



The **Credo** **IL Strategy** **Handbook** **2nd Edition**

From Planning to
Assessment: A Guide
to Creating a Successful
Information Literacy Program



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Note from the Author



Henrietta (Etta) Verma, a librarian and author of the *Credo IL Strategy Handbook*, is Credo's Customer Success Manager. She previously worked at public libraries, where one of her favorite tasks was helping elderly patrons learn to use email, and at an academic institution, where she developed IL curricula and taught science and engineering undergrads to find reliable research materials. Etta then worked for years as an editor at *School Library Journal* and *Library Journal*. These days, as well as helping Credo's customers to get the most out of their subscriptions, Etta corrals two children and two cats, and reads mystery novels in the few minutes per week that are left.



Introduction

Information literacy (IL) is having a moment in the sun—perhaps you’ve noticed?—as politicians, journalists, and the general public decry the growth of disinformation (commonly called “fake news”) and our inability to spot it. While most commenters don’t use the term IL, the problems they notice, such as a failure to understand what makes a reliable source and an unwillingness to seek and consider multiple viewpoints, are tackled by IL instruction. As librarians, we know disinformation is not a new phenomenon; helping students to see the value in others’ perspectives isn’t a novel role for us, either. What is new is the public’s awareness that information can be deceiving and that finding a way through the morass is desirable.

IL instruction can help students better discern among reliable and unreliable materials, especially online. A lack of media literacy among students is something Credo’s customers frequently express. What better time than now to set up an IL program if you don’t have one, or expand a program you already offer? This handbook was created to support initiatives at any stage of your IL program. The guide describes how to plan and implement an IL program, and once you get your feet wet, how to market your efforts to students, faculty, and even parents. Later chapters cover more advanced topics such as assessing student progress and adapting your IL program to better support your students.

We welcome your feedback on the handbook—please let us know how it has helped you and anything we can do to improve your information literacy work. You can contact the handbook’s author, Henrietta Verma, at henrietta.verma@credoreference.com.



CHAPTER 1

The Value of IL for Your Users

The Value of IL for Your Users



A need for information literacy, while not a new concept for librarians, is becoming increasingly important with the growth of mis- and disinformation. As students attempt to navigate “fake news,” we need to prepare them with the media literacy skills necessary to better discern reliable materials.

In a 2017 *Library Journal* article¹, librarian Tim Wojcik, formerly with Mercer Universities in Atlanta, noted that “historically trusted repositories of information, specifically the *New York Times* or the *Washington Post*, that even ten years ago weren’t viewed as sources of content with a slant, have now been cast as producers with an agenda.” This poses a problem, because these sources are ones professors expect students to use and your library pays to make available. A bias against scholarly and other vetted sources represents an even bigger problem in students’ lives after college, as they may rely on material that is of low quality or even purposefully false. Professors should be aware that your IL program offers a structured plan for graduating students who know disinformation when they see it and who understand the importance of being informed.

In the past, the need for information literacy was not front-of-mind outside of academia, making today’s heightened awareness of disinformation helpful when starting an IL program. If your library already offers IL instruction, you can still seize the day by boosting your offerings to include up-to-the-minute guidance on how to spot disinformation in various media.

It might seem basic, but let’s define here what Credo means when we talk about IL. For us, it’s far from a catchphrase that’s meant to sell products. We view it as a means of encountering the world of information and making it your own; a means to becoming a capable citizen in today’s world. **Information literacy starts with figuring out that a problem or a need you are facing is something that can be answered by learning what others have found out. It gives you the skills to then gather print and digital information, sift through it to see what is accurate and useful, and synthesize it for your needs.** Information rejection is perhaps just as important as information gathering, and it only starts with being able to push aside unreliable sources. Even after a researcher finds quality material, it’s crucial to figure out which paper, book, website, or other item is best for the project and the audience at hand. In some cases, students also have to figure out how to scan what they find to match the source types specified by their professor. **Being able to efficiently move from the recognition of an information need to finding a thorough, factual answer to that need is information literacy.**

Of course, the importance of information literacy doesn’t end once a student graduates. The work students will undertake after they leave college requires the ability to make sound, informed decisions. These days, there is a great emphasis on data literacy, with everything from decisions about baseball players to political machinations based upon the crunching of vast arrays of metrics and sophisticated accompanying visuals. This emphasis has happily worked its way back to colleges, which are now incorporating data elements more and more into their expectations for students.

It’s worth noting what IL is not. Librarians know a solid IL program when they see it, but you might need to make the case to your school’s administration. Looked at individually, the various skills an information literate student might learn and practice do not by themselves make them information literate. Being able to use your library’s catalog is an essential skill,

1 Verma, Henrietta. “Reference as Resistance.” *Library Journal*, November 15, 2017.
<https://www.libraryjournal.com/?detailStory=reference-as-resistance-reference-2018>

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but it doesn't make you information literate by itself. Similarly, being able to find articles using a library database is just a start and not information literacy. The definition of IL given above—beginning with recognizing a need—starts on purpose before a student ever enters a library or visits a library website. It begins with a habit of mind—noticing an information need and methodically going about meeting the need—and isn't any one skill. The definition also omits librarians on purpose, because we are just one component of an IL program. Students themselves, professors, and ancillary teachers such as tutors are all part of the world of IL.

Lastly, we must mention the role of an IL program in helping your institution to create graduates who are able to function well in today's information-rich world. GPAs, retention, and other academic benchmarks are important, but ultimately, you are preparing students for life after school, not just trying to get them to the next semester. **Information literacy, especially concerning digital information and media, is essential for today's graduates.**

This handbook is designed to help academic librarians start or improve an IL program. It will look at why such a program is important and beneficial to student outcomes and address every step of creating, implementing, assessing, and fine-tuning the work, by describing how you can:

- **Gauge attitudes towards IL in your school's administration and in the institution's various departments.**
In order to take advantage of existing goodwill toward the library and IL instruction, you have to figure out who and where your supporters are and, conversely, who and what may put up roadblocks to your plan.
- **Assess current library and institutional IL work.** What efforts are underway (if any), what is working, and what is needed?
- **Assess students' IL knowledge and needs.**
- **Inform yourself about current best practices with regard to IL and curriculum design.**
- **Create a sustainable program designed to grow and to offer scaffolded IL instruction to students throughout the institution.**
- **Market the program to students and faculty.**
- **Assess what works and what doesn't and making changes accordingly.**

In addition to referring to Credo-created material such as our Learning Tools, *Information Literacy – Core* and *Information Literacy – Health Science*, this handbook will draw heavily upon the expertise of our librarian customers in creating successful IL programs that turn around learning in their schools.

This handbook provides additional resources such as links to Credo's free webinars with thought leaders in the IL field and to free IL textbooks that offer an up-to-date, peer-led way of continuing your IL education. Recent, in-depth scholarship will be referenced, and the lengthy appended bibliography will give you plenty of further reading and alert you to ongoing sources of IL guidance. We at Credo hope this handbook will be of use in your work. We welcome your feedback on the handbook and on ways we can help your library become the hub for your institution's IL efforts. Please contact us at support@credoreference.com if you have any questions or comments.



CHAPTER 2

Designing a Program with Your Community and IL Standards in Mind

Designing a Program with Your Community and IL Standards in Mind



Whether your college is just getting started with its information literacy efforts and looking for one-shot instruction in general education classes or has a multi-year plan that includes faculty in scaffolded IL instruction, the library should be poised to lead the way, with your staff and resources as the cornerstone to planning and execution.

If it feels daunting, remember that your library has been providing IL instruction all along, as many interactions with students and faculty provide serendipitous exposure to how to use the library and perform research. The creation of a formal IL program can be seen as an extension of current activities. Finding the time to plan a new program is challenging, but a more organized approach to IL can help you teach IL concepts to multiple students at once rather than one by one in the library. And of course, many students won't come to the library of their own volition, so classroom instruction will reach more students as well as save you time.

Get to Know Information Literacy Standards

In 2015, the Association for College and Research Libraries (ACRL) released its “[Framework for Information Literacy for Higher Education](#).”¹ The Framework, as it is known, provides a set of guiding premises regarding IL. ACRL doesn't make it binding upon member libraries, though some accrediting bodies require adherence to the structure outlined in the document. The new document replaced ACRL's “[Information Literacy Competency Standards for Higher Education](#),” which were published in 2000 and have been rescinded.

The newer document doesn't suggest, let alone mandate, sweeping changes to IL practice. Rather, it suggests different ways of looking at information and students' ideal approaches to thinking about, finding, using, and creating it. Note that the “creating” part is new—the earlier standards didn't formally recognize students as content creators, whereas the Framework does. One impetus for the creation of the document was a recognition that, “librarians have a greater responsibility in identifying core ideas within their own knowledge domain that can extend learning for students, in creating a new cohesive curriculum for information literacy, and in collaborating more extensively with faculty.” What a rich opportunity!

The guidance in ACRL's framework can be complemented by the Association of American College's and Universities Information Literacy VALUE Rubric and by the UK and Ireland's Society of College, National and University Libraries, (SCONUL) “[The SCONUL Seven Pillars of Information Literacy Core Model For Higher Education](#)” (also known as the Pillars), which was released in 2011. The Pillars can be used as a complement to the Framework, as they enumerate high-level skills information literate students should be capable of. By high-level, we mean the skills mentioned are not specific abilities such as how to search a given database, rather they include statements such as, “information literate people will demonstrate an awareness of how they gather, use, manage, synthesise and create information and data...”. The Framework, the VALUE rubric, and the Pillars can be instructive in your work, but let's look at them separately, and with more detail on the Framework, as that's currently most widely used by U.S. institutions' accrediting bodies.

1 The Framework draws upon many sources, notably the following:
Meyer, Jan H. F., Ray Land, and Caroline Baillie. “Editors' Preface.” In *Threshold Concepts and Transformational Learning*, edited by Jan H. F. Meyer, Ray Land, and Caroline Baillie, ix–xlii. (Rotterdam, Netherlands: Sense Publishers, 2010).
Wiggins, Grant, and Jay McTighe. *Understanding by Design*. Alexandria, VA: Association for Supervision and Curriculum Development, 2004.
https://www.ascd.org/ASCD/pdf/siteASCD/publications/UbD_WhitePaper0312.pdf

Designing a Program with Your Community and IL Standards in Mind

ACRL's Framework for Information Literacy for Higher Education

As mentioned, the Framework concentrates on information and how it should be viewed and used. Each of its six areas of focus, or “Frames,” is presented in two sections:

- **Knowledge Practices** (focuses on the nature of knowledge and research)
- **Dispositions** (how students should work with and think about information).

