

Marshall University Marshall Digital Scholar

Libraries Faculty Research

Libraries

Spring 3-29-2017

Credo Online Reference Service

Larry Sheret

Marshall University, sheret@marshall.edu

Follow this and additional works at: http://mds.marshall.edu/lib_faculty

 Part of the [Education Commons](#), [Information Literacy Commons](#), and the [Scholarly Publishing Commons](#)

Recommended Citation

Larry Sheret. "Credo Online Reference Service," *The Charleston Advisor* 19, no. 1 (2017): 14-18.

This Article is brought to you for free and open access by the Libraries at Marshall Digital Scholar. It has been accepted for inclusion in Libraries Faculty Research by an authorized administrator of Marshall Digital Scholar. For more information, please contact zhangj@marshall.edu, martj@marshall.edu.



ADVISOR REVIEWS—STANDARD REVIEW

Credo Online Reference Service

doi:10.5260/chara.19.1.14

Date of Review: March 29, 2017

Composite Score: ★★★★★ 3/8

Reviewed by: **Larry Sheret**
Marshall University, Huntington, West Virginia

<sheret@marshall.edu>

Abstract

Credo Online Reference Service, popularly known as Credo Reference, is an e-reference database for K-12, public libraries, and academic libraries. The user-friendly interface provides an excellent place for students to begin their research, or to learn about the process of doing research during information literacy instruction. Instructors are provided with pre-proxied permalinks and embed codes that allow them to integrate any part of this resource into their learning management system.

Pricing Options

Subscribers may choose among three core collections that consist of 400 to 900 e-reference dictionaries, atlases and subject encyclopedias suited to the needs of K-12, public and academic libraries, or all three in the Complete Core. Credo offers flexible contracts ranging from small libraries to large consortia and state-wide contracts, and would consider nation-wide contracts.

The following compares prices for small institutions around 1,000 FTE to larger institutions with 20,000 FTE. All prices mentioned are general estimates; Credo is happy to work with any institution to determine a price based on bespoke criteria such as FTE, consortia membership, and more.

CREDO ONLINE REFERENCE SERVICE

The price structure is the same for the academic, public, and student cores. Each subscription includes the Core Content Package, Topic Pages, Mind Map, etc.).

Student, Public, or Academic Core

\$4,500 (1,000 FTE) - \$10,000+ (20,000 FTE)/year

Complete Core

Contact Credo.

Add-Ons

Essentials Collections (a selection of up to 300 discipline based add-on e-reference books): Subscription price range depends on the subject area and FTE; \$1,000 - \$4,500 each/year

Issue Briefs (covering current controversial topics): \$750 - \$1,750/year

One Time Purchase Titles: Title prices generally follow the industry standard but Credo is happy to provide pricing, help with creating custom collections, or print-to-electronic reviews for individual institutions. This add-on content is available for purchase on GOBI or directly from Credo.

Product Overview/Description

Credo Reference is an American company based in Boston, MA, but it was founded in the UK in 1999 under the name Xrefer. The database began with about three dozen reference books searchable online for free. Two years later, Xrefer had grown to 50 reference titles containing over 500,000 entries. In 2002, Xreferplus began as the company's first subscription based service with 100 titles and a customizable interface. The corporation's name was changed to Credo Reference in June 2007. By 2010, Credo General Reference database had a core offering of 100 titles and Credo General Reference Premium had grown to over 500 titles from more than 70 highly respected publishers.

In 2009, the University of Washington published the results of an information literacy study that stated, "Finding contexts for 'backgrounding' topics and for figuring out how to traverse complex information landscapes may be the most difficult part of the research process." In response to this study, Credo developed 10,000 Topic Pages that put information into a context. Topic Pages provide a definition, short overview, article entries from subject encyclopedias, images, guidance on where to find more in-depth research, a list of related topics, and a Mind Map if one is available for a particular search. New reference e-books or updated editions are added almost weekly at no extra charge.

