

Information Literacy/Tutorial Products

ProQuest Research Companion & Credo Information Literacy Modules

Review Date: 26 January, 2017

	Proquest Research Companion	Credo Information Literacy Modules
Content — 40% (Quality, uniqueness, reliability, and appropriateness for community college audience)	2	4
Interface — 25% (Usability, customization, mobile supported, lack of problems, print/download/email content, citation formatting)	2	3
Cost — 15% (Value)	3	4
Accessibility — 15% (Compliance with standards)	4	5
Support — 5% (For administrators and users)	2	4

In Fall 2016, selected members of the Council of Chief Librarians, Electronic Access and Resources Committee (CCL-EAR) undertook a comparative study of two information literacy tutorials/modules:

- *ProQuest Research Companion*
- *Credo Information Literacy Modules*

The review focused on the coverage, search interface, cost, availability/accessibility of service, customization, and mobile options for each product.

Open Educational Resources (OER) will be briefly explored after the summaries for the two products to contrast these two paid resources with some possible free learning objects for teaching information literacy.

Method

Three reviewers evaluated ProQuest Research Companion and Credo Information Literacy Modules from both an end user and administrative perspective. For accessibility testing, two different accessibility sources, aXe and WAVE, were used to test various webpages within these online resources.

Conclusion

ProQuest Research Companion seems to be a tool designed to provide assistance to students enrolled in a composition class. The content focuses on topics such as writing a thesis statement, identifying evidence, organizing an argument, and revising work. It also includes some content that relates to libraries and traditional information literacy topics, such as finding, evaluating, and citing information, which comprises approximately $\frac{1}{3}$ of the content. The *Credo Information Literacy Modules* present a series of tutorials that more closely match how librarians teach this content and address the topics in a way that supports the ACRL *Framework for Information Literacy in Higher Education*.

Proquest Research Companion is a smaller product than the *Credo Information Literacy Modules*. There are only minimal assessments and the pre and post tests do not assess the same content, so it is difficult to measure what students have learned from the tutorials. In comparison, the *Credo Information Literacy Modules* contain extensive assessment options that can be customized. These assessments, like all of the instructional materials in

the Credo *Modules*, can be turned on or off of or customized using an in-product web editor. The assessments and instructional materials in *Proquest Research Companion* cannot be customized, aside from adding some links to library resources.

While both products provide online information literacy instructional content using multimedia materials and provide assessment instruments, it is difficult to compare the two as Credo's *Information Literacy Modules* provide so much more content. This content, along with the ability to really assess student learning and customize all of the materials, comes at a price. Credo's *Information Literacy Modules* product is substantially more expensive than Proquest's *Research Companion* whether you purchase it outright or pay for an annual subscription. *Proquest Research Companion* is an option if a library is trying to replace a one-shot session for composition classes with a multimedia product or if the campus is looking to embed information literacy within the context of composition classes and wants the content presented in such a way as makes sense to composition and rhetoric instructors. Credo's *Information Literacy Modules* could be used to replace one-shots for any subject area, to construct a series of scaffolded workshops for students at various levels, to achieve institutional student learning outcomes in information literacy, or as curricular materials for credit-bearing information literacy classes where it is imperative that SLOs be measured.

For a more detailed comparison of the two products, see the table below.

Criteria	<u>Proquest Research Companion</u>	<u>Credo Information Literacy Modules</u>
Content/Interface	<p>Audience & Scope: Designed for beginning composition classes, usually freshman/sophomore students. Combines information literacy (IL) and rhetorical/composition skills.</p> <p>Instructional Content: There are 3 main topic areas that contain 9 modules.</p> <p><u>3 main topics:</u> Find Information Evaluate Information Use Information</p> <p><u>9 modules of videos:</u> Where do I start? How do I choose a topic? Where do I find information? How do I evaluate sources? What counts as evidence? How do I write a thesis statement? How do I organize my argument? How do I avoid plagiarism and find my own voice? What do I look for when I revise?</p> <p>Instructional Design: The modules are made up of 4-10 core videos. Some videos are followed up by optional Tell Me More videos that give more information on the</p>	<p>Audience & Scope: Designed for freshman/sophomore audience. Majority of content focuses on finding and evaluating sources. Designed to be discipline neutral. Uses current events as examples.</p> <p>Instructional Content: There are 6 modules.</p> <p><u>6 Modules:</u> Getting started Sources Searching Evaluating Presenting Citing</p> <p>Instructional Design: All modules begin with an Instructor's Guide which includes learning outcomes, standards addressed (for example, ACRL Framework, AACU Value Rubrics, SCONUL), an explanation of the real world application of the concepts being presented, discussion topics, and activity ideas.</p> <p>Each tutorial within a module focuses on a specific concept or skill and is meant to take 5 minutes. There are multiple videos and text-</p>

