Wales in a Global Context
Cymru mewn Cyd-destun Byd-eang

Building Reading Skills
Learning from the PISA Experience

Foreword

The development of pupils' literacy skills plays a fundamental role in their journey towards becoming lifelong learners, capable of contributing positively to society and the world of work. Strong literacy skills nurture confidence and are an important factor in promoting a person's overall sense of well-being. Research tells us that pupils who have developed strong literacy skills perform better in all aspects of school life.

Literate pupils are more likely to enjoy learning, to be involved in enrichment activities and to be aspirational when thinking about their futures. By building reading skills in individual pupils, we are preparing them to become active citizens in dynamic communities; communities that can engage in dialogue, that listen, share ideas and innovate. It is through contributing and belonging to such creative and active communities that our pupils will thrive.

This learning resource has been developed by expert practitioners from the four Welsh Regional Consortia, with pupils and teaching and learning at its heart. The purpose is two-fold; to learn about the development and assessment of reading skills from the experience of the Organisation for Economic Cooperation and Development (OECD) and the Programme for International Student Assessment (PISA), and to share some exemplar materials that teachers can use to build the reading skills of pupils across Wales. We believe that this learning opportunity will make a positive contribution to Wales' wider National Mission and support the excellent practice taking place in so many of our schools.

We would like to thank all individuals who have contributed to this resource and the additional resources referenced in the links and useful information section. This collaborative approach demonstrates the process of teachers taking the lead in developing the education agenda in Wales.

Building Reading Skills;
Learning from the PISA Experience
Core Subject Leads, June 2018

Regional School Improvement Consortia
Consortia Gwella Ysgolion Rhanbarthol

Defining Reading Literacy

Reading is often thought of as simply decoding a text or even reading aloud. In a PISA reading test the definition of reading is much broader. The tests do still cover the decoding element of reading. However, they also assess comprehension and metacognitive processes.

Comprehension and metacognitive processes can be defined as the integration of meaning with the pupil's knowledge about the world, ability to self-monitor and adjust their reading activity accordingly. This is based on the text(s) and the awareness of and the ability to use a variety of appropriate strategies to process a text.

"Reading literacy is understanding, using, evaluating, reflecting on and engaging with texts in order to achieve one's goals, to develop knowledge and potential and to participate in society."

(OECD May 2016, Draft Analytical Frameworks)