Credo expanded the number of user options available on the search page such as social networking and share tools (Twitter, Facebook, etc., and links to information management tools such as Zotero, End-Note, etc.), saved results page, a concept based Mind Map with hot links that connect directly to the Credo Reference database and topic pages, and proper citation formatting for every item in the database. The entire site operated in XML, so it was highly interoperable and automatically displayed well on any desktop or mobile device. Multimedia content was streamed to end users' computers and mobile devices. API connected the Topic Pages and search results pages to a selected list of a library's databases to enable federated searching.

New reference e-books or updated editions are added almost weekly, so the following numbers are only a snapshot of the current offerings.

Academic Core has 681 books, 1,102 videos, 2,230,290 entries, and 467,798 images. Academic Core is a curated collection to keep it current and to add material where gaps in content are found. A version of Academic Core that is not curated by Credo, Academic Core with Backfile, is available for the same cost. (Libraries may remove specific books from any collection.) This has 820 books, 1,102 videos, 3,451,073 entries, and 479,915 images.

Public Core has 860 books, 3,080,934 entries, 1,918 videos, and 491,038 images.

Student Core has 403 books, 1,869,307 entries, 1,338 videos, and 151,545 images.

Complete Core, which includes all the content from all Core Collections, has 1,154 books, 3.9 million entries, and 900,000+ images, audio clips, and videos.

Individual Titles may be purchased and added to each core (<<http://corp.credoreference.com/collections/one-time-purchase-titles.html>>).

WHAT'S NEW IN CREDO ONLINE REFERENCE SERVICE?

Redesigned User Interface

The home page and the entire user interface was redesigned in the summer of 2016 with several new functions added.

Key Concepts

IBM Watson's AlchemyLanguage was used to identify key concepts throughout the e-reference collection in order to create a controlled language taxonomy for the database. As of fall 2016, every search result includes a list of key concepts to help users select the best entry. Each search result also suggests related search terms that may be entered into new searches to hone results.

Quick View

This displays about two paragraphs from the beginning of an article for quick perusal.

Permalinks

A link icon was added to the top of the results page in early 2016. Permalinks now offer another way for students to save their research. The permalinks are pre-proxied for instructors to provide easy access to content in an LMS or other venue. Whenever a permalink appears, it will include the proxy prefix when the URL is copied to Bb or another LMS. Users who are already logged into the proxy will get right into Credo. Off-campus users who are not logged into the proxy will be prompted to sign in.

Embed Codes

Near the end of 2016, embed codes were added to every item in the collection. After opening up a link on a hits page, at the top of the page is a row of icons that allow for various functions. One of these provides the embed code for that page or image. Faculty may paste these codes into their LMS.

Translation Tool

Translation is enabled into more than 100 languages by Google Translate.

Text Reader

A text reader icon has been added for the reading of text in English. The text reader is not available for articles translated into other languages.

Mind Map

Formerly based on key words, in 2015 Mind Map changed to key concepts. The result is that instead of being directed to a single article when pressing on a Mind Map node, with the identification of key concepts, users can now see all of the reference articles about the concept they choose in the Mind Map.

Add-Ons

These are additional resources that may be purchased and integrated with Credo Reference. They include the following:

Essentials Collections became available in January 2016 to provide additional reference books in any of 25 subject areas. A listing of subject areas is found at <<http://www.corp.credoreference.com/collections/essentials-collections.html>>.

Issue Briefs is a collection of articles covering controversial topics based on top searches within the Credo database. This add-on, produced by Law Street Media, became available in October 2016 with 450 articles. Three or four articles are added weekly. Briefs average 1,750 words in length and include videos, graphs, and images.