	<p>same concept.</p> <p>Where do I find information? module has the most content related to libraries -- 5 mins on library resources, 2 mins on searching the library.</p> <p>Students can control the videos. Modules are easy to navigate</p> <p>Assessment: There are one or two self-check questions before every video to activate students' prior knowledge and a review question afterwards to check recall of concepts/processes presented in module. There are 11 self-check questions and 8 review questions for the entire product. Assessment results are recorded and can be downloaded. Scores seem to imply that improvement in scores from self-check to review can be attributed to what students learned from modules, but questions do not assess the same content.</p> <p>When students are logged in, they get a self assessment question before viewing each video. Incorrect answers do not receive constructive feedback, instead users are just told they are wrong. Students can choose to see the correct answer indicated. Then they are directed to watch the video. Review questions after the video include Take-away that reinforces the reason why the correct answer is correct.</p> <p>No overall pre/post test.</p>	<p>based tutorials within each module. There is a progress bar to show movement through the module.</p> <p>Images included in tutorials serve pedagogical purposes. When videos use live action they include actors who represent diverse populations.</p> <p>The feedback given to students when they answer incorrectly is specific and constructive.</p> <p>Students are able to control how they navigate the modules and can start or stop the videos.</p> <p>Librarians can decide which modules to use, hiding others. The modules can also be customized using an in-product editor.</p> <p>Assessment: A 20 question pre-test and a 20 question post-test covers the content/concepts presented in all 6 modules. There are also one or more 4-5 question quizzes within each module that test different concepts within the module and align with video or tutorial content of the same name.</p> <p>All of the assessments can be customized by adding, deleting, or editing questions.</p>
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	<p>Students' My Assessments record feature -- students can access their results at any time as they start answering questions.</p> <p>Additional Features: ProQuest has 5 additional tools to help students progress through the research process.</p> <p><u>Source Evaluation Tool</u> - Students enter names of book, periodical, or website. Program indicates quality of sources using red, green, or yellow. Only gives a thumbs up to scholarly sources, so peer-reviewed journals or books published by academic presses based on publication details about periodicals from Ulrich's, book publisher details from Bowker. Also get details about websites, such as restricted/unrestricted domain, site owner and site description from the site, redflags for sites the Southern Poverty Law Center identifies as hate sites and for fake news sites. Little nuance to evaluating sources.</p> <p><u>Topic Aid</u> - Students enter a general topic, get list of suggestions that all contain the same word or words as those entered. These may not be subtopics of the terms entered so does not help students narrow or broaden their topics.</p> <p><u>Search Aid</u> - Students enter a general topic, get keyword suggestions, and can directly search Google using the keywords selected. This can be customized to to search Google Scholar or to link</p>	<p>When students answer a question incorrectly, they are given specific feedback that attempts to correct their misconceptions.</p>
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	<p>students to your library databases.</p> <p><u>Citation Builder</u> - Students can add in title or URLs and citations are created using templates. (Similar to EasyBib.) Seems to work well.</p> <p><u>Revision Aid</u> - Students can copy and paste their papers into the program and get alerted to passive voice, run on sentences, words that have been used incorrectly (like literally), and awkward phrases that suggest not enough evidence or forced transition.</p>	
Customization	<p>Limited customization:</p> <p>For the Search Aid tool to work it requires customization to create links to your own databases or catalog as well as Google or Google Scholar (but not both). These links just take students to the tool and, if it's set up right, do the search that the user created using the tool.</p> <p>You can embed individual videos on your own site.</p> <p>There is no option to update, correct, remix, or otherwise customize the content of videos or quizzes. You can enable/disable self-check questions or review questions, add recommended sources by putting URLs and descriptions that will show up in the modules, change the icons that show up in source evaluation, and turn student registration on or off.</p>	<p>Extensive customization:</p> <p>Highly customizable text and questions within the modules. Administrators customize content using an OpenEdX platform: This platform allows customization of content in the staff view. Using "View in studio" you can edit text, add images, and add pages to tutorials. After customization the tutorials are still hosted by Credo and backed up in the cloud.</p> <p>Program does not support versioning and changes cannot be reversed after publishing. Administrators can add homegrown content with an embed code and Articulate tutorials can also be embedded. (Articulate is a software program used to make e-learning modules.) The same content can be built directly in the Credo tutorial by adding pages/slides.</p> <p>Quizzes can be edited. Administrators can add</p>