Evaluate & Reflect

Understand

Locate Information

Read Fluently
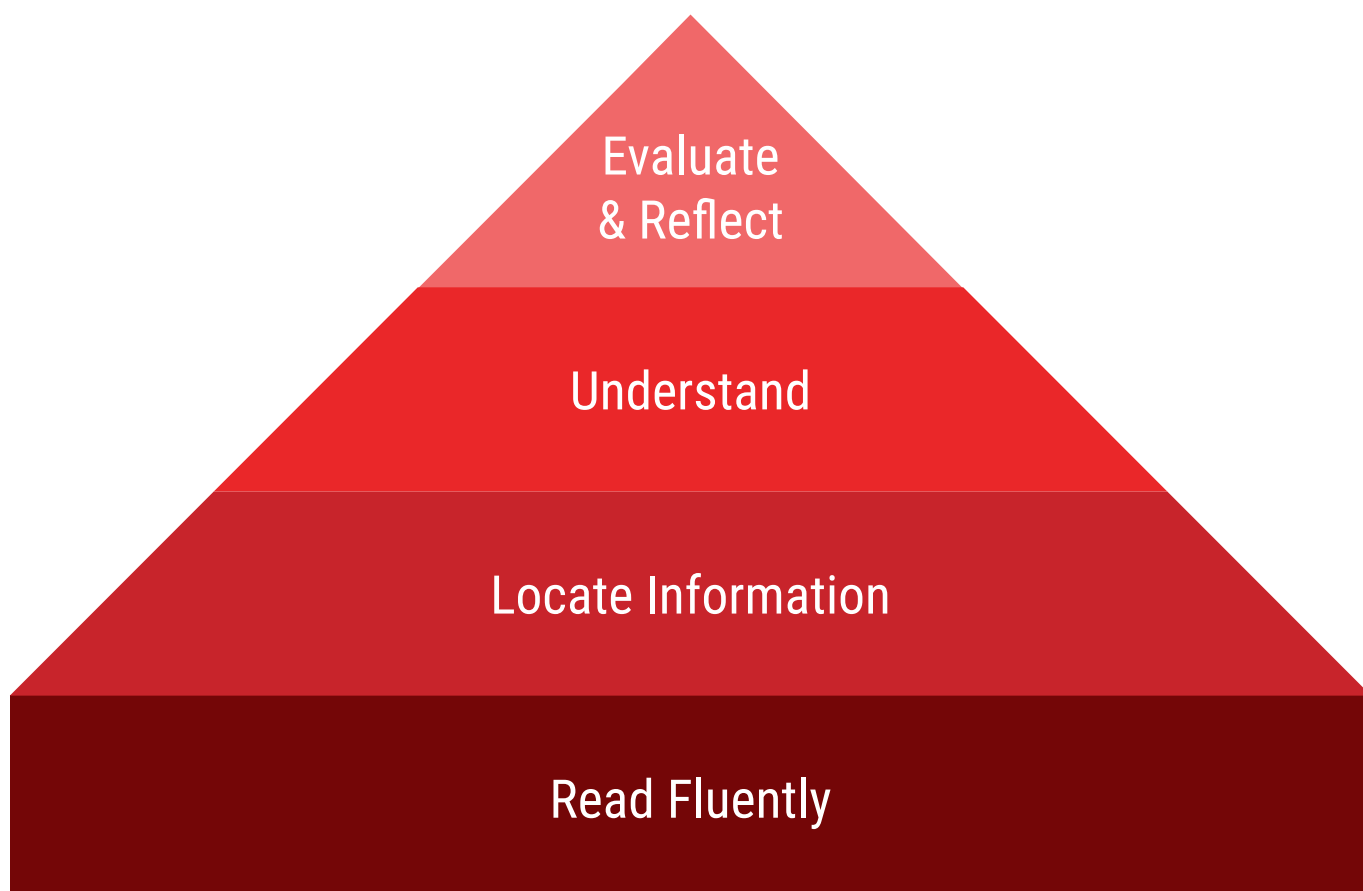
Reading Literacy Skills

As defined by *PISA 2018 DRAFT ANALYTICAL FRAMEWORKS, MAY 2016*

Locate Information

Fluent readers are able to read a text in its entirety to comprehend the main ideas and reflect on the text as a whole. However, in daily life, it is sometimes necessary to locate specific information from a text. The 2018 PISA framework defines the two processes where readers perform the selection of information within and across texts:

Access and retrieve information within a text

In the context of PISA 2018, access and retrieve tasks require the reader to scan a single text in order to retrieve target information made of a few words, phrases or numerical values. The identification of target information is achieved through literal or close to literal matching of elements in the question and in the text.

Search and select relevant text

In PISA 2018, text search and selection tasks involve the use of text descriptors such as headers, source information (e.g. author, medium, date) and embedded or explicit links such as search engine result pages.

Understand

A large number of reading activities involve the deconstruction of extended passages in order to form an understanding of the meaning conveyed in the passage. In PISA 2018 this is done in two ways:

Represent literal meaning

These tasks require pupils to comprehend sentences or short paragraphs.

Integrate and generate inferences

These tasks involve pupils generating various types of inferences such as simple and more complex coherence relationships.

Evaluate and Reflect

Competent readers can reason beyond the literal or inferential meaning of the text. They can reflect on the content and form of the text and critically assess the quality and validity of information:

Assess quality and credibility

Competent readers can evaluate the quality and credibility of text (e.g. whether the information is valid, up to date, accurate, unbiased).