User Interface/Navigation/Searching

The driving principle in the redesign of the user interface was to provide functionality that best suited the place where first and second year college students and first time researchers find themselves. The home page is uncluttered and provides multiple entry points to access various filters and other functions. Users may choose Basic or Advanced search, and filter by Collection (only if the Complete Core, Essentials Collections, or Issue Briefs are available as well), Subject, Title, or a field search of Headings. They may also launch a search directly from the Mind Map, which displays connections between topics. Results may be further sorted by relevance, length, and date. The default mode is a basic relevancy search of the full-text. When multiple terms are entered, they are treated as a phrase, followed by the Boolean operator AND, and lastly by OR. This produces an enormous number of results, but the most relevant hits appear on the first screen. While search terms are being entered in the query window, predictive phrase searching suggests possible ways for students to narrow a topic. Filters are displayed on the original search page as well as on subsequent pages to enable students to hone searches at any point.

If a Topic Page is available, it displays at the top of the results page. The Topic Page includes a main article, definition, the Mind Map already preset to the search query, a list of related topics, images, videos, related articles, and a customizable list of databases from the subscribing library's own holdings. With almost no effort, students are presented with an excellent collection of information resources with which to begin their research. If a Topic Page is not available, students may access the same types of information found on a Topic Page by selecting various options presented on the results page.

Figure 1 shows a search on "global warming." A Topic Page displays at the top of the results page, followed by relevancy ranked articles. Each article entry shows the title of the reference book, a single line of text, the length of the article, and a listing of key concepts. To the right is a quick view icon that displays about two paragraphs of text. Clicking the floppy disk icon displays a menu to save, e-mail, export to EasyBib, Reference Manager, RefWorks, or Zotero, and the citation in APA, Chicago, Harvard, or MLA. To the left are options to narrow the search, and a Related Resources menu that allows students to run the search on suggested databases provided by their own library. When one of these is selected, the search terms automatically populate and the search is executed.

FIND A BOOK

Additionally, users may browse the collection alphabetically or by subject and choose individual reference titles to read or search.

FIGURE 1 Credo Topic Page Listing for “Global Warming” Search

The screenshot shows the Credo library interface. At the top, there are navigation links for 'Library Home Page', 'Library Catalog', 'MARSHALL UNIVERSITY', 'Library Databases', and 'Ask a Librarian'. A search bar contains the text 'global warming'. Below the search bar, it indicates '1491 results about global warming' and lists related terms: 'Climate change, Greenhouse gas, Kyoto Protocol, United Nations Framework Convention on Climate Change, Carbon dioxide'. The main content area is titled 'Topic Page' and features a 'Global warming' section with a small image and a brief definition. Below this, there are sections for 'Full Text Articles and More', including 'global warming in International Encyclopedia of Environmental Politics' and 'Global Warming in Science in the Contemporary World: An Encyclopedia'. Each article entry includes a small image, a brief description, and 'Key Concepts' listed below it. On the left side, there is a 'Narrow Your Search' panel with filters for 'COLLECTION', 'SUBJECT', 'MEDIA', 'DATE', and 'LENGTH'. Below this is a 'Related Resources' section with various links to external databases and catalogs.

Critical Evaluation

Credo offers an intuitive interface with excellent e-reference content that provides a well-constructed place for K-12 students to begin their research and for faculty to teach the process of doing research. Typically, when students have formulated their research questions, they tend to proceed by going directly to the library catalog or to online journal databases and books. However, if they are new to a topic, their first step ought to be to find an overview of the topic in a subject encyclopedia. This is exactly what Credo Reference offers—an excellent collection of subject based reference material and Topic Pages that help students to understand the problem they are addressing and how it fits into a larger context.

Topic Pages reveal important concepts, place the topic into context, and suggest further readings. The full-text of all Credo Reference content has been indexed, which enables students to find relevant content related to their research easily and quickly. API connectors point students to their own library's database resources where they can explore the topic more in depth. This adds a layer of discovery to improve their information gathering experience.

The introduction of permalinks and embed codes throughout the database allows the content to be integrated with lessons delivered through an LMS (see Figure 2). This is a quantum leap that makes Credo Reference more valuable to faculty.