		scored or unscored quiz questions to any page. Editing quizzes is all done in an HTML XML editor which allows feedback to be customized such as what message students receive when they answer a question.
Mobile or Multi-Media Options	<p>Mobile Options: Responsive platform works on mobile devices.</p> <p>Multimedia: About 100 videos, 1-3 minutes long, transcripts available. Videos are captioned. Videos can be embedded in your own LMS and on your library website.</p>	<p>Mobile Options: Responsive platform should work fine on a mobile device, but older systems might cause problems because of browser issues.</p> <p>Multimedia: Videos have running transcript and closed captioning, lots of text; most are motion graphics but some are live action.</p> <p>Videos can be embedded in your own LMS, but license does not permit posting on the open Internet because content must be contained behind firewall.</p>

Citation Options	Includes MLA 7 and APA 6. No ETA on when MLA 8 will be available. Vendor says maybe summer 2017, but other projects are taking precedence.	Provides instruction in 5 citation styles. Includes MLA 7 and APA 6. MLA 8 video is currently available. Vendor says updating tutorial for MLA 8 now.
Initialization and Administration	<p>Authentication: IP authentication.</p> <p>Reporting Features (Assessments): Assessment Report: aggregate of all students' performance on self-check and review questions. Breakdown by module. Limit to only current year. Export aggregate data in excel files organized by module or by user. You can download a report that shows the scores individual users received by username.</p>	<p>Authentication: 2 ways to access: IP authentication or LMS integration (LTI 1.1, auto grading into gradebook)</p> <p>Reporting Features (Assessments): Grade Report is score for whole tutorial, You can also generate a problem grade report to see results for each question. Credo does statistical validation of their question banks using anonymized student data, and questions are updated if there's an issue. For custom questions, vendor says Credo would look at options for providing validation information if you get 250 or more responses</p> <p>Under Development: Working on function to email students and profs the results of assessment</p>
Availability/Accessibility of Service	<p>Vendor says ADA compliant. Our own accessibility checker testing confirmed accessibility with a few minor errors.</p> <p>Media Accessibility: Videos are closed captioned. Transcript is available. Cannot view both video and transcript at</p>	<p>Vendor says ADA compliant. Our own accessibility checker testing confirmed accessibility.</p> <p>Media Accessibility: Videos are closed captioned in addition to a rolling transcript to the right of the video. A</p>

	<p>the same time like you can with Credo.</p> <p>Website Accessibility: Accessibility checkers show few errors on several representative pages tested. There are more errors than Credo, but most are minor errors (empty links, redundant title text, etc.). There were some errors with labels and some buttons that lack discernible text that could cause issues for screen readers. Overall, few errors that do not result in the product being unusable.</p>	<p>downloadable transcript is also available.</p> <p>Website Accessibility: Accessibility checkers showed very few errors, including pages with the drag & drop feature. Alt tags were present. The accessibility checkers indicate that Credo has made a strong effort to make their product accessible.</p>
Technical Support	<p>There is a contact link at the bottom of every screen that can be used to submit a help form. No other help link available for students or librarians/administrators.</p> <p>In the customization area, terms are defined for administrators.</p> <p>Interface is very simple and there are few options for changes or customization so much help may not be needed on the part of administrators/librarians.</p>	<p>Screenshots and videos show librarians how to setup and customize content. Link to email tech support and “Ask Us” button. Help Community has been created where users can post questions/tip & tricks.</p> <p>User Interface No specific help link. Contact Us link at the bottom sends user to general Credo contact info page where user could click a contact us link.</p>

Cost	Relatively inexpensive but not the same product as the competition.	Purchasing Options: 1) Buy outright without updates 2) Buy outright and pay yearly for updates 3) Yearly subscription (most common)
The Competition	Credo Information Literacy Modules; possibly free Open Educational Resources	Proquest Information Literacy Companion, possibly, possibly free Open Educational Resources
Recommended Improvements	<p>Content issues: Be more careful when describing types of resources. Tutorials describe JSTOR as a general reference database instead of a source for scholarly articles. Include better examples of various resources. Tutorials only discuss or show Proquest databases, such as ABI-Inform, even though usefulness for searching for info for example topic is not apparent.</p> <p>Make examples more general to appeal to a broader audience. Current focus of modules is on crafting a paper for a composition class making it difficult to use the modules for other classes.</p> <p>Instructional design issues: Make sure visuals serve a pedagogical purpose and represent diverse user groups.</p> <p>Give learners constructive, specific feedback in response to incorrect quiz questions.</p> <p>Make sure pre-test and post-tests assess the same concepts or stop showing the difference between scores in a specific module as evidence</p>	<p>Interface Issues: Improve navigation to reduce scrolling within assessments.</p> <p>Interface is a bit ugly, but materials can be easily integrated into LMS such as Canvas.</p>

