True Federated Search

Helping school librarians rise to the information literacy challenge This article outlines the advantages of Oliver v5's Federated Search over other means of retrieving information from the Web, such as searching via public search engines (e.g. Google) and the query string search methods commonly used to search multiple sources. It explores how true federated search can help school library staff respond to the challenge of developing student information literacy in the Google age.



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Why Federated Search?

Ask any young person where they go to find information for assignments and they're likely to mention Google. In fact, research has shown that for around 95% of students, the search engine is the main or only source they turn to when conducting research (Purcell et al. 2012; Byrne 2012).

Given the ease and popularity of Google searching, promoting good research skills and information literacy is a major challenge for school library professionals. A library system which provides simple but sophisticated search methods is integral to overcoming this.

Return on investment from subscription based resources is also a major consideration for school libraries. Today's libraries subscribe to many popular student resources, including ClickView for video, electronic resources, online journals, encyclopedias and more. While the research value is obvious, promoting widespread use can be difficult without a single, advanced method of searching which retrieves relevant, aggregated results.

Oliver v5's Federated Search makes it **easy for students to access relevant, reliable resources** and provides school libraries with a simple, yet sophisticated channel to deliver them.



"Federated Search is a very beneficial tool for our students. It is easy to use and students enjoy using Oliver and the Federated Search functionality for research, as it gives them all the information they need with accurate results, without having to sift through lots of information sources unnecessarily."

> Beren-Dain Delbrooke-Jones, Librarian, Cheltenham College, UK

Oliver v5 Federated Search is easy and intuitive for students of all ages, with search outcomes far superior to other search methods.

School library resources are instantly more discoverable and accessible using Federated Search.

This makes it the ideal tool for supporting knowledge management and information literacy development in schools in the digital age.



Excerpts from NSW DoE publication SCAN provide feedback from NSW DoE Teacher Librarians on their use of Oliver v5's Federated Search:

"The integrated features of Federated searching in Oliver, provided an increase in the breadth of resources students were able to access." (Scan Journal. 2016 Volume 35. Issue 2.)

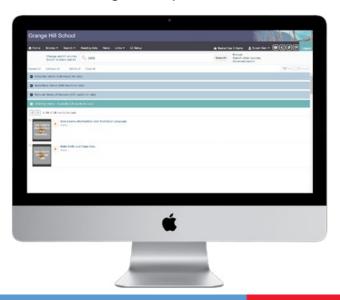
"Using a federated search (as opposed to a basic search) brought up results from our library, the Henry Parkes Library, Google and our World Book Online subscription results. ... I can see I will be encouraging students and teachers to do all their information searches through the OPAC. It's very cool.' (Scan Journal 2015. Volume 34, Issue 3.)

What is the difference between query string searching and Federated Search?

The key difference to Oliver v5's Federated Search is the **deep digital integration (API)** between the library management system and the schools resource databases **rather than just using query string searching**.

Query string searching (which you may have heard of), is a standard search function which inserts keywords into a web sites address (URL) to retrieve results from external sources. While it's possible to search multiple sources simultaneously by combining several query string searches together, there are a number of limitations to the approach. At a high level **these limitations include**:

- The method requires opening each target web site in a new browser window or tab
- Security is limited, with authentication passwords often showing up in the URL
- Predominantly limited to web sites and public search catalogues (authenticated resources require custom programming)
- Users can't effectively compare the results, they resort to sifting through each web site
- Simple changes to the target web site can break the search which means you have to constantly monitor this
- End users require technical knowledge to set up sources





How does Oliver v5's Federated Search work?

Oliver v5's Federated Search uses deep digital integration with over 1700 educational resource providers to search multiple resources from a single query. Simply speaking, Oliver v5 connects directly with your external resource providers and aggregates the results into a single, easily controlled page of relevant, real-time resources. And presenting your results within your library management system means that users aren't led away from your library's online catalogue and hub.

