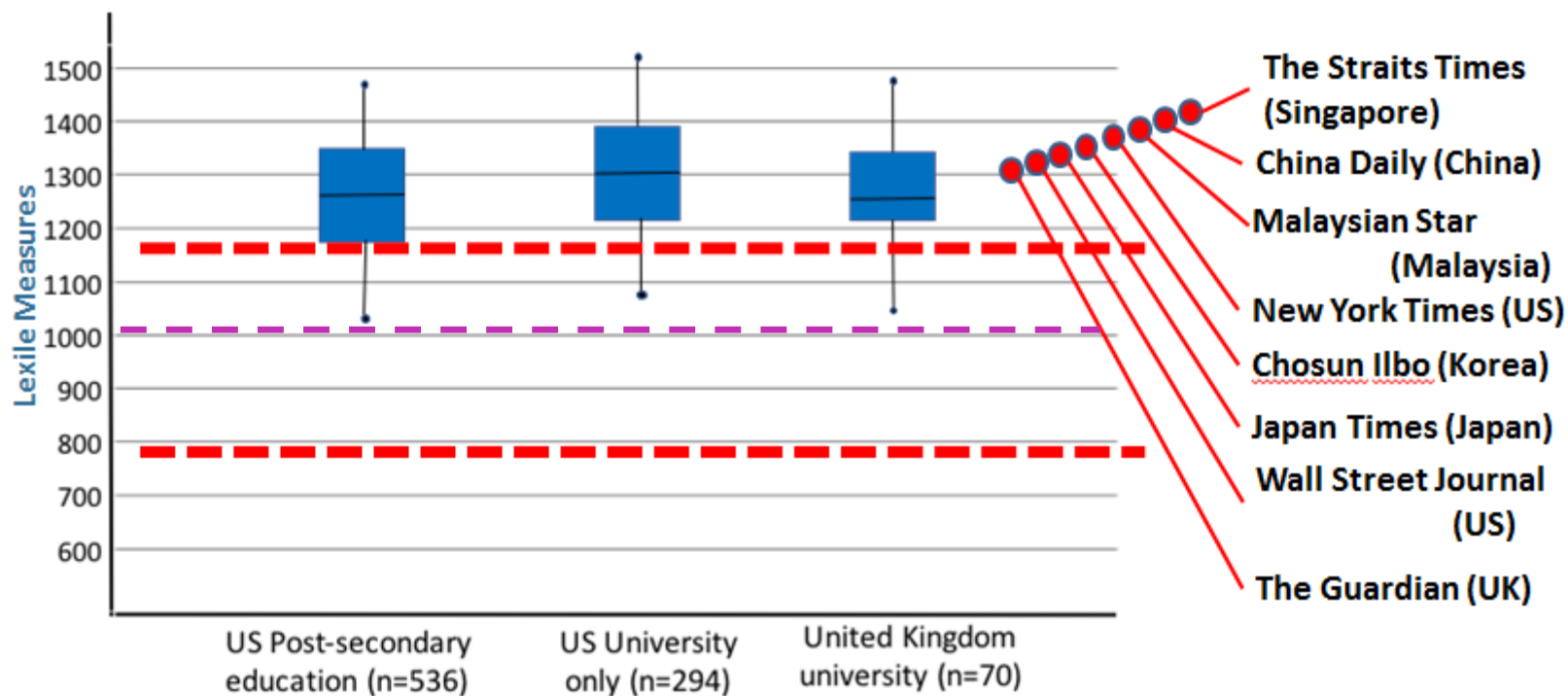








Approved textbooks (n=211)  
in UK, Key Stages 1-4, over 12  
subject areas.



# Lexile Text Measures by US K-12 Grade Levels

GRADES	CCSS LEXILE TEXT RANGE
11–12	1185L–1385L
9–10	1050L–1335L
6–8	925L–1185L
4–5	740–1010L
2–3	420L–820L
1	190L–530L

*Common Core State Standards for English Language Arts, Appendix A (Additional Information), NGA and CCSSO, 2012*

**330L** *Seals* ARNOLD

Earless seals live in oceans.

Thick blubber keeps seals warm.

A seal's back flippers help it swim fast.

A seal on land is slow.

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# Summary

Linking an existing assessment to the Lexile Framework extends the utility of the test scores

- Matching readers to text
- Benchmarking against existing text sets to anticipate need for scaffolding
- Understanding reading demands of international reading materials

# THANK YOU