As you review the Frames, keep in mind:

- As an expert in your field, these may seem like innate or general knowledge, but your students may be encountering these concepts for the first time (see Nobel laureate Daniel Kahnemann’s *Thinking Fast and Slow* for a helpful examination of your subconscious beliefs as an expert).
- The Frames may be approached in any order or combination (they’re listed alphabetically here and in the original ACRL document).

The Frames can be used as the mental underpinning for your IL strategy and your instructions to students. For example, you may not need to explicitly express that “research is a conversation,” but your approach to helping students can be based around that idea.

Authority is Constructed and Contextual

“Information resources reflect their creators’ expertise and credibility, and are evaluated based on the information need and the context in which the information will be used”

This frame emphasizes that information should be evaluated based upon whether the person who created it has relevant expertise and if it is a good match for the question at hand.

» Knowledge Practices

Students should learn to recognize different types of expertise and develop ways of determining which type of expert has created a given resource; that reliable information may come in any format; and there is a community of experts they are becoming a part of.

» Dispositions

Students who recognize that authority is constructed and contextual should be open-minded in their determination of who is an expert. They must be skeptical about the information they find while keeping an eye on their own biases regarding that information or the expert’s stance.

Designing a Program with Your Community and IL Standards in Mind

Information Creation as a Process

“Information in any format is produced to convey a message and is shared via a selected delivery method. The iterative processes of researching, creating, revising, and disseminating information vary, and the resulting product reflects these differences”

Valid information can come in any format and, as they become more expert, learners begin to recognize that different formats signify different things. ACRL mentions pre-prints vs. final articles as one example of format differences students will begin to find meaningful.

» Knowledge Practices

Students should learn to assess the fit between a resource’s format and its intended use, and determine which format is best for information they are producing themselves.

» Dispositions

Students who recognize information creation as a process recognize that their information need may be satisfied by material in many formats, and value the process of matching their need with various items.

Information Has Value

“Information possesses several dimensions of value, including as a commodity, as a means of education, as a means to influence, and as a means of negotiating and understanding the world”

Today’s students are used to free information, but they should be aware of how the value of information has manifested. Charging for access and intellectual property laws are two examples.

» Knowledge Practices

The knowledge practices discussed in this frame include using citations to give credit to creators; recognizing that some creators and users are marginalized and lack access to the academic information dissemination system; and a recognition by students that their own information can be commoditized, especially online, and they should be cautious regarding what they post.

» Dispositions

Learners must recognize that information others produce has value, and respect the time and effort that went into producing it. They must also learn that they can be producers as well as users of information, and this that position is a privilege.

Research as Inquiry

“Research is iterative and depends upon asking increasingly complex or new questions whose answers in turn develop additional questions or lines of inquiry in any field”

Students may be surprised to learn that even a mature field of study has unanswered questions—and that there are questions that may not ever be answered, but remain ongoing objects of study and perhaps disagreement. Continuous research adds to the field of study.

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» Knowledge Practices

The practices related to this frame are closely related to the process of writing a research paper. ACRL explains that students must be able to take organized, methodical steps—note a gap in information, find material to fill the gap or answer a question, synthesize the information gathered, and draw reasonable conclusions based on the material found.

» Dispositions

Students should view research as an open-ended process and approach it with curiosity and persistence. At the same time, they should recognize that they are novices and ask for help when necessary.

Scholarship as Conversation

“Communities of scholars, researchers, or professionals engage in sustained discourse with new insights and discoveries occurring over time as a result of varied perspectives and interpretations”

Knowledge in a field develops gradually and over time, competing voices may emerge. Becoming familiar with past and present research in a given discipline will allow novice researchers to enter the scholarly conversation.

» Knowledge Practices

Students should acknowledge other researchers' parts in a scholarly conversation by citing their work when it is used, contributing to the conversation themselves at the appropriate level, and acknowledging the contributions of various materials and authors to the field while recognizing that no one person or item has all the answers.

» Dispositions

Learners should recognize that they are entering an ongoing conversation and seek the sub-conversations in their research area, understanding the responsibility that comes with entering this arena, and be ready to learn more before judging a particular contribution to the field.

Searching as Strategic Exploration

“Searching for information is often nonlinear and iterative, requiring the evaluation of a range of information sources and the mental flexibility to pursue alternate avenues as new understanding develops”

Like research itself, the narrower task of searching is iterative. There is a spectrum to the practice, with experts using more advanced search strategies and a wider set of resources than novices.

» Knowledge Practices

Students should learn to scope or define a search task appropriately to meet their information need. They should also learn how to move from scoping to constructing and refining their search strategy and efficiently managing the results of the search.

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» Dispositions

ACRL notes that students who are learning how to do effective searching should exhibit flexibility and creativity in their approach. As part of this outlook, they should recognize the value of browsing and of performing targeted searches. Students should also be persistent when trying to find materials that match their information need and ask for help when necessary.

Related Credo Resource: The ACRL Framework is a lot to absorb. For practical guidance on using it, see a [webinar](#) with Dave Harmeyer, Associate Dean of the University Libraries at Azusa Pacific University and Janice J. Baskin, a retired professor of English and communications at the same institution ([see the webinar](#)). Harmeyer and Baskin, authors of *Implementing the Information Literacy Framework: A Practical Guide for Librarians* (Rowman & Littlefield, 2018), describe how best to use the ACRL Framework when collaborating with classroom faculty.

AAC&U VALUE Rubric

The Association of American Colleges and Universities, guidance on IL, known as the AAC&U Information Literacy VALUE Rubric, is a set of rubrics produced by AAC&U that address ideal outcomes throughout an institution.

There are five IL abilities listed:

1. **Determine the Extent of Information Needed**
2. **Access the Needed Information**
3. **Evaluate Information and Its Sources Critically**
4. **Use Information Effectively to Accomplish a Specific Purpose**
5. **Access and Use Information Ethically and Legally**

The rubric includes four steps for each ability: Benchmark, Milestone 1, Milestone 2, and Capstone. For example, a student at the first level, or Benchmark, for “**Determine the extent of information needed**” exhibits the following problems: “*Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.*” An advanced student, meanwhile, will have achieved the Capstone level of this ability, which the rubric describes as “*Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.*”

The SCONUL Seven Pillars of Information Literacy Core Model for Higher Education

SCONUL’s Pillars concentrate more on what learners should know about research rather than what they should believe about the nature of knowledge. For example, the first Pillar states that students should be “*Able to identify a personal need for information,*” whereas the first Frame is “*Authority is constructed and contextual.*” Still, examining each Pillar shows some overlap between SCONUL’s guidance and ACRL Frames in that they both describe how students should think about research.

Designing a Program with Your Community and IL Standards in Mind

Below are the seven pillars. Since U.S. accrediting bodies focus on the Framework, the Pillars are presented here as background knowledge rather than a checklist for your new IL program. Note that they offer a ready-made plan for moving through a research project as well as one for structuring an information literacy class.

- **Pillar: Identify.** Able to identify a personal need for information
- **Pillar: Scope.** Can assess current knowledge and identify gaps
- **Pillar: Plan.** Can construct strategies for locating information and data
- **Pillar: Gather.** Can locate and access the information and data they need
- **Pillar: Evaluate.** Can review the research process and compare and evaluate information and data
- **Pillar: Manage.** Can organize information professionally and ethically
- **Pillar: Present.** Can apply the knowledge gained: presenting the results of their research, synthesising new and old information and data to create new knowledge and disseminating it in a variety of ways.

A Word on Design

An effective IL program targets areas of student need, instead of blanketing everyone with the same information, and matches the principles of design thinking, a movement that says the design process begins with identifying desired outcomes. With your IL program, the desired outcome is to fill gaps in student IL knowledge. Design thinking was pioneered by Rolf Faste, a professor of industrial design at Syracuse University and later, professor of mechanical engineering and director of the Stanford Joint Program in Design. Stanford University is still a leader in the movement, and its design school currently offers a [crash course in understanding design thinking](#).

The best source for studying the design-thinking approach as it relates to education is Grant Wiggins and Jay McTighe's [Understanding by Design](#). The book itself is well worth a read, but the following are some major points from it to keep in mind as you create an IL program.

Wiggins and McTighe explain that the central question to keep in mind when designing a curriculum is, “**how do we make it more likely—by our design—that more students really understand what they are asked to learn?**” (Their work delves into the idea of knowledge versus understanding—think of tiling a floor using only black and white tiles, they suggest—knowledge is the tiles, but understanding is the patterns that can be formed using them.) They note that the purpose of a curriculum is to facilitate student understanding of a topic, and they suggest a process of “backwards design” to create this understanding in your classes and materials.

Backwards Design

Backwards design refers to starting with a goal. When applied to education, it means that the designer must first clearly state what students who complete this curriculum should understand at the end, and how to assess that understanding. It might seem obvious, but Wiggins and McTighe emphasize a truth that sometimes gets lost in curriculum design—concentrating on what students need to learn is the important thing, rather than thinking about what instructors or librarians want to teach, which resources we would like to use, or which activities we would like to have students perform.

Designing a Program with Your Community and IL Standards in Mind

A few common issues illustrate how students can lack understanding, even when performing well. For example, in a [Credo webinar on faculty and librarian collaboration in IL instruction](#)², librarian Dave Harmeyer and English professor Janice Baskin noted that even when students adeptly create citations, they often don't know why they are creating them. Instructors concentrate on the penalties for not citing sources and other academic integrity issues, but often fail to address why it's important to give others credit. Similarly, students may know that they should use scholarly sources in their research papers, but when asked why, the only reason they can come up with is, "the professor says so."

