

Search: Traditional Search, AI Search, and Knowing Which to Use

60 minutes

ICT Specialism 4: The internet and digital literacy

Outcome M4.U2.1

Outcome M4.U2.2

WHAT THIS LESSON DOES

Learn to combine traditional search operators with AI tools for effective research. Practise using site:, filetype:, quotes and exclude operators. Write AI prompts, verify cited sources and create a personal search cheatsheet for your investigation topic.

CURRICULUM OUTCOMES

Outcome	What the specification asks for
M4.U2.1	Search the internet to gather information on a specific topic of interest and accurately reference the material.
M4.U2.2	Compare information from various sources in order to evaluate its reliability, validity, accuracy and authority.

WHAT STUDENTS SHOULD BE ABLE TO DO

- Use five traditional search controls: site:, filetype:, quotes, exclude (-), and the Tools date filter
- Write effective AI search prompts and always verify cited sources
- Build a Search Cheatsheet covering five operators and three verified AI prompts

BEFORE THE BELL

- Review students' investigation topics from the proposals written at the start of this module.
- Write the single approved AI tool name and URL on the board.
- Confirm Project_Portfolio/09_specialism/sm4/ exists, and decide whether Word Online or Google Docs is the class default.
- Confirm school network allows Google, DuckDuckGo, and one approved AI search tool; write that tool name and URL on the board; confirm each student has an investigation topic or a temporary fallback
- Write the approved AI tool name and URL on the board; prepare one non-VAT sample row to model on the board before IP
- Project the three sample queries on the board; keep the approved AI tool URL visible
- Confirm Project_Portfolio/09_specialism/sm4/ exists for each student; state whether Word Online or Google Docs is the class default; show the folder path once on screen

Search: Traditional Search, AI Search, and Knowing Which to Use

HOW THE LESSON RUNS

5 min	introduction	Introduction
8 min	content	Key concepts
18 min	activity	Step-by-step task
3 min	content	Common issues
18 min	activity	Independent practice
4 min	content	Reflection
4 min	summary	Lesson summary

TEACHING MOVES

- Demo each of the three live operators, then wait for the class to mirror before the next.
- Circulate during the single AI verification to confirm students open cited sources.
- Model one operator row and one AI verify row on a non-VAT topic during Key concepts, before students start building their own tables.
- Offer the matching worksheet as support or exit ticket during independent practice.
- Run a short pair share during reflection: one operator win, one honest fail.

WHAT TO WATCH FOR

- Students enter operators in the address bar instead of the search box.
- Incorrect spacing around site: (space before, none after the colon).
- Copy-pasting a Unicode minus instead of a normal hyphen for exclude.

DIFFERENTIATION

- Support: matching worksheet and pre-written sample strings to adapt.
- Support: temporary topics (Work Experience rights, apprenticeship entry, local club funding).
- Extension: intitle: or the DuckDuckGo comparison in the summary challenge, since exclude and the date filter are already covered by the cheatsheet rows.