Reflect on content and form

Competent readers can also reflect on the quality and style of writing. This involves being able to evaluate the form of writing and how the language choices express the author's purpose and point of view.

Detect and handle conflict

Reflecting on multiple texts that hold conflicting information.

Text Examples

The following four text types are examples of the reading materials that will be included in PISA 2018:

Continuous Texts

Continuous texts are formed by sentences organised into paragraphs. Examples of continuous text formats include newspaper reports, essays, novels, short stories, reviews and letters, including on Kindle and other e-book readers.

The Global Picture of the Mobile Phone

The *mobile phones* are currently the dominant technology which the youths define themselves with. The kind of phone one carries and the way the phone is customized says a lot about who one is (The Economist, 2008). The mobile phone is currently not just a "must have'" device in the developed countries. In the established market, the uptake has approached a "saturation point" and as per 2004, there were about 51 million users in the United Kingdom (Banks & Burge, 2004). As on one hand the demand for these phones tends to be "unquenchable", on the other hand, it is after all just a technology. At all times, there will be more pressing needs. However, it is a technology which has the prospect to bring in a positive impact in the human lives (Aurigi, 2006).

The **innovation rate** in the mobile phone industry is quite unique and this is in regard to the handset innovation as well as the range of services that are offered. In the course of the past few years, the mobile phone has turned out to the main information communication device "spurred on by the earlier introduction of text messaging and the more recent mobile internet services (Wireless Application Protocol, WAP)" (Banks & Burge, 2004, p.9). During the initial years of its invention, there was over-hyping of WAP and its promotion was poor to doubtful public and this resulted in disappointing the public.

However, in the more recent times, as pointed out by Banks & Burge (2004), "the introduction on some phones of color screens, polyphonic sounds, build-in cameras, and innovative operating systems enabled WAP-related services to come of age, and servcies such as Vodafone live are a testament to how far things have come" (Banks & Burge, 2004, p.9).

Having *innovation* racing ahead in the developed countries, there is a threat of the developing nations being left behind, technologically. The suitably titled "digital divide" "was already an issue, with emphasis on access to telephones, computers and the internet" (Banks & Burge, 2004, p.10). For a number of reasons, the mobile phones have been in a position to "leapfrog" some obstacles, and following this, they have gotten themselves at the front position of the "digital divide" debate (Banks & Burge, 2004).
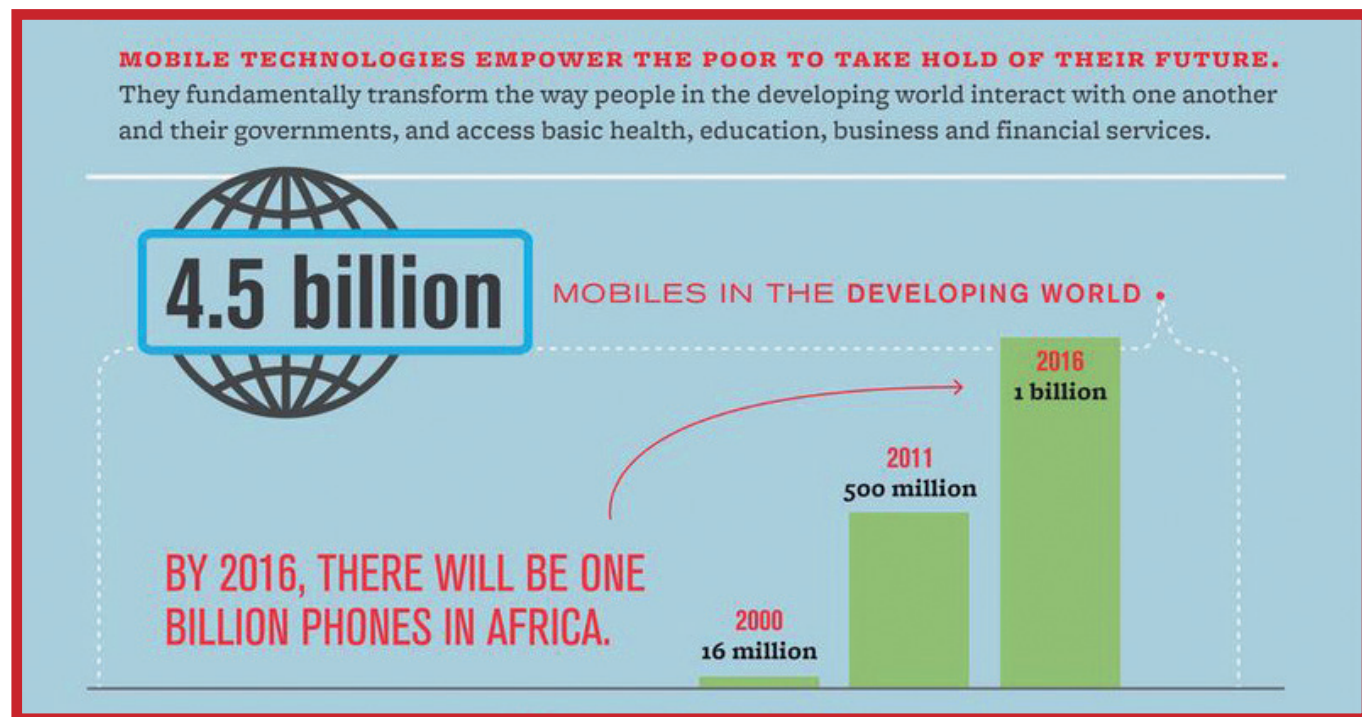
Individuals in some of the poor nations in the world are now accessible to the mobile phones. Banks & Burge (2004) points out that "addressing their specific needs, and supporting and encouraging the use of mobile technology as a force for positive social and environmental change presents the industry with unique challenges and opportunities" (Banks & Burge, 2004,p.10).