As well as showing a lack of understanding from the students, the examples above show teachers concentrating too much on activities and box-checking. They don't discuss—or perhaps even understand themselves—the reasons behind the things they ask students to do. A focus on activities as ends is one of "twin sins of design" outlined by Wiggins and McTighe. Teachers must encourage students to think about the meaning of an activity rather than just complete the activity. The other "sin" is a focus on breadth of coverage to the exclusion of understanding. The authors liken this to a whirlwind tour of a country that aims to take in every sight, with no cultural understanding planned or gained. To avoid these and other pitfalls, curricula should be designed according to the following three steps:

1. **Identify desired results.** What should students understand after they complete IL instruction?
2. **Determine acceptable evidence.** How will you know that they have gained this understanding?
3. **Plan learning experiences and instruction.** Which activities and lessons will impart an understanding from which future learning might build?

Before we look at these steps in more detail, it's important to take stock of your current surroundings, as this is the context in which your IL program will unfold.

Design Thinking Best Practice: Have Some Empathy

Empathy for learners should be front of mind as you design your program of instruction. In this case, it means empathy for students who are learning how to use the library or to use library resources in the classroom. Depending on your faculty population, you may also consider empathy for faculty who aren't adept at research and/or technology use.

Think back to when you were a novice library user yourself, and consider this lesson imparted in Daniel Kahnemann's *Thinking Fast and Slow*. Experts believe that much of what they know is innate, even though they had to learn it at one time, and therefore find novices unintelligent because they lack this so-called general knowledge. Try to remember which part of using a library you had to learn (likely all of it). What was difficult to understand? What was scary? Can you identify an "aha moment" you had that you could facilitate in your own teaching? At each step of creating your information literacy program, view your work from the perspective of an anxious novice user, one whose grade depends upon mastering the use of a forbidding institution—the library—to find materials that might seem purposely hidden. Better yet, have some novice users test-drive your lessons as you create them. This can help you save time and help you develop lessons from the eyes of inexperienced user.

2 This webinar is available to members of Credo's free InfoLit Learning Community. To join, please visit <https://www.youtube.com/user/CredoReferenceVideos/playlist> and click on the orange "Register Now" button.

Designing a Program with Your Community and IL Standards in Mind

Look Around You

What Are You Already Doing?

Before planning any increase to IL efforts, make sure to take note of and effectively promote any existing IL services. For example, if you have a personal-librarian program in which librarians are dedicated to helping students in certain subject areas, remind students about that assistance. If you offer drop-in assistance at the end-of-semester paper crunch, make sure students know about that resource. Remind faculty about your services as well. For help with marketing your current efforts, see this handbook's section "[Library Marketing 101](#)." If you've promoted your current offerings as well as possible but student IL knowledge is still lacking, it's time for some careful, detailed planning to ramp up your IL work (or start it). A plan is not only necessary for checking administrative boxes, it creates a less-stressful ride. It's true that even the best planned projects can hit snags along the way, but documenting your actual path next to your intended one can help you see the points at which things went awry, where you would do things differently next semester, or where you need help from your colleagues or others.

How is Your Institution's IL Friendliness?

An effective, efficient IL program requires an assessment of your institutional culture regarding information literacy. Whether you have a program or are planning one, it is important to start by understanding the culture in which your work will unfold.

Where does your institution stand in relation to IL friendliness? At Credo, we hear from librarians with a range of institutional backup with regard to IL work. At one end of the spectrum there are librarians with virtually no support—their library has been left to figure out IL without input or buy-in from classroom faculty or the administration. Librarians at these institutions may benefit from flexibility in what they can teach and how they teach it, but that freedom is usually outweighed by a lack of formal access to classrooms and syllabi, and possibly a lack of funding. At the other end of the spectrum are those working in institutions that expect the library's IL program to fit into a wider plan encompassing multiple departments, levels, and goals. Most institutions fall somewhere in the middle.

You probably know your institution's stance toward IL, but do some detective work to nail down the details. You may be surprised at what you find and may even unearth IL champions along the way. Try to find out some of the following:

- Is IL mentioned in your institution's strategic goals? Was the library invited to the table when those goals were being written?
- Outside of formal, written documents, does your administration show that it finds IL an important part of education? Does your institution's leadership mention IL (even obliquely) and/or the library in speeches about what students can gain from an education at the school?
- Is there financial and other support for librarians' professional development? Are gains in library staff IL knowledge encouraged, supported (financially and otherwise), and acknowledged? Pay raises, promotions, and tenure decisions that take IL teaching into account are of course ideal, but even a verbal acknowledgment from administrative leadership that professional development in the area of IL is valued goes a long way.

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- Is IL a part of your students' experience outside the library? In which disciplines or classes, or with which faculty? Are faculty members encouraged by their deans or others to take advantage of the IL instruction available for their classrooms?
- Has your library had an IL program before? What happened to it? What kind of support (if any) did it get, and what can you expect in comparison?

If IL is mentioned in your institution's strategic goals, this is a big advantage as it likely means that other departments are also pursuing, or expected to pursue, IL education. Approach other student-support departments in your institution—the tutoring center, for example—and find out what they're doing. If you don't have much capacity for IL, or you're trying to ramp up your efforts slowly, offer to assist with existing IL-related work in those departments. Ask staff there to let students know the library has IL experts. Consider hanging flyers about library services in those departments so students can start to see the library as a place to go for IL-related assignments. Remember to document these efforts so that the library has evidence of what it is doing to meet the IL goals set out in the institution's strategic plan. This can be done before you have a formal plan in place for in-library or in-classroom IL.

Plan and Record Your Work Using Checklists

Atul Gawande's 2009 *The Checklist Manifesto: How to Get Things Right* (Metropolitan Books) offers invaluable advice to anyone undertaking an endeavor involving more than one step. Gawande, a surgeon, describes how the simple use of a checklist that everyone involved in a project must adhere to dramatically improves outcomes. The book describes improvements in surgery, construction work, aviation, and more. Gawande also outlines the relevant information in a *New Yorker* article, "The Checklist³."

Use a master checklist to plan each step of your IL program. Include steps such as "interview professors," "decide on learning outcomes," and "assess how the program is working." Each of these lists can have its own sub-list— If you are interviewing professors, for example, you could include tasks such as "find three science professors to interview," "set up coffee date with professor x," "contact the student professor x mentioned over coffee," etc. Adhere to your checklists, adding to and editing them when necessary. They will ensure no task gets forgotten and create a valuable record of your work. The "Task" list within gmail offers a handy way to create checklists that can have subtasks and there are other free apps for the same thing, such as Remember the Milk, Wunderlist, and Monday.

Even if IL is not specifically mentioned in the institution's formal goals, don't get discouraged. When the institution's plan is up for revision, make sure your voice is heard. In the meantime, try to get institutional recognition for your IL planning. At departmental meetings, be prepared to talk about how the library is planning an IL program and that faculty and administrative input is welcome. (For stats that can bolster your elevator speech, see this handbook's "Library Marketing 101" section). It should quickly become apparent who will be behind your cause; these early supporters can host your first classes and will likely offer helpful preparation tips and feedback. For now, don't focus on those who don't see the value of an IL program—they will come later.

3 <https://www.newyorker.com/magazine/2007/12/10/the-checklist>

Designing a Program with Your Community and IL Standards in Mind

Attendance at faculty meetings can help you to ascertain which faculty members are already offering IL instruction in their classes. Find out which methods these faculty members are having success with, if any. Faculty may have something to teach librarians here, as they often have the training in instruction methods that we lack. Which effective teaching methods and activities are they using? (Remember, their methods of instruction should increase student understanding, not just train them to complete certain tasks.) Can these successful strategies be adapted to work in other classes? Would they be willing to collaborate during an IL session, allowing you to do a library resources mini-lesson?

Even if the above options are out, it's helpful to know which professors are IL friendly and have already started IL work with their students. If your science students, for example, are already getting a solid in-class grounding in searching PLOS, you'll only need to briefly mention it in your work with them before concentrating on other resources and issues. (Make sure that the grounding is genuinely solid, though; the faculty member may believe that mentioning a resource is enough, leaving students at a loss for how to use it.)

Overcoming IL Language Barriers

While you're looking around your institution for examples of IL, don't forget that some of it may not be called IL. Library jargon isn't universal, and there may be examples of professors using IL concepts but in other terms. This phenomenon is tackled in a recent paper by Deborah A. Murphy⁴ in which she explains that, "librarians are an essential part of the diverse community of campus stakeholders focused on student success. Establishing a mutually understood and shared foundation of concepts is critical if we wish to collaborate successfully with these stakeholders on assessment projects and ultimately integrating Information Literacy into campus learning outcomes and student success goals."

Murphy's paper offers a case study of a program aimed to foster undergraduate success at the University of California, Santa Cruz. Beginning in 2011, the program became assessment-driven and aimed to expose students to common IL language throughout the school. A problem emerged when librarians and faculty began working on a related plan of action together, however as, the terms librarians and faculty used to discuss information literacy were very different. The project team worked around this by agreeing upon a set of shared IL terms, which they [made available as a glossary](#). This resource is worth sharing with your own faculty as you discuss IL, as you may unwittingly be using different terminology.

Look Back

In order to avoid reinventing the wheel, find out what IL efforts, if any, your library offered in the past. This is where staff with long institutional knowledge can be invaluable. What did the previous program offer? Why was it abandoned, and are those factors still an issue? If the program exists, but at a reduced size, what was the reason for downsizing? What was and wasn't successful? Make sure to account for changes in the institution and in student needs when you're assessing what to keep and what to leave behind from the previous version. If the old program operated so long ago that it didn't include digital literacy, for example, it obviously can't be revived without an overhaul. Differences in your population will require

4 Murphy, D. A. (2017). Dream of a common language: Developing a shared understanding of Information Literacy concepts. UC Santa Cruz: University Library. Retrieved from <https://escholarship.org/uc/item/8fd4662m>

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changes to a previously existing program as well. For example, if your students now mainly come from a community college rather than straight from high school, you'll have to adjust the program accordingly. Or if your institution has recently started to offer health technology programs, like many other institutions, you'll have to account for health students and their curricular needs in your planning.

How Are Your Students' IL Skills?

