

## SACS DIGITAL LITERACY SCOPE AND SEQUENCE

This digital literacy scope and sequence addresses the ICT competence general capability in ACARA.

These are:

1. Investigate with ICT
2. Create with ICT
3. Communicate with ICT
4. Operate with ICT

Students develop ICT competence when they learn to:

- *Investigate* with ICT: using ICT to plan and refine information searches; to locate and access different types of data and information and to verify the integrity of data when investigating questions, topics or problems
- *Create* with ICT: using ICT to generate ideas, plans, processes and products to create solutions to challenges or learning area tasks
- *Communicate* with ICT: using ICT to communicate ideas and information with others adhering to social protocols appropriate to the communicative context (purpose, audience and technology)
- *Operate ICT*: applying technical knowledge and skills to use ICT efficiently and to manage data and information when and as needed
- Apply appropriate social and ethical protocols and practices to operate and manage ICT.

<http://www.acaratwb.com/general-capabilities/information-and-communication-technology-ict-competence>

Many other skills are implicit within ICT competence.

The following “core employability skills” have been incorporated in this document:

- Effective time management
- Planning and organisation
- Effective oral and written communication skills
- Ability to solve problems
- Ability to undertake tasks or make submissions at short notice
- Ability to work with others to achieve common goals
- Ability to think critically and creatively
- Ability to learn and continue learning

From Batho, M. (2008). Scotland’s skills strategy: Improving graduate skills. *LINK 21*. The Higher Education Academy. Retrieved August 21, 2012 from [http://www.heacademy.ac.uk/assets/hlst/documents/LINK\\_Newsletter/link21\\_scottish\\_enhancement\\_themes.pdf](http://www.heacademy.ac.uk/assets/hlst/documents/LINK_Newsletter/link21_scottish_enhancement_themes.pdf)

The four key general capabilities in the Australian Curriculum are also addressed in the ISTE standards and the 21<sup>st</sup> Century Skills (P21) documents. This St Andrew's Cathedral School (SACS) Digital Literacy document incorporates these commonalities.

<b>Australian Curriculum General Capabilities</b>	<b>ISTE Standards</b>	<b>21<sup>ST</sup> C SKILLS (P21)</b>
Literacy		
Numeracy		
Critical and creative thinking	Critical thinking, Problem solving and Decision making	Critical thinking and systems thinking Problem identification, formulation and solution
	Creativity and innovation	Creativity and intellectual curiosity
ICT Capability	Technology operations and concepts	Information and media literacy
	Research and Information fluency	
Personal and social capability	Communication and collaboration	Communication skills
		Interpersonal and collaborative skills
		Self-direction
Ethical behaviour	Digital citizenship	Social responsibility
		Accountability and adaptability
Intercultural understanding		

Digital literacy skills at SACS are mapped across stages at introductory, reinforcement and competency levels. These will change over time as students build competency earlier. Students who join the school in later years may need to be INTRODUCED to many of these skills and processes while their peers receive REINFORCEMENT.

I= Introduction

R= Reinforcement

C= Competency

<p><b>1. Investigate with ICT:</b> using ICT to plan and refine information searches; to locate and access different types of data and information and to verify the integrity of data when investigating questions, topics or problems</p>							
<p><b>Through planned learning activities, the student:</b></p>	<p>Early Stage 1</p>	<p>Stage 1</p>	<p>Stage 2</p>	<p>Stage 3</p>	<p>Stage 4</p>	<p>Stage 5</p>	<p>Stage 6</p>
<p>1.1 Relates the task to prior knowledge</p>	<p>I</p>	<p>I</p>	<p>I</p>	<p>R</p>	<p>R</p>	<p>C</p>	<p>C</p>
<p>1.2 Restates the task in his/her own words</p>	<p>-</p>	<p>I</p>	<p>I/R</p>	<p>R</p>	<p>R/C</p>	<p>C</p>	<p>C</p>
<p>1.3 Breaks the task up into parts</p>	<p>-</p>	<p>I</p>	<p>I</p>	<p>R</p>	<p>I/R</p>	<p>R</p>	<p>C</p>
<p>1.4 Chooses key words to construct good search queries and to collect useful information</p>	<p>-</p>	<p>-</p>	<p>I</p>	<p>R</p>	<p>I/R</p>	<p>R</p>	<p>R/C</p>
<p>1.5 Develops focus questions with modelling, and later guidance</p>	<p>-</p>	<p>-</p>	<p>I</p>	<p>R</p>	<p>R</p>	<p>R</p>	<p>R/C</p>
<p>1.6 Formulates his/her own research question and may use Bloom's Taxonomy to assist in constructing questions</p>	<p>-</p>	<p>-</p>	<p>I</p>	<p>I</p>	<p>I</p>	<p>R</p>	<p>R/C</p>
<p>1.7 Locates and uses the library website</p>	<p>-</p>	<p>I</p>	<p>I</p>	<p>I/R</p>	<p>I/R</p>	<p>R</p>	<p>C</p>

