

Exhibit 14: National Policies Regarding Use of Technology in Language/Reading Instruction

Reported by National Research Coordinators

Country	Description of the National Policies for Use of Technology
Australia	The use of technology is encouraged but not mandated. The Information and Communication Technology Capability is included in the general capabilities that area applied across the curriculum. In the Australian Curriculum: English, general capabilities are identified wherever they are developed or applied in content descriptions. They are also identified where they offer opportunities to add depth and richness to student learning through content elaborations.
Austria	The use of technology is mentioned in the general didactical principles (a part of the curriculum in general): The media-specific advantages of modern communication and information technology might contribute to activation and motivation (application in accordance to the facilities at the school). The realization of individualization, the internal differentiation and promotion is supported by appropriate facilities at school and in class with operational resources, technical media, modern communication, and information technology.
Azerbaijan	No policy
Bahrain	No policy
Belgium (Flemish)	Schools receive funds for operational costs. There is a bonus for pupils with specific needs based on socio-economic status. Schools can decide freely how to spend the money. In one of the national curricula, use of ICT is considered as obvious.
Belgium (French)	No policy
Bulgaria	No policy
Canada	Policies vary by province. In several Canadian provinces (with the exceptions of Alberta, Manitoba, Quebec, and the New Brunswick French curriculum), the provincial curricula contain statements or policies about the use of technology. In general, these statements refer to the use of technology in the classroom to support comprehension of various types of texts.
Chile	The national curriculum for Lenguaje y Comunicación (Spanish language and communication) includes a specific statement about the importance of integrating ICT in the learning process of students.
Chinese Taipei	The curriculum contains policies about using word processors and the Internet to edit and share writing as well as applying technology in language learning.
Czech Republic	No policy
Denmark	Following the Ministry of Education, IT and digital media should be an integral part of the curriculum. The use of IT and digital media is covered in the national curriculum beginning in grade 0, when students are taught basic ICT skills. For grades 1-9, the guide for Danish Language Instruction proposes four themes in the application of IT and media: information seeking and data collection; production and presentation; analysis and communication; and knowledge sharing and collaboration. Students in grade 4 should be able to navigate age-appropriate homepages in order to seek relevant information, assess relevance, and acquire knowledge about source criticism.
Egypt	No policy
England	No policy
Finland	Students should have experiences in producing different kinds of texts by word processing programs.
France	No policy
Georgia	The National Curriculum contains a list of cross-cutting competencies that also include computer literacy. However, computer literacy is not emphasized until Grade 5.
Germany	No policy
Hong Kong SAR	Students need to learn through hands-on experience to apply technology in learning. This includes using information technology and other media to search, retrieve, select, analyze and synthesize information and to express ideas or present what they feel or learn from reading. E-resources should be used to encourage e-reading and a platform should be established for e-reading and Internet-reading for students, teachers and parents to engage in reading and share their reading experiences and achievements.
Hungary	No policy
Iran, Islamic Rep. of	Use of digital technology is not mandatory but is recommended. The criteria for approving programs and software produced by the private sector for teachers and students are specified in the curriculum.
Ireland	The 1999 primary English curriculum acknowledges the role of technology in enriching the teaching and learning of language, including reading, significantly. The Digital Strategy for Schools aims to embed technology and digital learning tools in teaching, learning, and assessment in primary and post-primary schools in order to enhance students' learning experience and lifelong learning skills. The Scoilnet portal provides all Irish schools and homes with digital reference content including full text-to-speech functionality. PDST Technology in Education offers teachers a summer course entitled Reading and Writing using ICT for Primary School Teachers, which approximately 500 teachers have completed.

A dash (-) indicates data not provided.