In recent decades, there has been a paradigm shift in education. It is now considered crucial to show what students have learned, and library science literature reveals an emphasis on “outcomes” rather than “outputs” (see, for example, Martha Kyrillidou's 2002 paper in the *Journal of Academic Librarianship*, “From Input and Output Measures to Quality and Outcome Measures, or, From the User in the Life of the Library to the Library in the Life of the User”).⁵ The outputs are still used—students are still widely expected to do research papers, for example—but there is an emphasis on the learning gained through the process rather than solely on the quality of the paper itself. These days, important outcomes include being media literate and being able to discern disinformation (widely called “fake news”). The “outcomes vs. outputs” paradigm is similar to Wiggins and McTighe's emphasis on understanding rather than absorbing masses of content or doing fun but academically pointless activities.

The outcomes your students are already capable of will guide which outcomes you plan to teach in your new program, because there's no need to teach something students already understand. Unless your population commonly comes to you from local institutions with solid IL programs, this won't be a worry. Most students need all of the IL instruction they can get and need to have the same concepts reinforced and built upon over time. Even if you can't forego large chunks of material, you may gain enough from a pre-planning assessment to tweak your teaching so it emphasizes some concepts more than others. You can also shape your curriculum to take into account particular local needs, such as the need to concentrate on a particular outcome your administration emphasizes as necessary but that wasn't previously a strong focus of your work.

If you have limited time, you can use the Pre-test provided in *Credo's Information Literacy – Core* to assess where students stand. This resource is available to *Information Literacy – Core* subscribers and is usually used as part of individual classes by a professor or librarian, but can also be used to gain a bigger picture of information literacy in your institution. For example, all incoming freshmen could be given the test to help you plan first-year lessons, or you could ask students at all levels of a given major to take the assessment to see which IL concepts are missing and necessary for students in that major. Additional guidance on setting up assessments is available from Syracuse University⁶ and Mercy College⁷.

It's often difficult to gain access to classes or students. When you're setting up assessments, try a professor who you know is already a fan of the library; it will usually be easy to convince them to give up some class time in order to help create a great IL experience for the institution. Try to push the envelope a little. Faculty members who are library friendly will likely

5 <https://www.sciencedirect.com/science/article/abs/pii/S0099133301002993>

6 <https://surface.syr.edu/istpub/11/>

7 <https://www.tandfonline.com/doi/abs/10.1080/10691316.2013.829363>

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impart more IL concepts in their classes and familiarize their students with the library more than professors who favor standalone classroom learning. Leaning on your champions may create a skewed picture of IL in the school as a whole, so try to engage some of those professors who are reluctant, using the statistics presented in this [Greater Western Alliance study](#) to convince them to give you classroom/student access. In short, the study shows that students who receive IL instruction have a higher average GPA and successfully complete more credit hours annually than students who don't receive such instruction.

If you can't get any class time, try informally inviting a faculty member to coffee so you can pick their brain. It's best to try a few professors who teach different subjects and different student groups, but meet with them individually so it doesn't feel like a formal meeting. If you haven't had a formal IL program before, your coffee companions may at first be unfamiliar with the kind of questions you're asking, so go easy on the library jargon. Frame the questions to concentrate on student work rather than teaching practices so the person doesn't get defensive. When you meet with your faculty for coffee, try these questions to find high-level trends and needs:

- **What are your students' strengths in terms of finding and using information?**
- **What kinds of skills do your students need help with?**
- **What's your goal for the students by the end of the semester?**
- **Is there a particular type of project that you'd like to get our help with? (This is your chance to mention discipline-specific resources at the library.)**

Where you find faculty members receptive to the importance of IL, ask if you can see a range of examples of student work (not just the good stuff!) in order to gain a better perspective on what the students at your school know and what they need from IL instruction and the library. Reading papers and other student work should give you a gut feeling for how to start creating your curriculum, but for a more structured approach, compare the work to the "steps" in AAC&U's Information Literacy VALUE Rubric. Ideally, you'll be able to tailor instruction toward the differing levels of IL knowledge you find among various student cohorts and majors. If you find that students in the same classes and majors vary widely in their grasp of IL knowledge, this could be an opportunity to try a flipped-learning model. Assign video tutorials from Credo's Learning Tools or other IL instruction to be watched outside the class to try to bring students to the same baseline.

Don't forget to include various student constituencies in your survey of IL knowledge. It's important to take into account the needs of all students including those who are taking classes online and students taking evening classes.



CHAPTER 3

Creating a Dynamic, Interactive Curriculum Across Disciplines

Creating a Dynamic, Interactive Curriculum Across Disciplines



Keep Marketing in Mind When Writing Your Curriculum

Even as you work on developing a curriculum, marketing your work should be included in your planning (for much more on marketing, see this handbook’s section “Library Marketing 101”). The curriculum you develop and the resulting gains in students’ abilities will form a major part of your library’s public image. Everyone you speak to when developing the curriculum needs to know how important this will be in the lives of students and in the success of the institution. If you run into a professor, be ready with information on how IL proficiency can help save class time. Students you encounter should hear about likely gains in their GPA from IL knowledge. Administrators can be told about the accreditation advantages of an IL program.

You’ll still have to market the program when it’s ready, of course, but laying a foundation of positivity toward IL along the way will help enormously. It also helps to think of marketing as you make program-content decisions. When you’re considering an activity for inclusion in your course, imagine “selling” it to students and faculty using details about how it will help them. If it’s not easy to describe why a program is right for a given need, consider moving that activity to a different part of the course or abandoning it for a better option. Since there are multiple ways to approach a given IL concept, find the one that resonates with your audience while imparting valuable skills.

Start Your Design Thinking!

From reading this handbook’s previous chapter, “Designing a Program with Your Community and IL Standards in Mind,” you now know the basics of design thinking, which recommends a “backwards” approach to setting up a curriculum. First decide upon the outcomes you want participating students to be capable of and the assessment methods you’ll use to find evidence of the outcomes. Lastly, decide which learning experiences will allow students to ace the assessments. Grant Wiggins and Jay McTighe, authors of *Understanding by Design*, emphasize that the outcomes you choose should require students to gain deep knowledge of the area they’re studying. Let’s look at the steps of design thinking as they apply to writing a curriculum (for a sample of how outcomes, assessments, and learning come together into a tangible curriculum plan, see the table on [page 29](#)).

Develop Desired Outcomes

Outcomes should be determined in terms of knowledge to be gained rather than specific skills. For example, an outcome could be, “Students will understand that authority is constructed and contextual,” which is one of ACRL’s frames. When you write an outcome, it should state a big, abstract idea, requiring investigation by students before they grasp it.

Start with a look around you. Are you already offering learning experiences that match the outcomes you’ve decided upon? Some of your lessons may already check the right boxes. Ask yourself, does this lesson work toward imparting a learning outcome that is important for my students? Am I using an assessment that really uncovers whether the student is capable of the outcome involved? If your answers are yes, there’s no need to reinvent a module of your work just for the sake of it. Keep what you can, but recognize where lessons fall short—where you can’t tell if students understand because there are no assessments or those in place measure the wrong thing, or where there are no lessons that work toward an outcome you’ve prioritized.

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A focus on outcomes means examining stories as well as data, and thus creating a comprehensive picture of what students understand, know, and can do after taking a course. Let's look at students who are in their last terms at community college as an example. After taking several IL classes, they may be capable of getting high grades on research papers, an indication of progress. It shows valuable information—they're able to follow through on commitments, find and synthesize information, and structure a paper according to academic requirements.

Looking at the bigger assessment story is also important. Can students move the skills they learned writing a research paper to another project and to the workplace? (Wiggins and McTighe quote educator David Perkins¹ as explaining that, “understanding shows its face when people can think and act flexibly around what they know. In contrast, when a learner cannot go beyond rote and routine thought and action, this signals lack of understanding.”) How many students at our hypothetical community college move on to four-year schools? How does that figure compare to before the school started an IL program? Do faculty members report that students better understand the research process? Can faculty include more-advanced topics in their classes or assign more-advanced research assignments since students have been exposed to IL concepts?

Identify or Develop Assessments

One size doesn't fit all when it comes to IL programs. What worked at one institution may need tweaking to be successful at another, because the students, faculty, and courses aren't the same. Within a school, students at different levels have different needs. For example, if your upper-level students have benefited from numerous one-shot IL sessions throughout their time at your institution, they might be familiar with some IL concepts and skills. Cohorts vary as well—it isn't safe to say that the students in this year's first-year class, for example, have the same needs as the previous year's entering class. This is why pre-learning assessment is important for setting a benchmark for your work.

The assessments referred to as part of Wiggins and McTighe's paradigm are post-learning critiques of how much students have absorbed. These must be carefully developed with learning outcomes in mind and investigate real understanding rather than the ability to complete individual tasks. The assessment will measure the appropriate level of understanding of the population taking the test or doing the assignment. While outcomes are broad, assessments are targeted.

Wiggins and McTighe advocate “authentic” assessments, with the term referring to various ways of making the assessment real-world; rote learning has no role here. Fundamentally, authentic assessment tests students' ability to understand and function in situations they may face outside of school and requires them to apply what they learned to novel situations.

For some of your learning outcomes, try Credo's quizzes to test student understanding. For example, if students are being assessed on their understanding of the importance of academic honesty, the “Academic Integrity” quiz included in Credo Instruct offers one way to measure success. Ideally, you should gauge understanding of a given topic at more than one stage and by more than one assessment type to achieve multiple levels of understanding and to test different student

1 “What Is Understanding?” in Martha Stone Wiske, Ed., *Teaching for Understanding*, 1998, p. 42.

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strengths. Some students do best when allowed to express lengthy thoughts, as in an essay; others do well in more high-pressure assessments, such as quizzes. To give everyone a chance, and best match assessments with the subject at hand, consider using various methods over time.

Students should be clear on why they are being assessed—not just to check a box on the syllabus but to ensure they understand important elements of a general education or of their major. They should also know which items are being assessed during a given test or assignment. Keeping this knowledge a mystery isn't productive, because students need to be partners in their education. This doesn't mean that every exam should be open book; rather, students should know the purpose of the exam and the range of material it will cover.