The application of Key Concepts has made searching more targeted and sheds some spurious results that can otherwise come up on the results pages. It would be useful if the Key Concepts were hotlinks so students could jump directly to the most pertinent information. One way around this limitation is to search by using the Mind Map. Clicking on a link in the Mind Map will display the same results as entering the Key Concept into the search window. Every node on the Mind Map corresponds to a Key Concept. Searching the Key Concepts through the Mind Map also exposes students to related Key Concepts. The Mind Map provides a dy-

namic, graphical way to see context and to explore these relations. If students fail to enter precise Key Concept terminology during a search of the Mind Map, no results will be displayed. This causes frustration for students who do not understand why they are getting zero results. For this reason, it is best to begin every search from the home page (which is the default setting), find a relevant article, note the Key Concepts associated with that article, and then search the Mind Map using these. Once the Mind Map displays, it is useful to explore adjacent nodes to hone the search and to understand the context of a topic (see Figure 3).

In the past, searches produced a lot of results that appeared to have the same information from different sources. This overlapping of coverage can be annoying. The introduction of Key Concepts to the database has helped to mitigate this apparent duplication by identifying the different perspectives in which various reference materials are approaching a subject. Readers will find different sets of Key Concepts associated with the references. This makes it easier for them to identify those references that are most likely to hold the kind of information being sought.

FIGURE 2 Credo Embed Code

The screenshot shows a dialog box titled 'Embed Code [for faculty/librarians]' overlaid on the Credo interface. The dialog box contains an HTML code block for embedding the article. The code is:

```
<iframe src="https://muezproxy.marshall.edu:4891/content/entry/abccscience/global_warming/0.embed" style="position: relative; height: 400px; width: 100%;"/></iframe>
```

 Below the code, there are instructions: 'Instructions for using Embed codes.' and 'Embedding articles is subject to our Terms of use.' The background shows the 'Topic Page' for 'Global warming' with the same definition as in Figure 1.



FIGURE 3 Credo Online Reference Mind Map

SAGE eReference, which excels in social sciences content, is also offered through Credo for those who wish to take advantage of Credo's online user interface and value added products. Credo is an aggregator that assembles its core collections with titles from Gale, Oxford, Blackwell, SAGE, and hundreds of other publishers. Institutions that build their own online reference collections can find a rich number of subject encyclopedias offered by Taylor & Francis, Elsevier, Spring-

er, and others. Much of the information in these sources is geared to upper-division and graduate level students and to professionals, rather than to lower-division, K-12, or public users. Building a customized general reference database collection is expensive and titles are not automatically upgraded when newer issues are published.

A possible option to a database of subject encyclopedias would be a complete online encyclopedia such as Britannica School, Britannica Library, or Britannica Academic. Britannica gives the option of free access at <www.britannica.com>, but users are confronted with ads on every page. Value added content such as Topic Pages, Mind Maps, embed codes, an intuitive user interface and Key Concepts are among the features that set Credo Reference apart from its competitors.

Purchase & Contract Provisions

In addition to subscribing to any of the core content options, each Essentials Collection is an add-on of up to 300 titles with reference content in any of 25 subject areas. Additional individual titles from outstanding publishers are available for purchase through GOBI or directly from Credo, but not through other vendors. When titles are purchased via Gobi, they are fulfilled by Credo on the Credo platform. Titles within Credo Reference may be purchased without a subscription to Credo, and Credo will manage access to these for a fee of about \$500/yr. There are currently 3,486 titles available for purchase <<http://corp.credoreference.com/collections/one-time-purchase-titles.html>>).

Subscriptions for individual users are not available at this time. Individual articles may be saved in PDF and used to fulfill inter-library loan requests. Free MARC records are provided and the site has COUNTER-compliant usage records. Updates to the platform are delivered in a zero-downtime fashion without disruption to any user activity.

Authentication

Authentication is by user name/password or token-based logins or library-card logins, Google authentication, OpenAthens, Shibboleth,

The Credo Online Reference Service platform is optimized for screen readers, is ADA compliant, and has completed a VPAT (<http://search.help.credoreference.com/access/accessibility.html>).