[Extract from an essay]

Non-continuous Texts

Non-continuous texts are organised differently to continuous texts, and therefore require a different kind of reading approach.

Examples of non-continuous text objects are lists, tables, graphs, diagrams, advertisements, schedules, catalogues, indexes and forms. These text objects occur in both fixed and dynamic texts.

MOBILE TECHNOLOGIES EMPOWER THE POOR TO TAKE HOLD OF THEIR FUTURE.
They fundamentally transform the way people in the developing world interact with one another and their governments, and access basic health, education, business and financial services.

4.5 billion

MOBILES IN THE DEVELOPING WORLD

BY 2016, THERE WILL BE ONE BILLION PHONES IN AFRICA.

2000
16 million

2011
500 million

2016
1 billion

[Graph]

Mixed Texts

Mixed texts use elements of continuous and non-continuous texts e.g. a prose explanation including a graph or table. Even though two types of texts are used they are mutually supportive. Mixed text is a common format in magazines, reference books, reports and web pages, where authors employ a variety of presentations to communicate information.

THE BLOG 10/08/2013 07:14 pm ET | **Updated** Jan 23, 2014

6 Ways Mobile Technology Has Transformed the World's Poor

By Clara Tsao

Mobile technology is rapidly changing the face of communication in the most remote areas of the world. Today, out of the seven billion people in the world, approximately six billion are cell phone subscribers. In response, companies, governments, and NGOS alike have realized the potential of this tool in addressing today's most pressing global challenges. Last week I attended the Mobiles Conference with 150 thought leaders and decision makers to discuss the present use of mobile technologies to increase development impact. Here are some key areas where mobile technology has had the greatest success.

1. Education

In education, mobile technology has helped provide schools, teachers, and parents access to meaningful data and tips to help students succeed. The educational non-profit, Eneza Education has been doing just that. Eneza is a mobile platform allowing students to access quizzes, mini-lessons and tips and tricks on local content via the web, mobile web, and an USSD/SMS-based system. So far, Eneza has around 100,000 students at over 400 schools across Kenya, and over 20 schools subscribing to their data. Their next goal is to obtain 200,000 students to its platform by 2014.