If you have to build your own assessments, consider guidance from *Instruction by Design*, in which Wiggins and McTighe recommend thinking like an assessor. To do this, ask yourself, *what will show that students have gained the desired understanding? What evidence will count?* For various IL-outcomes-based research assignments, see [Project CORA](#) (Community of Research Assignments), as well as "[Writing Information Literacy Assessment Plans: A Guide to Best Practice](#)," by Megan Oakleaf of Syracuse University. To adapt Project CORA and Oakleaf's recommendations for local needs, try an assignment charrette, a method of getting quick feedback on an item you're planning to use with students and to gain ideas from what others have developed. See the [National Institute for Learning Outcomes Assessment's information on charrettes](#) and consider similar meetings aimed at brainstorming assessments other than assignments.

Next let's look at how outcomes and assessments come together to inspire lessons building toward lasting, in-depth understanding. Starting at the beginning, we'll look at how to create a curriculum for orientation, then in first-year programs, and finally for discipline-specific classes.

Curriculum Ideas from Orientation Day to Discipline-Specific Work

Orientation

Orientation has traditionally been viewed as a casual event, but think of it as the first opportunity to impart your IL curriculum. Catching students when they're brand new is a chance to get your message across when it's most needed.

Below are two concepts to keep in mind:

1. **Successful Marketing Involves Letting People Know What's In It For Them**
2. **Every Learning Experience Should Start With An Outcome** (For more on marketing, see [chapter 6](#))

The following may be the outcome that guides your creation of a curriculum for orientation:

Students will have novice-level knowledge of what this library has for them and will know whom to approach for more information.

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Your orientation should reassure students that “the library is here for you,” an important takeaway as many students, especially those who are the first in their families to go to college, find the library intimidating. Combating library anxiety is essential to IL efforts—even if students are going to limit themselves to the library’s online resources, they have to see the library as a safe place to find answers to their questions instead of something walled-off and scary. To learn more about how to help students feel the library is their ally, please see a [webinar on the topic](#) by April Sheppard of Arkansas State University in which she discusses making the library a more welcoming place for faculty. Many of the tactics discussed by Sheppard are perfect for students as well.

Your orientation should also speak to what the library has to offer the new students (please don’t only talk about what they’re not allowed to do in the library!). Depending on the slot you’re offered during orientation, you can do anything from a short talk to a longer presentation with videos or a tour. Whatever you do risks being forgotten in the storm of information flying toward new students, so leave them with something concrete they can find later—for example, a branded library giveaway like a bookmark listing services and contact information. If you’re looking for a fun activity to introduce new students to the library and library resources, see our [FYE guide](#) or [ACRL’s Sandbox](#).

In the FYE Classroom

The above-mentioned guidance on developing an effective first-year experience program, [The Credo FYE Guide, 2nd Edition: Practices for Enhancing Instruction](#), may come in handy when deciding upon an IL curriculum after orientation. All first years need an introduction to their library, but some first-year students may need extra help. Look at the populations your school serves who need focused attention—if you have a lot of transfer students, for example, think of what they might need. International students and English-language learners are other groups to seek out, especially if they seem unfamiliar with American-style libraries.

Like in orientation, and in all student experiences, learning in the first year must be aligned with previously developed outcomes. As discussed, outcomes should be general, abstract, and refer to complex learning on the part of the student. While working toward greater student understanding, assigning precise, measurable learning outcomes means students at different levels, with different learning styles can work toward the same goal and have their progress measured with the same yardstick. Students who are at a remedial level when they enter college, for example, may need each skill taught separately, whereas those who are already somewhat familiar with first year-level IL skills can focus on higher-level research tasks or even take IL in a “flipped” way and work in class on more-advanced items.

Which outcomes should you choose? This depends upon the school, its population, and outside forces like what accreditors need to see. The school’s administration may have set its own outcomes as part of the institution’s strategic goals. Find out all you can about what is expected of your program by forces outside the library (if they don’t work toward real understanding of IL, try to get a seat at the table when the plan is being updated). Those externally imposed standards and outcomes are your starting point, but they don’t have to be your entire curriculum. Add to the outcomes to best serve your students, based upon the tips above from Wiggins and McTighe, from the [Credo FYE Guide](#), and from other supporting literature. One helpful document is this course outline from [Western Carolina University](#) that discusses many of the elements making up first-year programs.

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Using Credo's Learning Tools in Your Curriculum

The videos, tutorials, and assessments that comprise *Credo's Information Literacy – Core* address students' basic foundational information literacy needs and are therefore ideal for first-year classrooms. Freshmen who need remedial assistance will value the chance to practice their information literacy skills privately and at their own convenience. Depending upon the time made available to you, there are various options for introducing these and other learning materials you develop for freshmen students:

- Use the **Learning Tools** in class as part of a lecture or hands-on instruction.
- **“Flip” instruction**, assigning students the lecture portion of the class as homework, leaving more time for active learning time in class. Students enjoy online learning, but research has shown that “students report higher levels of engagement and learning at institutions where faculty members use active and collaborative learning techniques.”²
- Make *Information Literacy – Core* available for students to access independently outside of class.

Some features ideal for first years include:

Tutorials:

- Why IL Matters
- Information has Value
- Types of Sources
- Background Research Tips
- Source Types
- Choosing and Using Keywords
- Evaluating Information
- Synthesizing Information for Academic Writing

Videos:

- The Research Process
- Evaluating Sources
- How to Narrow Your Topic
- Writing Help
- Anatomy of a Research Paper

There are many benefits for librarians who use these materials. They allow librarians to spend time reinforcing the basics rather than teaching them for the first time. Librarians are able to engage students in more active learning, going deeper into information literacy content and tackling more complex and nuanced concepts. Authentic assessment becomes more feasible as librarians and faculty can spend more time working on assignments in class and applying what they've learned in a discipline-relevant context. Best of all, librarians who assign multimedia to teach the basics have more time to build relationships with students by supporting them through meaningful instruction and activities relevant to their class.

In addition to high-impact activities, librarians who use *Credo's Information Literacy – Core* can use the time saved to work more directly with instructors to integrate information literacy into their assignments and curriculum. With more time, and more active engagement with students, there's a bigger opportunity to show the library's strategic value and become more involved in the design of assignments and possibly even courses.

2 Paul D. Umbach and Matthew R. Wawrzynski. “Faculty do Matter: The Role of College Faculty in Student Learning and Engagement.” *Research in Higher Education*, Vol. 46, No. 2, March 2005 (2005) DOI: 10.1007/s11162-004-1598-1. <https://link.springer.com/article/10.1007/s11162-004-1598-1>

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To create a comprehensive IL education, try the various free online IL textbooks that are available. While you know your students best and will build the best curriculum for them, some sources to consider are the SUNY OpenTextbooks work [The Information Literacy User's Guide](#) and Michael Caulfield's narrower [Literacy for Student Fact Checkers](#). An excellent but not free source is William Badke's *Research Strategies: Finding Your Way Through the Information Fog*, now in its sixth edition. For a free taste of Badke's work, try his LibGuide "[Scholarly Inquiry and Research Methods](#)."

After First Year

Once students enter their sophomore year and thereafter, they are studying their major(s) in depth and require IL assistance tailored toward their needs and the norms of the subject in question. Ideally, librarians are part of the institution's curriculum-planning committee and will be able to partner with instructors to create curricula reflecting IL outcomes. Building relationships with faculty is a great way to make students library users. You might even get to the point where the professor automatically thinks of IL and library outcomes for students along with discipline-specific needs when creating a curriculum or automatically visits the library when it's time to plan for the next semester.

If this is not the situation, meet with faculty who request IL instruction in their classroom in order to discuss the class syllabus and the outcomes the professor has in mind. When your IL program is more robust, you can see where the "holes" are—classes that should be getting IL instruction and whose faculty need to be approached "cold" by you—see this handbooks' "Library Marketing 101" on reaching non-users of the library.

Even if they ask you to visit their classroom, some faculty members will have fixed ideas about what they want taught in an IL session and might think a one-shot session is enough. If this is the case, a broader approach that goes beyond "here's what databases the library has" can benefit them and their students. Be ready with discipline-specific outcomes, assessments, and learning ideas that could work within the syllabus and the discipline in question. If possible, show what you could do in a second or subsequent session if you were allowed the time. Discuss, using real numbers, how other classes at the institution have benefited from this approach. Discuss, too, how you're going to scaffold the instruction—in the beginning of the class (or using material students must watch or read ahead of time) you'll go over the basics of relevant material students have learned in previous years. For example, if you're teaching an advanced biology course that discusses how to find open-access science material, you could remind students about their learning from previous years. Various disciplines have their own "culture," which is relevant in this case because a familiarity with OA materials like preprints and alternative forms of peer review is essential to students of biology.

The table on [page 29](#), showing how to apply backwards design to an ACRL Frame, is adapted from *Learning by Design*. It brings outcomes and assessments together and follows them with possible learning experiences. Note that the various understandings, essential questions, etc. do not have to be made explicit to students, as the template outlines a pedagogical planning exercise, not a syllabus.

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This is just one example of a curriculum plan you could develop. To adapt the template to your situation, remember that outcomes are general and can work from arrival on campus to graduation, whereas assessments and lessons should be tailored toward a student's current level. For example, the suggestions on teaching students about the politics surrounding information creation could be adapted for first-year use by leaning less on the machinations of peer review and more on how to figure out who owns a website and how that might influence the material posted there. (One source that can show who owns a site is ICANN WHOIS, <https://lookup.icann.org/>).

Applying Backwards Design to an ACRL Frame

Backwards design asks curriculum writers to aim for deep knowledge on the part of those taking the lessons. In terms of information literacy, deep knowledge means that students should be capable of high-level outcomes such as those mentioned in the [ACRL Framework for Information Literacy for Higher Education](#), such as “identify the contribution that particular articles, books, and other scholarly pieces make to disciplinary knowledge.” Particular skills related to that “Knowledge Practice,” as ACRL terms it, include finding articles and books, figuring out which part(s) make a significant contribution to their field, and articulating what that contribution is. These skills are definitely things to cover in your program, but the knowledge demonstrated by these skills should be your primary concern.