The user interface can be translated into Spanish, French, Portuguese, Polish, Urdu, Chinese (Mandarin), and Arabic.

There will always be information gaps in any reference collection. This problem is constantly being addressed by Credo as it runs gap analyses of the collections and continuously adds new titles to address areas of non-coverage. One solution is for libraries to beef-up any of 25 subject content areas by adding one of the Essentials Collections, or by purchasing individual titles. Credo is currently working to add more statistical information to the database. Issue Briefs has also been offered as an add-on, in part, to help address any lack of information in current, hot-topic areas.

Credo Reference Ltd. offers additional products for purchase, such as the following.

1. Literati by Credo was launched on January 1, 2012, with a highly interactive, flexible library platform that integrates information literacy tutorials, assessment, and content from a library's own pages.
2. Student Help (Homework Help), a live student-teacher homework tutorial service (2012).
3. The current iteration of InfoLit Modules for college students (2015).
4. SKILL Modules for K-12 (2016). These are InfoLit Modules for younger students.

Competitive Products

There are several excellent e-reference databases that concentrate on either the hard or soft sciences, but in the provision of ready-reference and general reference collections that cover a broad spectrum of subject categories in both the hard and soft sciences, Credo's only peers are Gale Virtual Reference Library and Oxford Reference Online. These offer similar, sometimes identical, titles and may be customized by selecting additional titles not found in the core collections.



Credo Online Reference Review Scores Composite: ★★★★★ 3/8

The maximum number of stars in each category is 5.

Content: ★★★★★

Various packages and individual titles are available to meet any library's needs. The content score will increase as gaps in content are closed and as more information on current issues and statistics is added to the core collections.

User Interface/Searchability: ★★★★★ 1/2

Searching is especially well-suited to the beginning user population. Searching is intuitive, and "next steps" are suggested by the way search results are displayed. Topics Pages and Mind Maps are particularly useful to students who are beginning the research process.

Pricing: ★★★★★

A reasonably priced option for libraries to provide general reference material that is continuously upgraded with new titles and editions. Many value-added features assist students who are starting a research project.

Purchase/Contract Options: ★★★★★

Contracts are negotiable and customizable.

logins via referring URLs, or auto-geolocated logins in which all people in a specific geographical area are associated with an account. Simultaneous unlimited user access is provided. The only exception is a limited number of purchased add-on titles for which the publisher has set single-user limits.

Author's References

Head, Alison J., and Michael B. Eisenberg. "Finding Context: What Today's College Students Say About Conducting Research in the Digital Age." Project Information Literacy Progress Report. The Information School, University of Washington, February 4, 2009.

<http://www.projectinfolit.org/uploads/2/7/5/4/27541717/pil_progressreport_2_2009.pdf>

About the Author

Larry Sheret is the Instruction and Emerging Technologies Librarian/Associate Professor at Marshall University in Huntington, West Virginia. He provides library liaison services to the Department of Modern Languages, School of Physical Therapy, and Digital Forensics and Information Assurance program, and he is a member of Marshall's institutional repository team. He held previous library positions at Western State College (aka Western State Colorado University) and Central Arizona College. He received his M.A. from the School of Information Resources and Library Science at the University of Arizona in 1996. ■

Free Text Keywords: library | e-reference | online reference | general reference | Mind Map | K-12 | college | public libraries

Primary Category: Multidisciplinary (or interdisciplinary)

Secondary Categories: General Reference

Type of product being reviewed: Ebook collection; Encyclopedia/Handbook

Target Audience: Secondary; General public; Undergraduate (including community colleges)

Access: Subscription

Contact Information

Credo Reference Ltd.

201 South Street, 4th Floor
Boston, MA 02111

Phone: (617) 292-6100

E-mail: <support@credoreference.com>

Product URL: <<http://search.credoreference.com>>

Producer URL: <<https://corp.credoreference.com/>>