

# Information Literacy learning outcomes matrix

Wageningen University & Research – Library  
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## **Introduction**

Wageningen UR Library provides a great deal of education in Information Literacy. From that perspective, we described the intended learning outcomes of Information Literacy (IL) for students at Wageningen University in this document. The learning outcomes provide a basis for a dialogue with teachers about the IL learning trajectory.

The learning outcomes are grouped in six competency areas, adapted from the SCONUL Seven Pillars of Information Literacy (SCONUL, 2011):

1. Orientation: The information literate student is able to identify an information need, and knows where and how to gather information for orientation on a topic.
2. Prepare: The information literate student is able to formulate a focused research question, and a strategy to prepare a systematic search.
3. Search: The information literate student can construct a systematic search for various databases and platforms, and knows how to use relevant articles to find additional information.
4. Evaluate: The information literate student can evaluate the search results, revise the search if necessary, and knows when to stop searching.
5. Manage: The information literate student can store and organise information systematically and transparent, and knows how to keep track of the search process and how to stay up-to-date.
6. Communicate: The information literate student is able to cite and reference correctly, avoiding plagiarism and copyright problems. Knows how the publication process works.

Each competency area has 2-3 topics with learning outcomes. Learning outcomes are divided into four levels (A, B, C and D). If there is no higher level provided the learning outcome is at the same level as the previous one.

A student can develop within several competency areas simultaneously and independently, although in practice they are often closely linked. The learning outcomes matrix can be used to discuss which learning outcomes should be mastered at the end of a course or at the end of the bachelor, and to choose suitable learning and assessment activities.

The Library is developing generic and programme-specific learning and assessment activities linked to the learning outcomes.

## **Reference**

SCONUL, 2011. The SCONUL Seven Pillars of Information Literacy: Core Model for Higher Education. London. Available at: <http://www.sconul.ac.uk/sites/default/files/documents/coremodel.pdf> [Retrieved: 16 January 2017]

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Stage	Topic	Level A	Level B	Level C	Level D
		The information literate student:	The information literate student:	The information literate student:	The information literate student:
Orientate	Information need	Recognizes a need for information.	Identifies and documents the information need for a <b>defined task</b> .	Identifies and documents the information need for a <b>scientific project</b> .	Identifies and documents the information need for a <b>systematic review</b> .
	Information sources	Recognizes and describes characteristics of information sources.	Identifies appropriate information sources for a <b>defined task</b> .	Identifies appropriate information sources for a <b>scientific project</b> .	Identifies appropriate information sources for a <b>systematic review</b> .
	Finding aids	Names the finding aids Google, Google Scholar, Scopus, Global Search and describes their pros and cons.	Names available finding aids, such as <b>general and subject specific databases</b> .	Compares the usefulness of different finding aids <b>in the discipline</b> .	Names all relevant finding aids for a <b>systematic review</b> .
Prepare	Research question	Formulates the topic clearly and identifies the main themes (concepts).	Formulates a research question and identifies for each concept <b>correct search terms</b> .	Formulates a <b>well-focused</b> research question and identifies for each concept correct search terms.	Formulates a well-focused research question and identifies for each concept correct search terms. Defines <b>inclusion and exclusion criteria</b> .
	Information sources	Recognizes the type of information source from a reference.	Selects appropriate information sources for a <b>defined task</b> .	Selects appropriate types of information sources for a <b>scientific project</b> .	Selects appropriate types of information sources for a <b>systematic review</b> .
	Finding aids	Describes how to access library sources and full texts.	Selects a <b>few</b> appropriate (general and subject specific) finding aids.	Selects and substantiates <b>several</b> appropriate (general and subject specific) finding aids.	Selects and substantiates <b>most</b> relevant (general and subject specific) finding aids.
Search	Topic search	Performs basic searches using Boolean operators, field searching, phrase searching and wildcards.	Constructs a search query in a systematic way with <b>key concepts and search terms</b> using Boolean operators, field searching, phrase searching and wildcards. Performs this search correctly in various databases and platforms.	Constructs a search query in a systematic way with key concepts and search terms using Boolean operators, field searching, phrase searching and wildcards and if appropriate <b>proximity operators or a thesaurus</b> . Performs this search correctly in various databases and platforms.	Level C
	Following a thread	Uses reference lists to find additional information sources.	Uses reference lists, <b>cited by and related documents</b> to find additional information sources.	Level B	Level B
Evaluate	Search results	Evaluates the search results critically.	Relates the search results to the original research question and <b>revises</b> the search if necessary.	Relates the search results to the original research question and revises the search if necessary. Estimates <b>precision and recall</b> to determine when to stop searching.	Relates the search results to the original research question and predefined <b>inclusion and exclusion criteria</b> . Revises the search if necessary. Estimates precision and recall to determine when to stop searching.
	Information sources	Evaluates information sources using various criteria (e.g. suitability, authority, purpose, currency, and accuracy) and selects the most appropriate ones.	Level A	Evaluates information sources using various criteria (e.g. suitability, authority, purpose, currency, and accuracy). Uses <b>citation metrics</b> as an evaluative technique. Selects the most appropriate sources.	Evaluates and selects information sources systematically using predefined <b>inclusion and exclusion criteria</b> .
Manage	Information sources	Stores and organizes information sources systematically using basic techniques.	Stores and organizes information sources systematically using <b>citation management software</b> such as EndNote or Mendeley.	Stores and organizes information sources systematically using citation management software. Develops and uses a transparent <b>system for managing data and files</b> .	Level C
	Search strategies	Keeps track of the search process to be able to repeat and improve the search.	Keeps track of the search process, <b>including search queries</b> , to be able to repeat and improve the search.	Keeps track of the search process, including search queries, to be able to repeat and improve the search. Knows how to <b>save searches</b> and to <b>set up alerts</b> in various search systems.	Level C
Communicate	Citing and referencing	Indicates when and where to cite a source and identifies which publication details are required in a reference list.	Cites and refers to information sources using a self-chosen or required <b>citation style</b> .	Cites and refers to information sources in a self-chosen or required citation style using <b>citation management software</b> .	Level C
	Plagiarism and copyright	Avoids plagiarism by citing correctly (e.g. quoting, paraphrasing, summarizing).	Avoids plagiarism by citing correctly (e.g. quoting, paraphrasing, summarizing). Explains the difference between <b>plagiarism and copyright</b> .	<b>Acquires, stores, modifies, and distributes text, data, images, and sounds, legally</b> .	Level C
	Publishing	Describes in which information sources people publish for a specific purpose.	Describes the process of <b>academic publishing</b> .	Level B	Selects the <b>most appropriate journal</b> to publish using tools like citation metrics. Uses <b>scholarly social media</b> such as ResearchGate, Academia and LinkedIn to present oneself.