An additional template by Wiggins and McTighe for designing a curriculum is available both in their book and on various education websites, including that of [Vanderbilt University's Learning Center](#), a site that also includes a video of Wiggins discussing his work.

This template is just one example of how a standard that is broad enough to use in various subjects and at various levels can help develop a curriculum. Remember that even where you are required to adhere to a given standard or guideline, it is a minimum requirement. Your work can go further than a standard or incorporate elements that are at the same level but are unaddressed by the standard writers.

The Ideas in *Understanding by Design* Applied to One of ACRL's Information Literacy Frames

STAGE 1: DESIRED RESULTS

Established Goals

Identify the contribution of particular articles, books, and other scholarly pieces to disciplinary knowledge.

Understandings

Students will understand that disciplinary knowledge changes over time, some publications expand disciplinary knowledge more than others, and publication is an important activity for academics.

Essential Questions

- In what ways does disciplinary knowledge change over time?
- Who causes the change?
- How is it caused?
- Who decides if a given publication is field-altering? How is new knowledge spread?
- Are there gatekeepers who control knowledge change and dissemination?

(For help in developing questions related to the sometimes-problematic nature of information creation, see Eamon Tewell's "The Practice and Promise of Critical Information Literacy."¹⁰)

Students Will Know or Be Able To...

Students will be able to find and recognize material relevant to their field. They will have knowledge of the kinds of publications most relevant to the discipline (e.g., conference proceedings and journal preprints are formats that science students need to be familiar with). They will know which titles and authors should be monitored for discipline-expanding material.

STAGE 2: ASSESSMENT EVIDENCE

Performance Tasks

Students must find recent items that are relevant to their field on the open web and in the library's books and databases. They will be tasked with skimming the material to find significant new information or previously known research that is examined from a new perspective. This can involve lateral reading "around" an item to discover what is being said about how groundbreaking and reliable it, the item the source appears in, or the author is. They will write annotations for five of these items, describing the content and stating how each one advances the discipline.

Other Evidence

Students will be expected to contribute to class discussions with examples of recent, discipline-altering research and other writings. Advanced knowledge will be demonstrated by ideas concerning next steps and/or new perspectives on existing discussions in the field. (For a look at assessment methods being used in academic libraries today, see Allison Erlinger's 2018 "Outcomes Assessment in Undergraduate Information Literacy Instruction: A Systematic Review."¹¹)

10 Tewell, Eamon C. The Practice and Promise of Critical Information Literacy: Academic Librarians' Involvement in Critical Library Instruction. *College & Research Libraries*, [S.l.], v. 79, n. 1, p. 10, Jan. 2018. ISSN 2150-6701. <https://crl.acrl.org/index.php/crl/article/view/16616/18453>

11 Erlinger, Allison. Outcomes Assessment in Undergraduate Information Literacy Instruction: A Systematic Review. *College & Research Libraries*, [S.l.], v. 79, n. 4, p. 442, May 2018. ISSN 2150-6701. <https://crl.acrl.org/index.php/crl/article/view/16600/18666>

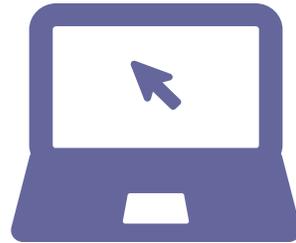
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STAGE 3: LEARNING PLAN

The following activities should be spread over a semester. Remember this is a content plan, not a syllabus, so you will have to integrate these ideas into your other learning objectives and into the schedule.

- Have students take the Credo tutorial “Types of Sources” and give them a tour of the library and web options for finding material in the discipline at hand.
 - » Bring students to the area holding the print works available in the discipline and introduce any subject-specialist librarians by name
 - » Give students a “tour” of the discipline’s digital presence at the library, including databases, LibGuides, and relevant institutional repositories
 - » Discuss which open access materials can be of use to them and how they can be found
- Have students take the Credo tutorial “Scholarship as Conversation” and discuss how they are learning to be part of a community of practice that has its own communication norms (for more on this, see William Badke and Robert Farrell’s “Situating Information Literacy in the Disciplines¹²”).
 - » Review email listservs that practitioners use where students might find announcements of new papers and ideas and later, jobs
 - » Explain what monographs, scholarly articles, conference proceedings, and trade magazines are and which ones to monitor
 - » Show students the Credo video “Peer Review,” and discuss some of the politics and controversies surrounding the process
 - » Give students the social media handles of prominent researchers, presenters, and institutions in the discipline; by following these people and groups, students will get daily information on news, concerns, and publications in the field. Make sure to include more than “the usual suspects” in your list; all students need to see people like them thriving in academia
- Show students the Credo video “Evaluating Sources” and discuss how to skim and otherwise quickly evaluate materials. See Swarthmore College’s “[Staying Afloat: Some Scattered Suggestions on Reading in College](#)”.
- Have students take the Credo tutorial “Annotated Bibliography” and watch the Credo video “Writing Help.”

12 Farrell, Robert and William Badke. 2015. “Situating Information Literacy in the Disciplines: A Practical and Systematic Approach for Academic Librarians.” *Reference Services Review*, 43 (2): 319-340. https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1079&context=le_pubs



CHAPTER 4

Teaching Information
Literacy Online



Teaching Information Literacy Online



The first edition of this handbook was released in 2018, well before we faced COVID-19. Back then, information literacy was taught in some online-only classes and some hybrid classes (classes that have in-person and online elements). So teaching information literacy online is not a wholly new experience for librarians and professors. Still, the situation in which we now find ourselves is unprecedented, as almost all classes except labs are now online only, and many of your libraries are closed or have limited hours. Suddenly, we're all forced to adapt to teaching and learning online to a much greater extent, and you can't tell struggling students to "come see me at the library." On the students' end, those with poor technology access or who dislike online learning for one reason or another, and who would not have chosen an online class before, are forced into the new mode, too. This new edition of our handbook therefore features the added chapter that you are now reading, which will discuss various methods of making online IL teaching as successful as possible, from shortcuts you can take using videos and webinars to creating community in online classes.

Since online classes are already underway, let's first look at ways to improve the social side of those and build, curriculum-wise, on what you're already doing. Later we'll get into bigger changes you might try in the long run, as all involved become more comfortable with the new environment. First, a reminder that the principles related earlier in this handbook, on designing learning experiences, still hold true.

Empathy is Crucial!

As discussed in, "[Designing a Program with Your Community and IL Standards in Mind](#)," empathy is an important part of backwards design, the approach we recommend for designing learning experiences. Backwards design means thinking about the learning outcomes you intend for students as the first step of creating your curriculum and your learning environment. Next you decide which assessments will let you know whether students have deep understanding of these outcomes. Then design a curriculum that will allow students to get that deep understanding. The developers of this path, Grant Wiggins and Jay McTighe, also recommend having empathy for students, perhaps a more nebulous part of their work than the outcomes—assessment—learning experiences steps. Empathy in education means doing your best to understand students' needs and the obstacles that they face in working toward understanding.

These days, empathy is even more important than before. Remember that everyone's having a hard time. Some of your students may be newly unemployed or have family members who are. They may be sick or have sick family members, and even if they don't, everyone's baseline level of stress has gone UP. It's a pandemic! So allow yourself and your students leeway that you may not ordinarily give. For example, can you record your online classes so that students can view them asynchronously? For students who are essential workers, this could enable them to still complete the semester.

Even students whose lives haven't been directly affected by COVID-19 are suddenly learning in a new way, and it's not for everyone. Don't assume that younger students will adapt to online learning more easily than older ones. It might be broadly true, but there are exceptions. Online you can't tell who's who anyway, so tell students that you have drop-in hours (see below) if they need extra help with research or some other aspect of their work that the library can address.



Dr. Nicole Campbell on Kind Practices for Online Instructors

In a recent Twitter thread, Dr. Nicole Campbell, a professor at Western University in London, Ontario, offered some [great tips for putting online students at ease](#). These ideas, such as not insisting that students switch the camera on and “Ask a question and try to find creative ways to pause without silence that are not distracting,” are easy and free to implement.

Before taking regular classes into account, let’s look at library input into orientation for new students, which is now largely online.

Online Library Orientation Models

Orientation might be one area of our “new normal” that’s better for libraries. Now, you don’t have to be invited to orientation and try to squeeze everything into a three-minute speech to overwhelmed first years. You also don’t have as much to cover if your school is online only as there’s no need (for now) to tell students how to use the physical library.

Try asking students who are further along in their journey what they wished they had learned from orientation and which parts worked well for them. Also try questions about your online presence: what do students think that those new to the school should know about your online materials and services? Try other librarians for advice too, both your in-house colleagues and on listservs and other online forums. ILI-L, the Information Literacy Instruction Discussion List, and FYE-List, the National Resource Center for the First-Year Experience and Students in Transition’s First-Year Experience listserv, are both great places to ask questions and find out what others are doing.

During your orientation, make sure to mention yourself and the other library staff as lifelines during online learning. The social side of our work is crucial to lean on as it’s what students are missing in this new landscape. Concentrate on introducing yourselves and describing how to get in contact, adding a relatively brief description of what the library has—you can get into that in more detail when the student gets in touch. Try listing a few ideas of when to contact the library: when you can’t decide on a research topic, when you can’t figure out how to get an article that’s listed on your syllabus, when your professor says you can’t use Wikipedia but that’s how you usually get an overview of a new topic, etc. It’s also helpful to tell students that the library can help with learning skills such as time management and other ways of succeeding in school.

Soft Skills in Films On Demand

Infobases’s *Films On Demand* offers some short videos that you can link to in online orientation to give students some grounding in the soft skills that will help them thrive in school. For example, see the Cambridge Educational set “Academic Success: Smart Tips for Serious Students,” which includes videos on time management, active listening and note-taking, and more.



Teaching Information Literacy Online

Try adding a [library orientation video](#) or LibGuide to your library website for students who missed orientation or just need more information about your materials and services. In a video, just as in person, reassure students that the library staff is there for them even when in-person visits are impossible. Tell students how to get in contact and leave them with links or directions (“see the links to the right of this video”) to further information. Some libraries have offered orientation for distance students all along, so have a look online for their [materials](#).