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Israel	Acquisition of digital reading strategies is one of the curriculum objectives in both Hebrew and Arabic. For this purpose, instructional units for teaching digital reading strategies for grades 3-4 were developed and have been widely introduced since 2012. The goals in digital reading are not defined in terms of benchmarks in the curricula. The Hebrew curriculum recommends using computer-based learning environments as a platform for learning reading components, and on using the Internet for research in other content domains in different learning subjects, which may promote acquisition of digital skills and digital reading strategies.
Italy	The 2012 national guidelines frequently mention the importance of developing digital competencies (based on the European concept of key competencies). Furthermore, starting from the 2015-2016 school year, the National Plan for Digital School (PNSD - Piano Nazionale Scuola Digitale) is being implemented. It provides a strategy of digital innovation of Italian schools.
Kazakhstan	No policy
Kuwait	Teachers are encouraged to use ICT.
Latvia	No policy
Lithuania	The national curriculum contains very general statements about use of technology including computers, tablets, interactive boards, and the Internet. Primary teachers can integrate technology into other areas of education, as well as in language and reading, although this is not obligatory. Teachers who integrate information technology into the educational process aim to use ICT to modernize and improve teaching and learning, acquaint students with educational computer programs, educational games, and digital learning objects and apply them in the educational process.
Macao SAR	According to the Curriculum Guide, teachers are encouraged to use information technology in teaching and learning to help students develop relevant skills and solve reading problems.
Malta	According to the NCF, speaking, listening, and responding to various types of texts should be given importance. The main objectives for Digital Literacy acknowledge the need to support schools in adapting e-content to students' literacy needs. Finally, the National Literacy Strategy recommends clear instruction for assistive technology or adaptive apparatus in the primary school years to promote literacy acquisition.
Morocco	Some relevant circulars were issued by the Ministry of National to implement and exploit digital resources.
Netherlands	No policy
New Zealand	There is an expectation that teaching approaches will take account of ICT that supports learning across the curriculum. In literacy, this may mean using e-learning to raise literacy levels; using devices or software to engage reluctant learners with texts; or creating self-managing learning opportunities to suit different learning pathways. There are a range of resources or examples of how technology can be used in literacy.
Northern Ireland	Using ICT is embedded in the Northern Ireland curriculum as an essential cross-curricular skill alongside communication and using mathematics. All grant aided schools are provided with a managed ICT service, which includes software, hardware, connectivity, and technical support.
Norway (5)	Digital competence is one of the five basic skills, and every school subject has to take those into account.
Oman	The policy is outlined in the 2004 Ministry of Education document titled, "The Philosophy and Objectives of Education in the Sultanate of Oman."
Poland	-
Portugal	No policy
Qatar	Some schools use tablets or Internet using electronic LMS portals. The Protection Programme (in coordination with ICT Qatar) is used as a safety measure on the Internet and is intended to promote the culture of safe use of the Internet and new technologies.
Russian Federation	From 2015, at the request of the Ministry of Education and Science, textbooks should exist in paper and electronic forms. Electronic forms of books are currently being created, but their implementation is not yet widespread.
Saudi Arabia	No policy
Singapore	One of the learning outcomes for Reading and Viewing in the English Language Syllabus 2010 is for students to apply close and critical reading and viewing to a variety of literary selections and informational/functional texts from print and non-print sources. Schools are also guided by Baseline ICT standards which articulate the knowledge, skills, and attitudes to develop students into 21st century learners.
Slovak Republic	No policy
Slovenia	ICT skills are included in the curricula for several mandatory subjects and areas. Pupils in the third cycle can choose to study one of the computing subjects as one of their electives.
South Africa	There is no mention of technology in the curriculum statement targeting Grades 4-6. This should be understood from the perspective that less than half of the schools in South Africa have access to ICT. In primary schools, less than a quarter of schools have access to ICT.

SOURCE: IEA's Progress in International Reading Literacy Study—PIRLS 2016

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Country	Description of the National Policies for Use of Technology
Spain	The statement is introduced in the Area of Language and Literature, Block 2: Writing Communication: Reading: Use the new technologies in an efficient and responsible manner in order to search and treat information.
Sweden	It is stated in the national curriculum, as an overall goal, that the school is responsible for ensuring that each student can use modern technology as a tool in the search for knowledge, communication, creativity and learning. In the Swedish syllabus it is stated that the students should learn to express themselves through various media, that they should learn to use computers for writing, read texts that combine words and pictures, such as films and web texts and that they should learn how to conduct website searches. The students should also be taught how to use digital tools to plan and give oral presentations. The national curriculum is currently being revised with the aim to strengthen the use of technology.
Trinidad and Tobago	Teachers are expected to use appropriate technology to enhance the reading experience of young children.
United Arab Emirates	In most lessons, students are directed to go back to websites to explore and find out needed information.
United States	Policies on the use of technology in the curriculum vary by state. Many states encourage the use of media and technology in their curricula. For example, in the Common Core State Standards used in most states, literacy and writing objectives encourage students to assess information from diverse media and formats, use visual displays of information and media formats to improve presentations, and use the Internet to collaborate with other students. In the Every Student Succeeds Act (ESSA), signed into law in 2015, the Student Support and Academic Enrichment grants encourage states and districts to promote the effective use of technology in schools.

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Benchmarking Participants—Responses Pertain to Benchmarking Provinces/Regions/Emirates/States

Buenos Aires, Argentina	No policy
Ontario, Canada	Teachers use a range of ICT to extend and enrich instructional strategies and support students' learning in language.
Quebec, Canada	No policy
Denmark (3)	Following the Ministry of Education, IT and digital media should be an integral part of the curriculum. The use of IT and digital media is covered in the national curriculum beginning in grade 0, when students are taught basic ICT skills. For grades 1-9, the guide for Danish Language Instruction proposes four themes in the application of IT and media: information seeking and data collection; production and presentation; analysis and communication; and knowledge sharing and collaboration. Students in grade 4 should be able to navigate age-appropriate homepages in order to seek relevant information, assess relevance, and acquire knowledge about source criticism.
Norway (4)	Digital competence is one of the five basic skills, and every school subject has to take those into account.
Moscow City, Russian Fed.	According to the requirements of the Federal State Education Standard of primary education, the education-methodical and information equipment in language/reading instruction should consist of the following components: Technical tools, software tools, CD and DVD components, educational activities in the information environment, and posting homework tasks in Internet.
Eng/Afr/Zulu - RSA (5)	There is no mention of technology in the curriculum statement targeting Grades 4-6. This should be understood from the perspective that less than half of the schools in South Africa have access to ICT. In primary schools, less than a quarter of schools have access to ICT.
Andalusia, Spain	The statement is introduced in the Area of Language and Literature, Block 2: Writing Communication. Reading: Use the new technologies in an efficient and responsible manner in order to search and treat information.
Madrid, Spain	The statement is introduced in the Area of Language and Literature, Block 2: Writing Communication: Reading: Use the new technologies in an efficient and responsible manner in order to search and treat information.
Abu Dhabi, United Arab Emirates	The curriculum document contains outcomes that support using technology. During teacher assessments, teachers are asked about technology use.
Dubai, United Arab Emirates	In most lessons, students are directed to go back to websites to explore and find out needed information.