The true value, or core differences to this federated search method can be summarised as:

- **Results aggregation:** results are presented on a single screen/page which users can easily refine to compare and fine-tune results
- **Librarian support:** connecting your valuable subscription resources is easy for any staff member to do and it removes the effort and expense of indexing, or monitoring external websites for changes
- **Security:** it provides secure access to your paid resources and the ability to control the number of results returned
- Ranking: it automatically ranks based on the resource suppliers' (e.g. EBSCO) quality ranking methods
- Search quality: it is not limited to website and public search catalogues; API connectors are available for over 1700 educational resources including ClickView videos, which can be played directly from the Oliver v5 search results screen
- Comprehensiveness: your multi-source searching can also include any number of free resources including configurable Z39.50 sources.

"I have been setting up our federated search. Wow! I love it! I have been procrastinating with this setup, because it looked complicated. I was surprised how easy it was and that it worked so well!

With Federated Search, integrating several resources, it is such a rich search result. Students can see the library books – and, importantly, our eBooks – plus all our other resources."

Linda Twitchett, Head of Libraries & Upper Secondary Teacher-Librarian, Australian International School, Singapore

A perfectly integrated, true federated search engine with access to over 1700 popular research dtabases for Oliver v5 users

See a full list of Oliver v5 Federated Search supported databases **here**.



ClickView

- JSTOR
- EBSCOhost databases
- Gale Cengage databases
- ProQuest Research databases
- Infobase Facts on File databases
- Google
- PubMed
- LinksPlus
- YouTube
- Wikipedia
- World Book Online
- Britannica Online
- Local library (your local v5 system)
- Other v5 libraries
- Configurable Z39.50 sources

Flexibility and additional value

Query string searching has long been a standard function in Oliver v5 and remains freely available.

Oliver v5's Federated Search produces an even more comprehensive, integrated search result that is intuitive for users of all ages.

With the ability to:

- Combine query string (Search Other Sources) searching and Federated Search, leaving no stone unturned!
- **Embed the search into other systems**, for example a school website or learning system.
- Help younger students develop research skills from a very early age, using Oliver v5's junior search interface, Orbit. Orbit offers an adapted Federated Search tool named Super Search which is easier for younger users to understand and use.

"The Federated Search has been very effective in further encouraging consultation of a wider range of resources - books, online encyclopedia, databases and in particular, ClickView. Our Audio Visual Department holds an extensive video collection – notably a steadily growing ClickView resource, (currently 6,500 programs)."

Maria Pepe-Micholos, Teacher Librarian, St Michael's College, Australia





Supporting and facilitating the school librarian's role

With their specialist knowledge and training, librarians and teacher-librarians are uniquely qualified to teach information literacy, which the Australian School Library Association and Australian Library and Information Association (2009) define as "the ability to find, analyse, evaluate and ethically use information for a given purpose in a variety of formats" (Hughes 2014, 29).

To do this effectively, they need powerful information retrieval tools that enable students to discover resources in the library and beyond, with exceptional ease, speed, depth and accuracy compared to surface-level web searching.

"With Federated Search we have seen an improvement in the development of students' research skills. Federated Search defers students from using the search engines; instead they use relevant, curated information sources, helping them identify the difference between good and irrelevant or misleading information."

Beren-Dain Delbrooke-Jones, Librarian, Cheltenham College, Gloucestershire, England.

Softlink's Federated Search supports school library professionals in their complex, multi-faceted role. It enables fast access to the full range of resources available via the school library, including in-house and subscription databases, specialised search engines and directories, library catalogues and reference libraries, as well as websites and public catalogues. It helps students develop good referencing habits and saves time and money by offering comprehensive search results without the expense and effort of indexing searchable content.

For more information about Softlink's Federated Search, please contact sales@softlinkint.com

References

Hughes, Hilary. 2014. "School Libraries, Teacher-Librarians and Student Outcomes: Presenting and Using the Evidence." School Libraries Worldwide 20 (1):29-50. https://doi.org/10.14265.20.1.004.

Purcell, Kristen, Lee Rainie, Alan Heaps, Judy Buchanan, Linda Friedrich, Amanda Jacklin, Clara Chen, and Kathryn Zickuhr. 2012. "How Teens Do Research in the Digital World." Pew Internet & American Life Project, annurev-publhealth-032013-182440.