If your school is offering in-person sessions, are you able to meet students outside? Even before COVID hit, some libraries offered “tailgating” events to market library services. A library orientation tailgate could be helpful to students and is safer for staff and students than an indoor event. To learn about a similar event that followed a disaster, see “[A Library, a Tailgate, and a Tornado: Outreach Strategies amidst Upheaval](#),” which discusses an effective and fun introduction to Houston Cole Library at Jacksonville State University—one that was held in a tent because many parts of the school had been destroyed by a tornado.

[Penn State’s four-day online orientation](#) for the class of 2024 is likely more than most schools can manage, but you can always choose elements of their program that work for you. On the more compact side, see [Arizona State University’s library orientation LibGuide](#), which offers a handy “Why Use Library Resources?” explainer for new students. Are your students into games? See Credo’s [FYE Guide](#), for a description of California State University - Fresno’s Orientation Game.

IL Classes: Start Small by Building on Existing Work

There was little time to prepare for this online-only world before we all had to jump in with both feet. It’s likely that you will have to continue offering online classes with no break to step back and reconsider or redesign. Instead, look at what you and others are already doing that you can build on.

Create “Best Of” Videos

Have you had experiences “dropping in” to online classes that went well? Or have you had a whole class session to teach IL to students, akin to when students are dropped off at the library, and you found that students were engaged? Think about what went well and try to build on it. Look at all aspects of the session when considering why it “clicked.”

Was it...

- The content? A particular section of the content?
- How you presented the content—flipped learning of Credo or other multimedia that was presented to students before class and discussed together when you dropped in, for example? Games that allow students to have fun or feel challenged while learning?
- The tools you showed students—a particular database or website, for example, that they were interested in?
- How the professor taught IL concepts prior to inviting you in?
- The time of the class—time of semester, week, or day?



Teaching Information Literacy Online

These are just a few of the variables that you can look at and try to replicate. For example, if you find that second-year students pay particular attention when you show them that you have databases that can help them in their new majors, this is an area to concentrate on. Use a Credo video or make your own video that shows how to search databases, with accompanying text or verbal explanation on the databases you have in-house.

Our research at Credo shows that students prefer short videos; 1-3 minutes is best. Host these on your website and LibGuides, and give the link to instructors to drop in their online classes for students to watch as needed or as homework. Add closed captioning and transcripts so that your material will be accessible to everyone (Credo material already has captions and transcripts and we can provide instructions to our customers are creating multimedia of their own and need to add these elements).

If you have liaison or embedded librarians, consider asking each one to make a short video on how to use the online resources in their specialty area. Remember that your own videos or those by your colleagues don't have to show you on screen if you prefer not to be shown. You can narrate over a screenshare of your databases at work. Close each video with a slide listing how students can get in touch while the library is closed.

You can also get students involved. Sometimes, as you know, a particular student just “gets it” and is all over what you're teaching. Why not give that person a role in your video, or help them to make a video of their own? They can talk about how a particular resource or skill helped them in their work and offer their peers tips on how to get the most from it. It's a handy item for the student's own portfolio and other students are likely to respond well to advice from a peer user.

Offer Webinars on Popular Topics

Looking again at the variables above, consider creating webinars in which you present a topic that has proven popular in your online classes and invite related questions, broader questions about research or the library, or both. For example, let's say you've noticed that students have lots of questions when it comes to creating APA Style citations. Set up a time for students to join a group online call—using Zoom or whatever the school subscribes to—and give them a short demo of how to create three citation types: a book with one author, a website, and a journal article. Show them where they can find more information online, such as from Credo's tutorial on APA Citation Style. Then leave time at the end for questions about citations they're trying to create, and/or about library resources and services that they need information about.

During your webinars, if students are not asking questions, be ready with queries yourself that you preface with, “here's something I wish someone had explained to me when I was learning how to use APA style.” Or ask them questions to get the ball rolling. “What projects are you working on? The library may have online materials you haven't tried.” And inform attendees about future webinars and about any IL-related videos you made.

Note: If possible, set up any webinars or online classes with a password that you give out to students. This can cut down on the phenomenon of “[Zoom-bombing](#),” meaning when uninvited attendees crash the meeting and may post inappropriate content or behave inappropriately.



Teaching Information Literacy Online

Online Study Hall

Try inviting students to an online study hour, an open meeting where everyone's studying together. It might seem odd, but just the feeling of others "having their back" can be a boost. [Ryerson University](#) in Toronto conducts virtual study halls via Google Meet, with students spending most of the time working alone but also taking a short session with a learning specialist.

Regular Online Classes

Videos and webinars can only go so far—you also have to teach library classes and drop into other classes that are online. To develop content for these classes, [see Chapter 3](#) of this handbook, "Creating a Dynamic, Interactive Curriculum Across Disciplines."

There is plenty of advice online for teaching online classes--see, for example, Harvard's "[Best Practices: Online Pedagogy](#)," and the reading list presented by [Digital Pedagogy Lab](#). You know your students best, so pick and choose from among the various approaches and do's and don'ts. The various experts don't necessarily agree, so use your best judgement based on your school's population and the class at hand. For example, the Twitter thread cited above by Dr. Nicole Campbell recommends that students shouldn't be required to have their cameras on, whereas Harvard's advice recommends the opposite on the theory that it encourages a feeling of community.

Speaking of community, the major challenge that we at Credo hear from librarians at this time is how to create community in online classes. It is easy, as you know, for struggling students to quit school at the best of times. Those struggling students, and even those who did well before, risk getting lost in the online environment if the instructor doesn't succeed in creating an active community in both live classes and asynchronous interactions.

Some of the activities in Credo's [FYE Guide](#), [Second Year Transition Guide](#), and this [recent blog post](#) by librarian Raymond Pun can be used in online classes to help students become and stay engaged. Some of them are described below, as well as additional activities to try.

Use Credo's Interactive Quizzes

If you have Credo's Information Literacy – Core Product, use our quizzes as group exercises. They are interactive, which is key to engaging students in online classrooms. The quizzes are a mixture of types, and the drag-and-drop ones would be particularly good to use in live classes.

Take Polls of Student Opinion Using a Polling App

Our FYE Guide describes how Christina Holm, Instruction Coordinator and Ashley Hoffman, eLearning Librarian at Kennesaw State University broadcast a live webinar of orientation into multiple rooms at once, and students stayed engaged during the presentation by interacting with the presenter using a mobile polling app. This can be done in regular classes as well as orientation. Some webinar software offers polling, but you can use standalone products such as SurveyMonkey or Swift. Try for fun polls as icebreakers—a version of "Never Have I Ever" game, for example. Options related to online learning could work well to get students smiling—"Never have I ever attended class in my pyjamas," for example, with students answering yes or no.



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Have a Powerpoint party

PowerPoint parties are an old idea that has been given new life by COVID. [Bustle](#) describes these as events in which each attendee provides a short presentation on something they're interested in, and tells how to hold a PowerPoint party on Zoom. For a faster option, you could have students present TikTok videos--they're fast to produce and to watch, so are less like homework. Combine the party with a lesson on misinformation or another IL topic, with each student talking about or showing an absurd conspiracy theory or media item. Just keep it moving!

Book Displays

Students can't visit the physical library, but you can teach them about your ebook collection and have them practice searching it by asking them to create online book displays.

Share Library Experiences

Ask students to talk about library related experiences they've had in the past and connect those to your services. This is an activity described in Credo's [Second-Year Transition Guide](#), but it doesn't have to be limited to second-year students. For example, if a student talks about using the library to study in, you can mention the virtual study group(s) you've set up. If a student says they saw a cool library exhibit, talk about your online special collections. Negative experiences that students have had are an opportunity for you to talk about your positive service ethos and the ways your staff is there for students.

Meditation

This would normally happen in the library or a classroom, of course, but a guided meditation can easily be done remotely, and who doesn't need some relaxation now? You can repeat it when finals roll around.

These are just a few ideas to get you going—the point is, find whatever ways you can to make classes interactive and prompt students who haven't engaged to give the games and activities a try.

We've looked in this chapter at how to create short experiences, such as videos, and interactivity in longer classes, to make information literacy and online learning generally easier and more engaging for students. We hope that you'll find ways to use these ideas in your work, and of course to continue this great work once COVID is over. A better online presence for libraries could be an upside to this difficult period. Please contact us at Support@CredoReference.com if you'd like any assistance with using this guide or in using our products with your students.



CHAPTER 5

See Your IL Program Come to Life

See Your IL Program Come to Life



In order to implement an IL program, your curriculum, including assessments, should be in place. You should already know the outcomes planned for your students to achieve, how you will assess when outcomes are achieved, and the lessons you will use to get them there. If these steps seem backwards, that's on purpose! At Credo we recommend a “backwards design” approach to curriculum development. This means starting by deciding upon the outcomes you want for your students and working backwards to plan lessons. For more information on this approach, see Grant Wiggins and Jay McTighe's seminal *Instruction by Design*¹.

Your curriculum plan should aim to carry students from having little or no IL knowledge to in-depth IL familiarity, which includes the ability to find, analyze, synthesize, and report upon information related to general education classes as well as specific majors. Many libraries are only able to provide one-shot gen-ed sessions due to staff shortages and faculty reluctance. If you can do more than one-shots, there's a lot to figure out—how is the material best spread out and reinforced over the several years of college? Should it be presented online or in-person? Where do subject or embedded librarians come in? The possibilities can be overwhelming, but luckily guidance is available in IL-related journals. Below are ACRL-aligned maps of IL plans used by several successful programs, showing how they spread IL education throughout students' college careers.