<b>Through planned learning activities, the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
1.8 Identifies and uses a range of possible sources of information to extract information: <ul style="list-style-type: none"> <li>• Human sources: interview, TV, radio</li> <li>• Primary and secondary print sources</li> <li>• Non-Fiction ; Reference; Periodicals; Audio-visual; Fiction</li> <li>• Online pictures, objects and text</li> </ul>	I	I	I	I/R	I/R	R	R/C
1.9 Uses other academic libraries and understands how to locate resources in these	-	-	-	-	-	I/R	R/C
1.10 Knows the difference between a search engine and a browser	-	-	-	I	I	R	C
1.11 Develops familiarity with a number of search engines in using the internet as an information resource	-	-	-	I	I	R	C
1.12 Uses Advanced Search features to locate resources effectively	-	-	-	I	I/R	R	C
1.13 Uses an online encyclopedia to search for information	-	-	I	I/R	I/R	R	C
1.14 Searches subscription databases for current and relevant information	-	-	-	-	I	I/R	R/C
1.15 Skims and scans sources for information	I	I	I	I/R	I/R	R	C
1.16 Selects, accesses and downloads e-books appropriate to interest and reading ability onto a device	-	-	I	I	I/R	R	C
1.17 Develops competence in using online textbooks	-	-	-	-	I	R	C

	Early Stage 1	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
<b>Through planned learning activities, the student:</b>							
1.18 Interacts with online resources through: <ul style="list-style-type: none"> <li>• Following directions</li> <li>• Listening, observing and viewing</li> <li>• Identifying a sequence of ideas</li> </ul>	I	I	I/R	I/R	R	R/C	C
1.19 Develops visual literacy through modelled interpretations of visual material	I	I	I/R	I/R	I/R	R	R/C
1.20 Selects a means for recording relevant information, using an appropriate note-making strategy, e.g. concept mapping, main idea, list making, using a note-making template, clustering notes under sub-headings; and arranging ideas, events and facts in a coherent sequence from oral, written and pictorial sources	-	-	I	I/R	I/R	R	R/C
1.21 Annotates selected resources	-	-	I	I	I	R	R
1.22 Assesses the usefulness of each source	-	-	I	I	I/R	R	R/C
1.23 Recognises the need for information currency	-	-	I	I/R	R/C	C	C
1.24 Identifies bias	-	-	I	I	I	R	R/C
1.25 Makes judgments on sources based on accuracy, authority, objectivity, currency and coverage	-	-	-	I	I	R	R/C
1.26 Cites sources and records bibliographic information – author, title, date, URL	-	I	I	I/R	I/R	R	R/C
1.27 Uses databases, by opening, browsing and searching the library catalogue and online encyclopaedia	-	I	I	I/R	I/R	R/C	R/C

<b>Through planned learning activities, the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
1.28 Undertakes virtual field trips	-	-	I	I	I	R	R
1.29 Participates in virtual labs and simulations	-	-	-	I	I	I/R	R
1.30 Uses real-time polls as a catalyst for debating issues	-	-	-	-	-	I	I/R
1.31 Knows how to navigate and use online courses on Schoology/learning management system	-	-	I	I	I/R	R	R/C
1.32 Learns through online communities, such as Twitter, social media platforms and YouTube	-	I	I	I	I	I/R	R
1.33 Uses Socratic inquiry to explore ideas critically	-	-	-	-	-	I	I/R