	<p>of learning.</p> <p>Tool Issues: Improve the tools or get rid of them. The tools seem like great ideas but only work on a superficial level. For example, recommendations for keywords only work when a single word is entered and only offer suggestions for two-word phrases that include the original keyword.</p>	
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Summary (ProQuest Research Companion)

Content — 40%	Interface — 25%	Cost — 15%	Accessibility — 15%	Support — 5%
				

Research Companion presents information literacy (IL) skills within the context of a rhetorical/composition assignment.

Content is divided into 3 main topic areas that contain 9 modules.

Find Information			
0%	01: Where do I start? ▶	(4m 50s)	Feeling overwhelmed? ▶
0%	02: How do I choose a topic? ▶	(14m 33s)	💡 Topic Aid
0%	03: Where do I find information? ▶	(16m 59s)	🔍 Search Aid
Evaluate Information			
0%	04: How do I evaluate sources? ▶	(21m 57s)	📄 Source Evaluation Aid
0%	05: What counts as evidence? ▶	(16m 05s)	
Use Information			
0%	06: How do I write a thesis statement? ▶	(11m 15s)	
0%	07: How do I organize my argument? ▶	(14m 00s)	
0%	08: How do I avoid plagiarism and find my own voice? ▶	(15m 31s)	📄 Citation Builder
0%	09: What do I look for when I revise? ▶	(11m 55s)	↩️ Revision Aid

FIGURE 1: Overview of *Research Companion* modules

There is some additional information regarding assessments that is worth noting:

One or two pre-test questions preview for students one of the concepts that will be covered in each module. Students are given two opportunities to answer. Whether students answer the question correctly or incorrectly, the only feedback they receive is that they should watch the tutorial video.

No easy topics

✓ Self-check 📺 Video 📄 Review

Incorrect. See take-away below.

Take-away:
You should let your research process guide your opinions rather than holding fast to a preconceived notion and searching for something that matches it. Researching is a process of learning and requires a flexible attitude and a willingness to change your mind when you are exposed to new information and arguments.

You know you've picked a good topic when all the sources you find could be used to validate the opinions you held at the outset.

true
 false

Continue

FIGURE 2: An example of feedback received from post-test

After students finish each module, they are given a brief quiz that does not align with topics covered by the pre-test questions, though they are based on the tutorial video content. This means comparison of the pre-test results and post-test results are not a useful evaluation of students' performance. Unfortunately, when tutorial administrators are provided with results of students' quizzes, the results are presented as a percentage change from the pre-test to the post-test even though this appears to be a misrepresentation of the relationship between the pre-test and the post-test questions.

The screenshot shows the ProQuest Research Companion interface. At the top, there is a navigation bar with three buttons: 'Find Information', 'Evaluate Information', and 'Use Information', each with a red arrow pointing to it. Below this is a sidebar menu with a progress indicator showing 0% completion. The menu items include '01 Where do I start?' (with a 0% progress circle), 'Video / Text' (with four video options: 'Feeling overwhelmed? (1m 08s)', 'Ten basic terms (1m 31s)', 'Scholarly arguments (1m 39s)', and 'Pep talk (0m 32s)'), '02 How do I choose a topic?', and '03 Where do I find information?'. Below the menu are 'Tools' including 'Topic Aid' and 'Search Aid'. The main content area features a video player titled 'Feeling overwhelmed?' with a 'See transcript' link and 'Embed this video' / 'Embed custom playlist' options. The video player shows a progress bar at 0:04 / 1:08 and a 'Slow video down' button at 1.00x.

FIGURE 3: The student interface. The left menu is seen on every screen.

ProQuest Research Companion offers several tools in addition to the tutorial content. The reviewers found that these tools do not add appreciably to the value of the product because 1) the Topic Aid does not give suggestions for anything but the most general topics, which are topics that are too broad to begin with, 2) the Search Aid offers keyword suggestions that contain the words the user enters, which is generally not what students need help with, instead they generally need help finding synonyms for the natural language searches that they are used to doing but that is not what is provided by the Search Aid, 3) the Source Evaluation Aid draws from Ulrichs and Bowker to provide users with details about the publishers for periodicals and books, though the basic details provided would be available through a Google search and the website evaluation information is not always in-depth enough to help users who are not yet familiar with the website they are trying to evaluate, 4) Citation Builder provides the same level of citation assistance that is available from free sites like EasyBib and Knight Cite, 5) the Revision Aid offers users the types of style alerts that are available from the free Chrome plugin Grammarly.

