

Using online independent study projects effectively

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What's the idea?

Whilst face-to-face teaching has not been possible, schools have taken many different approaches to providing remote learning for pupils – from synchronous or asynchronous lessons, to project-based approaches. One particular approach is the use of independent study projects – typically making use of the internet for research. This kind of project usually requires searching online for information, evaluating and selecting the information that is most useful and reliable, analysing and synthesising it, and presenting it in the required or chosen format (e.g. document, presentation, mindmap). Students can be provided with a list of specific sources of online information, be asked to locate the information themselves or a combination of the two.

What does the research say?

Independent study projects can be effective if well-designed and supported – but learner guidance is critically important, particularly in relation to increasing the quality of the activity outcomes (Lazonder & Harmsen, 2016). Pupils can find it difficult to locate information online efficiently and effectively; that is, they struggle with how to formulate searches, how to scan resources, and how to evaluate resources. They need clear and detailed instructions on how to do this when faced with this kind of activity for the first time (van Deursen & van Diepen, 2013).

There is very little research on the use of these approaches with younger children and struggling readers. Unsurprisingly, reading comprehension is an important predictor of learning gain in such activities (Segers, Droop & Verhoeven, 2010).

How does this work in practice?

Critically, an online study project approach will only work if you know your pupils have

access to a device and the internet. Assuming that this is the case, you will usually need to start by preparing the students to work in this way focusing on information literacy skills and metacognitive skills (there are useful links in the further reading below). If students will be expected to locate some or all of the information themselves, they may require more detailed guidance on how to approach this. In particular, students can find it difficult to formulate queries in search engines. Students may also benefit from guidance on how to scan text documents and how to evaluate information. Obviously, younger learners will need more guidance and support than older ones. You could present such guidance in a document but could also use other media such as audio or video.

Giving students a chance to discuss the guidance and ask questions may be useful, as may creating opportunities to practice information literacy skills prior to starting the project. Students may also need additional guidance on a range of other beneficial skills such as time-management, formulating questions, how to present the project outcomes etc.

There are various ways in which online research can be set up, either for individuals or for small groups of students. If you want students to be able to use a search engine then you might want to consider tools that have been specifically designed for young people to use. For example, Swiggle has been designed for Key Stage 2 students.

Projects can be organised in different ways. A scavenger hunt asks students to find a set of items and/or accomplish a set of small tasks; finding images and gathering factual information works well in this kind of activity. More substantial research projects are also possible – pupils will need to be provided with an outline of what is required and expected outcomes, and possibly even pre-selected resources. Pupils can be asked to engage in virtual tours or field trips of galleries, museums, landmarks and places for example – many museums and galleries also have

useful resources (including ideas for projects) that can be adapted for online research projects (e.g. Natural History Museum, Science Museum, Imperial War Museum, The Tate).

Various tools exist to support online research and independent study projects. Social bookmarking tools or curating tools (e.g. Diigo, Wakelet, Evernote, Onenote) can be used to collate and organise online sources as well as notes and ideas. Mindmapping tools (e.g. Popplet, Mindmeister) can be used to help organise ideas arising from online research projects. Some tools (e.g. Wakelet, Onenote) have been integrated with Immersive Reader which improves readability by converting text to speech.

Top tips

- Take pupils through a short, exemplar research project, highlighting the research skills (eg information literacy, time management etc) and sources used.
- Provide guidance on how to plan the project, how to develop a research question, and how to structure the report (including how to record the sources of information the students choose to use). Students will find templates useful, particularly if they have little prior experience of working in this way.
- Ensure that the desired outcomes and assessment criteria are shared (or co-constructed) with students prior to starting the activity.
- If you are specifying some links for students to base their research on, include a range of media types if possible.
- Provide clear guidance on how students can get support with their project work once it is underway (e.g. a whole class discussion forum, progress meetings with students).
- Keep the timeline relatively short (e.g. 4-6 weeks) to make it more manageable and keep the students motivated.

WANT TO KNOW MORE?

- Lazonder AW & Harmsen R (2016) Meta-Analysis of Inquiry-Based Learning: Effects of Guidance. *Review of Educational Research* 86(3): 681–718.
- CILIP/ILG (undated) "Research Smarter" resource sheets. <https://infolit.org.uk/information-literacy-group/school-resource-sheets/>.
- Quigley A, Muijs D & Stringer E (2018) Metacognition and self-regulated learning: Guidance report. London: Education Endowment Foundation. <https://educationendowmentfoundation.org.uk/tools/guidance-reports/metacognition-and-self-regulated-learning/>.
- Segers E, Droop M & Verhoeven L (2010) Integrating a WebQuest in the Primary School Curriculum Using Anchored Instruction: Effect on Learning Outcomes. *CORELL: Computer Resources for Language Learning* 3: 65–74.
- van Deursen AJAM & van Diepen S (2013) Information and strategic Internet skills of secondary students: A performance test. *Computers and Education* 63: 218–226.