<b>2. Create with ICT:</b> using ICT to generate ideas, plans, processes and products to create solutions to challenges or learning area tasks							
<b>Through planned learning activities, the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
2.1 Brainstorms for group construction of prior knowledge	I	I	I/R	I/R	I/R	R/C	R/C
2.2 Contributes to an online mind map of the topic	I	I	I	I/R	I/R	R	C
2.3 Takes into account the audience	-	I	I	I/R	I/R	R	R/C
2.4 Uses subject specific terminology	I	I	I/R	I/R	R	R/C	C
2.5 Organises information and ideas into a logical structure using web and text formats	-	I	I	I	I/R	R	R/C
2.6 Connects ideas logically and creatively	-	I	I	I/R	I/R	R/C	R/C
2.7 Engages in reflective thinking to clarify a problem or develop an idea	-	-	I	I	I/R	R	R/C
2.8 Debates an issue presenting several points of view	-	-	I	I	I/R	R	R/C
2.9 Begins to predict possible outcomes	I	I	I	I/R	I/R	R/C	R/C
2.10 Uses appropriate text type and presentation format for presentation	-	-	I	I	I/R	R	R/C
2.11 Recognises, uses and prepares different forms of presentation	-	I	I	I/R	I/R	R	R/C
2.12 Uses Web 2.0 technologies and apps to interact with and create information	-	I	I	I/R	I/R	R	R



	Early Stage 1	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
<b>Through planned learning activities, the student:</b>							
2.13 Can create an animation to convey a concept or idea	-	-	I	I	I	I/R	R
2.14 Demonstrates complex, critical and creative higher order thinking in interrogating online sources	-	-	-	I	I	R	R/C
2.15 Keeps a well-organised record of good work within an e-portfolio as part of creating a positive digital footprint	-	I	I	I	I	R	R
2.16 Presents the information using appropriate organizational frameworks and digital tools:							
i. Written and word processed reports, recounts, procedures and lists		I	I	I	R	R/C	C
ii. Oral reports, descriptions and comparison supported by relevant graphic and pictorial information, sourced online and from print resources		I	I	I	I/R	R	C
iii. Digital charts, diagrams and online posters		-	-	I	I	R	R
iv. Online publishing and using Publisher		I	I	I	I/R	R	C
v. Drawings, illustrations, maps		I	-	I	I	R	R
vi. Multimedia presentations, adding video and sound, e.g. podcasts, vodcasts, Windows MovieMaker, Photostory, iMovie	-	-	I	I	I/R	I/R	R/C
vii. Flow charts, timelines, tables		-	-	I	I	I/R	R/C
viii. Webpages		I	I	I	I/R	R/C	C
ix. Wikis and blogs		-	I	I	I	I/R	R/C
x. Online presentation tools		-	I	I	I/R	R/C	C

<b>3. Communicate with ICT:</b> using ICT to communicate ideas and information with others adhering to social protocols appropriate to the communicative context (purpose, audience and technology)							
<b>Through planned learning activities, the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
3.1 Participates with peers to contribute to group online learning	-	-	I	I	I/R	R	R/C
3.2 Understands the use of a phone in mobile learning	-	I	I	I	I	R	C
3.3 Sequences ideas in order to communicate effectively	I	I	I/R	R	R/C	C	C
3.4 Evaluates the best information and tools to communicate ideas	-	-	I	I/R	R	R/C	C
3.5 Develops clear e-scaffolds for organising information and notes	-	-	-	I	I	I/R	R/C
3.6 Selects appropriate graphics to communicate meaning visually in presentations	I	I	I/R	R	R/C	C	C
3.7 Designs multimedia presentations using various forms of presentation software such as PowerPoint, Prezi and/or Voicethread to communicate ideas	-	-	I	I/R	I/R	R/C	R/C
3.8 Is able to produce instructional material for the school community	-	-	-	I	I	R	R
3.9 Contributes to a database of meaningful student questions and answers	-	I	I	R	R	C	C
3.10 Engages in online global collaboration projects	-	-	I	I	I	I/R	R

<b>Through planned learning activities, the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
3.11 Uses Skype and other forms of communication technologies to hold a dialogue with students and experts from other countries	-	-	-	I	I	R	R/C
3.12 Understands the use of online communication mechanisms such as podcasts, film clips and video conferencing	-	-	-	I	I	R	R
3.13 Uses recording devices and software to record oral presentations and publish podcasts using tools such as Audacity	-	-	-	I	I	R	R
3.14 Is able to contribute to a blog, wiki or ning and add links, a discussion, comments and images	-	-	I	I	I	I/R	R/C