Summary (Credo Information Literacy Modules)

Content — 40%	Interface — 25%	Cost — 15%	Accessibility — 15%	Support — 5%
				

The *Credo Information Literacy Modules* focus on finding and evaluating sources and are designed to be discipline neutral. Content is presented in 6 modules.

Home [Start Here](#)

Bookmarks

Welcome to the InfoLit Modules

Pre-Test

Getting Started With Research

Sources of Information

Searching for Information

Introduction

Video: Choosing a Database

Tutorial: Choosing & Using Keywords

Quiz: Choosing a Database Quiz

Quiz: Choosing and Using Keywords Quiz

Tutorial: Search Techniques, Part 1

Tutorial: Search Techniques, Part 2

Video: Refining Search Results

Quiz: Search Techniques Quiz

Evaluating Information

Presenting Research and Data

Citations and Academic Integrity

Post-Test

Searching for Information > Tutorial: Search Techniques, Part 2 > Introduction

Bookmark

INTRODUCTION

While every database is different, there are helpful tricks that can improve your search results on almost any database.

This tutorial will cover:

- Full-Text Searching
- Fielded Searching
- Subject Searching and Thesaurus
- Truncation/Wildcard
- Limiting Your Search

FIGURE 4: Overview of Credo modules and student interface

There are pre- and post-test assessments for each module.

Credo provides a 20-question pre-test that is designed to be taken before starting any module and covers the content of the full set of modules. When students respond incorrectly to a question on the pre-test they are given constructive feedback about how to better understand the concept.

The post-test is based on the same outcome and performance indicators as items on the pre-test, making it possible to compare the results and determine what students have learned.

Tutorial administrators can customize the content by hiding or adding videos and slides. The text-based tutorial slides can be edited directly to add different images or change the text. Assessments can be customized by hiding or adding questions to make the quizzes match with the changes made to content or to emphasize the outcomes that the administrator considers most important.

The screenshot displays a 'Course Outline' interface. At the top, there are three buttons: '+ New Section' (green), 'Collapse All Sections' (blue), and 'View Live' (blue). Below the buttons, the course start date is 'Oct 06, 2016 at 00:00 UTC'. The main content area is divided into two sections: 'Welcome to the InfoLit Modules' and 'Pre-Test'. Each section has a 'Released' status and a 'New Subsection' button. To the right, there are three instructional panels: 'Creating your course organization', 'Reorganizing your course', and 'Setting release dates and grading policies'. The 'Creating your course organization' panel explains adding sections, subsections, and units. The 'Reorganizing your course' panel describes dragging sections to new locations. The 'Setting release dates and grading policies' panel details how to use the 'Configure' icon to set release dates and grading policies. The 'Changing the content students see' panel explains how to use the 'Publish' and 'Hide from students' icons to control content visibility.

FIGURE 5: Customizing content

Open Education Resources (OER) for Information Literacy

There are options for free information literacy tutorials such as repositories for Open Educational Resources (OER) and those connected to specific Learning Management Systems. Some of these repositories include [OER Commons](#), [Merlot II](#) (Multimedia Educational Resources for Learning and Online Teaching), and The [Peer Reviewed Instructional Materials Online \(PRIMO\)](#) database. The [Community College Consortium for Open Educational Resources](#) has a list of additional OER collections. An example of the materials listed on such sites is [The Information Literacy User's Guide](#) a 7-chapter book that addresses similar topics to both the resources reviewed.

Canvas, the statewide LMS, has a repository called Canvas Commons which allows users to share educational content that can be modified for local purposes within the learning management site -- provided your campus has the feature activated. YouTube has videos that many libraries and businesses have posted on various information literacy topics -- although you may have to caption them yourself.

For colleges that do not have the funding to adopt the holistic information literacy resources, such as the two reviewed here, there are options out there although they will take time to find and/or develop.

Other Reviews

Condic, K. (2014). ProQuest research companion. *Choice*, 52(1), 38-38,40. Retrieved from <http://search.proquest.com/docview/1558854634?accountid=39629>

Condic, K. (2015). Information literacy course modules [Credo]. *Choice*, 52(6), 944. Retrieved from <http://search.proquest.com/docview/1660771113?accountid=39629>

Swoger, B. J. M. (2014). eReviews [ProQuest]. *Library Journal*, 139(3), 130. Retrieved from <http://search.proquest.com/docview/1493826207?accountid=39629>