Mobile Birth Registration

2. Surveys and Polling

Grants for projects in international development are heavily data driven. New developments in surveying and polling on mobile devices has allowed international development workers to easily collect data in rural communities and take an evolutionary leap from paper surveys. Such tools include formhub, an open source project of the Earth Institute, allows surveys to be created in minutes. The platform is accessible from any Android device with offline features, allowing for easy data collection and analysis anywhere.

[Online article with digital text embedded]

Multiple Texts

Multiple texts are defined as those that have been generated independently and make sense independently. They may be loosely linked or contrast with each other for the purposes of the assessment. The relationship between the texts may not be obvious; they may be complementary or may contradict one another.

Reviews Cell Phones

How the Mobile Phone is Evolving in Developing Countries

Governmental and non-governmental organizations are using phones to substitute for physical infrastructure in developing nations.

By Chandra Steele May 11, 2012 3:55PM EST

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Image courtesy of iicd.org

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Developing countries bear the brunt of technology. Their land is often stripped for the metals to make components and it also serves as the dumping ground for the unrecycled final product. In exchange, some countries get desperately needed infrastructure. In many African nations, China is building roads, dams, and railways, but it's still not enough to close the development gap, and the technology one gapes even wider.

Mobile phones, though, can cut across that distance. Even in places that lack electricity, they are often plentiful. "The penetration of mobile phone

Reviews Cell Phones

11 Uses for Your Old Smartphone

Do you have an old smartphone lying around? Turn it into something cool.

By Evan Dashevsky March 11, 2017 12:01AM EST

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11 ⌄

Smartphones! Everybody loves 'em. In fact, they're an absolute necessity in today's information age. We don't do anything or go anywhere without our little magic pocket slabs. But here's the super weird thing about smartphones: They all seem to last around two years before they need to be retired.

Two years just happens to the amount of time that most contracts or payment plans last. Strange how that seems to work out, right? I attribute no foul actions, nor endorse any conspiracies, BUT if you are ever in the mood to be inundated with a bout of raw unfiltered anger, try doing a Twitter search for "planned obsolescence."

[Extracts from two online articles on mobile phone usage]

Useful Links and Further Information

Teaching Resources for Building Reading Skills:

PISA resources

- PISA 2018 Released Field Trial New Reading Items
  http://www.oecd.org/pisa/test/PISA_2018_FT_Released_New_Reading_Items.pdf

- PISA 2015 Released Field Trial Items for Scientific Literacy and Collaborative Problem Solving
  http://www.oecd.org/pisa/test/PISA2015-Released-FT-Cognitive-Items.pdf

- PISA 2012 Released Mathematics Questions
  http://www.oecd.org/pisa/test/PISA%202012%20items%20for%20release_ENGLISH.pdf

- PISA 2012 Released Financial Literacy Questions
  http://www.oecd.org/pisa/test/financialliteracytest/

- Scientific resources
  https://hwb.gov.wales/resources/resource/a56eb2ee-4585-4c78-b8af-8efa3ff16a3b

Information about PISA 2018:

- *http://www.oecd.org/pisa/*

- PISA 2018 Draft Analytical Frameworks, May 2016
  https://www.oecd.org/pisa/data/PISA-2018-draft-frameworks.pdf

- *https://www.nfer.ac.uk/*

Wider Reading:

- Didau, D 2014, *The Secret of Literacy: Making the implicit, explicit*, Independent Thinking Press, Carmarthen.

- Beck, Kukan & McKeown 2002, *Bringing Words to Life: Robust Vocabulary Instruction (Solving Problems in the Teaching of Literacy)*, Guildford Press, Guildford.

- Tyrer, G 2018, *100 Ideas for Secondary Teachers: Literacy Across the Curriculum (100 Ideas for Teachers)*, Bloomsbury Education, London.

Notes