<p><b>4. Operate ICT:</b> applying technical knowledge and skills to use ICT efficiently and to manage data and information when and as needed</p>							
<p><b>Through planned learning activities, the student:</b></p>	<p><b>Early Stage 1</b></p>	<p><b>Stage 1</b></p>	<p><b>Stage 2</b></p>	<p><b>Stage 3</b></p>	<p><b>Stage 4</b></p>	<p><b>Stage 5</b></p>	<p><b>Stage 6</b></p>
<p>4.1 Understands and uses basic computer terminology</p>	<p>I</p>	<p>I</p>	<p>R</p>	<p>R/C</p>	<p>R/C</p>	<p>C</p>	<p>C</p>
<p>4.2 Understands the use of computers, iPads and apps for learning</p>	<p>I</p>	<p>I</p>	<p>I/R</p>	<p>R</p>	<p>R/C</p>	<p>C</p>	<p>C</p>
<p>4.3 Understands the process of planning, storing and retrieving information online</p>	<p>-</p>	<p>-</p>	<p>I</p>	<p>I/R</p>	<p>R</p>	<p>C</p>	<p>C</p>
<p>4.4 Develops basic <b>computer skills:</b></p> <ul style="list-style-type: none"> <li>i. Understands and uses keyboard features – space bar, Enter/Return, caps lock</li> <li>ii. Reads and uses text , icon and dropdown software menus</li> <li>iii. Uses word-processing software – to create, edit, save, delete, move, print documents</li> <li>iv. Minimises/maximises open documents/programs</li> <li>v. Enters, highlights and edits text - font, size, alignment, spacing</li> </ul>	<p>I I I I I</p>	<p>I I I I I</p>	<p>I/R</p>	<p>R</p>	<p>R/C</p>	<p>C</p>	<p>C</p>
<p>4.5 Further extends the use of word processing by:</p> <ul style="list-style-type: none"> <li>• Copying, cutting and pasting text</li> <li>• Using tables and columns and bullet points</li> <li>• Changing page orientation – Portrait/Landscape</li> <li>• Manipulating and resizing graphics</li> </ul>	<p>-</p>	<p>I</p>	<p>I</p>	<p>I/R</p>	<p>R/C</p>	<p>C</p>	<p>C</p>

<b>Through planned learning activities, the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
4.6 Develops basic skills in using the internet: <ul style="list-style-type: none"> <li>Identifies and uses links on a web page</li> <li>Uses Back/Forward navigation arrows in Browser</li> <li>Copies/pastes from web page to document</li> <li>Is aware of web page structure</li> </ul>	-	I	I	I/R	I/R	C	C
4.7 Uses social bookmarking tools such as Delicious or Diigo to bookmark and sort internet sites	-	-	-	-	-	I/R	R
4.8 Uses the library catalogue to locate resources and to record and share reading	-	-	I	I/R	I/R	R	R/C
4.9 Accesses and downloads ebooks onto digital readers	-	-	-	I	I/R	R/C	C
4.10 Uses digital video and audio files	-	-	-	I	I/R	R/C	C
4.11 Knows how to use a video camera and to download files	-	-	-	I	I	I/R	R/C
4.12 Uses and manipulates computer-generated images, digital art and photographs	-	I	I	I	I/R	R	C
4.13 Uses spread sheet software to organise information and create charts and graphs to communicate the data	-	-	-	I	I/R	R	R/C
4.14 Uses a database software to create a database	-	-	-	-	-	I	I/R
4.15 Knows how to create and share information using cloud-based document creation and storage tools	-	-	-	I	I	I/R	R
4.16 Uses Schoology features – enrolls in courses, saves documents, uses Dropbox functions	-	-	-	I	I/R	R/C	C
4.17 Uses survey tools to collect data	-	-	-	-	-	I	I/R

	Early Stage 1	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
<b>Through planned learning activities, the student:</b>							
4.18 Uses data collection technology, e.g. data loggers, mapping systems, to gather and view data, examine patterns, analyse possible solutions and report on results and conclusions	-	-	-	-	-	I	I/R
4.19 Understands troubleshooting of basic operations of a computer such as internet connectivity, printing and software	-	I	I	R	I/R	R	R/C
4.20 Uses a virtual world, e.g, Second Life, to explore ideas	-	-	-	-	-	-	I
4.21 Develops skills in using presentation software by:							
i. Opening presentation software		I	I	I			
ii. Saving presentation software		I	I	I			
iii. Using a blank presentation or Design template		I	I	I			
iv. Inserting shapes, graphics and animations		I	I	I			
v. Manipulating and resizing graphics		I	I	I			
vi. Using WordArt or web-based fonts for headings	-	I	I	I	I/R	R/C	C
vii. Using colour in backgrounds, fonts and shapes		I	I	I			
viii. Using slide transition and custom animation features		-	-	I			
ix. Using textboxes and manipulating the font		I	I	I			
x. Saving graphics from the web to the presentation		-	-	I			
xi. Viewing the presentation		I	I	I			
xii. Linking slides in a PPT kiosk		-	-	-			
xiii. Using dynamic web-based presentation tools		-	-	I			

A. Apply ethical protocols							
	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
<b>Through analysis of outcomes-based criteria the student:</b>							
A.1 Understands the ethical use of social media, observes netiquette protocols when using digital media and respects the rights and opinions of others	-	-	-	I	I/R	R	R/C
A.2 Understands and complies with acceptable use policies for using digital media	I	I	I	I/R	I/R	R	R/C
A.3 Uses an ethical approach when making notes electronically by acknowledging sources	-	-	I	I/R	I/R	R/C	R/C
A.4 Employs in-text referencing, footnotes and endnotes correctly to acknowledge the intellectual property of others	-	-	-	-	-	I	R/C
A.5 Understands the basic idea of intellectual property, the issue of plagiarism and the need to comply with copyright conventions	-	-	I	I/R	I/R	R	R/C
A.6 Uses Turnitin as a training tool to refine skills in academic honesty	-	-	-	-	-	I	I/R
A.7 Understands and employs strategies to deal with cyber-bullying – reporting to a trusted adult, blocking the sender, not responding, retaining the evidence	-	-	I	I	I	I/R	R
A.8 Manages Privacy settings on websites requiring personal information	-	-	I	I	I	I/R	R/C
A.9 Knows how to set a strong password and change it	-	-	I	I/R	I/R	R	C
A.10. Knows when to withhold full name, home address, email, phone number/s, banking information	-	-	I	I	I	I/R	R/C

<b>Through analysis of outcomes-based criteria the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
A.11 Understands critical evaluation of emails, sites and programs which may cause harm to a computer	-	-	-	I	I	I/R	R/C
A.12 Critically evaluates the credibility and authenticity of online information by checking the date, the authenticity and credibility of the site	-	-	-	I	I/R	R	R/C
A.13 Understands the benefits of creative commons and knows how to find and use CC images and music in presentations	-	-	-	I	I	I/R	R



R. Reflection							
<b>Through analysis of outcomes-based criteria the student:</b>	<b>Early Stage 1</b>	<b>Stage 1</b>	<b>Stage 2</b>	<b>Stage 3</b>	<b>Stage 4</b>	<b>Stage 5</b>	<b>Stage 6</b>
R.1 Reflects on the purpose of the task	-	-	I	I	I	R	R/C
R.2 Decides whether the product meets the learning outcomes	-	-	-	I	I	R	R/C
R.3 Develops metacognition skills and the ability to communicate about his/her learning	-	I	I	I	I/R	R	R/C
R.4 Evaluates how well s/he worked through the research process and what additional information and skills are needed for improvement	-	-	-	-	I	R	R/C
R.5 Notices a growth in understanding or knowledge	I	I	I	I/R	I/R	R	R/C
R.6 Responds to assessment by teachers and peers	-	I	I	I/R	I/R	R	R/C
R.7 Uses evaluative strategies, e.g. reflective journals	-	-	I	I	I	I/R	R
R.8 Uses reflective evaluation to set further goals	-	-	-	I	I	I/R	R
R.9 Self-evaluates role of ICT in the learning process	-	-	-	I	I	I/R	R
R.10 Uses a Personal Learning Environment as a metacognitive mechanism for improving learning	-	-	-	-	-	I	I/R

## **BIBLIOGRAPHY - USEFUL LINKS**

Batho, M. (2008). Scotland's skills strategy: Improving graduate skills. *LINK 21*. The Higher Education Academy. Retrieved August 21, 2012 from [http://www.heacademy.ac.uk/assets/hlst/documents/LINK\\_Newsletter/link21\\_scottish\\_enhancement\\_themes.pdf](http://www.heacademy.ac.uk/assets/hlst/documents/LINK_Newsletter/link21_scottish_enhancement_themes.pdf)

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P21. (2011). *Framework for 21<sup>st</sup> century learning: Overview*. Retrieved July 20, 2012 from <http://www.p21.org/overview/skills-framework>

P21. (2011). *ICT Literacy maps*. Retrieved July 20, 2012 from <http://www.p21.org/overview/skills-framework/31> This link has useful links to subject-related ICT maps with ideas for different grades – recommended.