ACRL's Best Practices on IL “Articulation”

In its best practices guidance,² ACRL has several recommendations related to structuring an IL curriculum. For an IL program to be effective, the organization recommends that:

- **Competencies Are Sequential and Integrated Throughout a Student's Academic Career, Progressing in Sophistication**
- **The Structure is Formalized and Widely Disseminated**

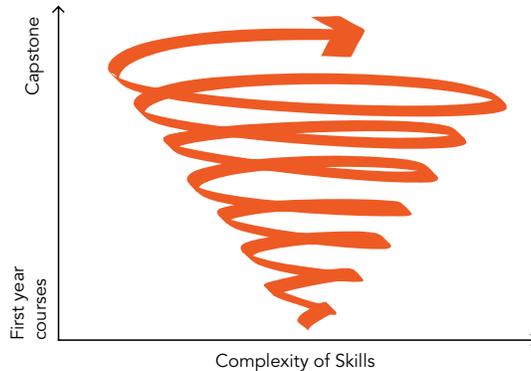
This is best done through a method called “scaffolding,” which means that each step of the teaching and learning process reinforces (by repetition) and builds upon preceding steps with increasingly complex ideas. For example, an early portion of your IL program might introduce the idea that their work should incorporate the ideas of others. In later sessions, and throughout the students' time in school, they will be reminded, through practice as well as explicitly, that they should include expert ideas in a paper. They will also learn how to find various kinds of sources in which expert ideas can be found, how to choose among those sources, read and analyze them, etc., with each step reiterating key points from previous steps. Scaffolding is a great way to meet accreditation requirements—the library portion of the institution's report can show how students are meeting benchmarks by taking various IL classes that each build upon earlier offerings.

The following diagram shows how scaffolding works, with the process illustrated as an ever-widening spiral. As time progresses (the vertical axis), the complexity of IL widens (the horizontal axis).

1 Wiggins, Grant, and Jay McTighe. *Understanding by Design*. Alexandria, VA: Association for Supervision and Curriculum Development, 2004.

2 Association of College and Research Libraries (ACRL), 2003. Association of College and Research Libraries (ACRL) Characteristics of Programs of Information Literacy that Illustrate Best Practices: A Guideline. Chicago, IL: American Library Association; 2003. www.ala.org/ala/mgrps/divs/acrl/standards/characteristics.cfm.

Articulation of IL: Continuous, Increasing in Complexity³



If you are using the ACRL framework or other guidelines that specify understanding rather than the ability to complete specific tasks, start with a foundational expression of each item and reinforce it over time, getting more complex with each “repeat.” Speaking in terms of the ACRL frames, this means that you shouldn’t introduce the frames one by one; rather each frame should be in operation at each stage of a student’s time in school, but expressed in terms of what they are currently working on. For example, with the “Research as Inquiry” frame in mind, over time, students can take the following lessons, which corresponds to the Credo Learning Tools videos shown:

IL SKILL	INSTRUCT	MULTIMEDIA
Identify information evaluation criteria	Beginner	Video: Evaluating Sources
Use essential information evaluation criteria	Beginner	Tutorial: Evaluating Information
Conduct in-depth evaluation of sources	Beginner/Intermediate	Video: Types of Bias

With the scaffolding approach, progressive IL instruction is more effective than one-shot instruction. While librarians are aware of this, faculty and administration may need to be educated as to why it’s in students’ best interest to receive progressive IL instruction over time. It is impossible to present all the material that students need to succeed in one lesson, let alone give them concepts they will need later in their education. Remind faculty of what they probably see in their classes; without reinforcement, students’ knowledge and skills can drift backwards, especially during long breaks —hence the dreaded “summer slide,” a phenomenon requiring faculty to repeat last year’s learning.

If more formal convincing is needed, see this handbook’s section on marketing, which covers statistics on increasing GPA rates and other measures experienced by students who take effective IL instruction. The marketing section also discusses techniques to promote the effectiveness of progressive IL instruction, especially if you’re facing opposition to implementing more than a one-shot.

³ Illustration is by Credo and inspired by Porter, J.A., Wolbach, K.C., Purzycki, C.B., Bowman, L.A., Agbada, E., & Mostrom, A.M. (2010). Integration of information and scientific literacy: Promoting literacy in undergraduates. *CBE Life Science Education*, 9(3): 536-542. doi: 10.1187/cbe.10-01-0006



See Your IL Program Come to Life

Becoming information literate involves many steps. In order to ensure all students graduating from a program have been exposed to all the necessary ideas and have had a chance to practice the skills involved, you will have to develop a formal plan. The plan (which can be tweaked over time as necessary) should “map” progress from first year to graduation, showing where IL appears in the various tracks a student can take. The expected outcomes must be stated, with milestones noted along the way. ACRL’s recommendation of a “formalized” plan means that faculty should have a plan in place to see students when they notice a need, instead of relying on random invitations, which are too haphazard and will likely result in some students and some concepts being missed.

Presenting IL concepts widely imparts the idea that research and other IL skills are useful in all areas of education. IL instruction is not just for English classes, and it’s not just for first-years. With backing from administration, you might even be able to go a step further and teach IL skills to faculty—perhaps at first during new-faculty orientation, and later in other situations like course-design institutes. You can present it as helping faculty with research for their own publications or teaching them the concepts their students will need.

As well as disseminating your in-person instruction throughout the physical institution, the wide dissemination recommended by ACRL means providing IL instruction online and in other remote ways such as phone assistance, texting, and Skype. Try to find out what communication method your students prefer and use most often, and don’t forget this will likely change over time. Especially if you have online-only students or when facing a situation like COVID-19, you will need to provide online IL classes that cover the same skills as your in-person presentations. Remember, too, that faculty who teach online classes may need IL assistance.

Online instruction can be either synchronous (live) or asynchronous instruction (lessons that students can take in their own time and at their own pace). Research⁴ has shown that students—not just those who take online classes—prefer asynchronous instruction. Credo’s Learning Tools are ideal for asynchronous instruction as they are designed for students to use alone as well as with a librarian or professor. You can also use services such as LibGuides to present IL tips and strategies students can use when they need help with a particular IL concept outside class.

- **ACRL also suggests local governance structures to advocate for and ensure institution-wide integration into academic or vocational programs.**

Loosely translated, this means the library needs a seat at the table when curriculum decisions are being made. Try to be included in departmental curriculum meetings and use the “elevator speech” approach to advocate for IL being part of curriculum plans. Come prepared with your statistics as well as specific ideas about how IL instruction can help in the subject being discussed. For example, if you’re meeting with science faculty, be prepared to talk about how students can learn to find and interpret traditionally published scientific literature and open-access and preprint documents, as well as understand what these different publication choices signify. With humanities students, you can discuss how Credo’s reference materials or other items can be used to get solid overviews of historical events. In these meetings, make sure faculty are informed about the academic-integrity aspects of IL instruction.

4 Nevius, A.M., Ettien, A., AHIP, Link, A.P., Sobel, L.Y. (2016). Library instruction in medical education: a survey of current practices in the United States and Canada. *Journal of the Medical Library Association*, 106(1). Doi: 10.5195/jmla.2018.374



See Your IL Program Come to Life

Moving up from departmental meetings, librarians should also be included in the school's curriculum planning committee. If you are invited and, as too often happens, allowed only an observer role, try to give members flyers or other handouts on what the library can offer. If you have Credo's Learning Tools, use these promotional materials:

- [Getting Started with Information Literacy – Core](#)
- [Information Literacy – Core Multimedia Aligned with Research Assignment](#)
- [Curriculum Mapping of Information Literacy – Core Multimedia](#)

People respond well to hearing how a product or service can help them in their work, so try discussing how the library's subscription materials can be used to create up-to-date, affordable-learning textbooks. Try using your database usage statistics to generate initial interest and following up with information on your IL-instruction services.

- **Finally, ACRL specifies programs and courses charged with implementing competencies**

You know how it goes. If someone isn't responsible for a task it doesn't get done. Make sure you specify exactly where and when IL instruction will happen, and assign tasks to keep track of different components. Identify where IL skills belong in general education and in programs, with the overall goal of having each student emerge after four years with the same kinds of top-level skills and particular competencies, flavored by the major they're taking. For example, each student will know how to complete a research paper, but science students may be familiar with one kind of citation style used in their field and social science students another.

Information Literacy VALUE Rubric

The ACRL Frames and other guidance that encourage mindsets rather than specific abilities can feel vague. If you don't need to adhere to the ACRL Frames or if you need a more concrete supplement to them, try the Association of American Colleges and Universities (AAC&U) Information Literacy VALUE Rubric⁵. The IL Value Rubric illustrates progress from an opening Benchmark of little IL knowledge ("Has difficulty defining the scope of the research question or thesis") through to a Capstone level of IL fluency ("Effectively defines the scope of the research question or thesis"). Remember that the foundational level may correspond with students who have completed their first year, especially where you have transfer students who have not take your IL instruction. Conversely, some first-year students may have prior IL knowledge. Be ready to tweak your classes on the fly so you can meet the needs of students at all information literacy-knowledge levels.

Start Small!

It's best to start small when it comes to staffing your new IL program and figuring out which classes to offer it to. At first, the librarians who have been most involved in planning the work, as well as the faculty members they've consulted with along the way, are the best teaching candidates. Once this group feels they've developed a solid foundation for growth of the program, you can include a wider array of librarians and faculty.

When starting off, it makes sense to concentrate most heavily on first-year students' IL needs. Many of the First Year Experience programs that have emerged in recent years are fertile ground for ideas. [The Credo FYE Guide, 2nd Edition](#)⁶

5 http://www.ala.org/acrl/sites/ala.org.acrl/files/content/issues/infolit/Framework_ILHE.pdf

6 https://www.infobase.com/wp-content/uploads/FYE_2E_CredoGuide_Final.pdf



See Your IL Program Come to Life

is a free resource that offers tips on all aspects of information literacy instruction for librarians who are teaching IL to first-year students. The topics help to form a checklist for planning your own rollout of IL services to new students on campus.

IL is still important after first year, of course. In serving sophomores, juniors, and seniors, you'll need to continue IL instruction in Gen-Ed classes while including it in classes covering the school's various majors. First, let's look at Gen-Ed classes.

Gen-Ed in First Year and Beyond

While each institution is different, below is general guidance on how to impart IL throughout a general education curriculum. For Credo Learning Tools users, the [Curriculum Mapping of Information Literacy – Core Multimedia chart](#) includes information on which Credo learning object can be used at each step.

If you are fortunate enough to have faculty who want to partner on IL assignments, this [annotated bibliography assignment](#) is a template for a scaffolded Gen-Ed assignment that is completed over several weeks. While the assignment directs students to create an annotated bibliography, its structure can guide the writing of various kinds of IL work. The assignment progresses in concrete, measurable steps, with each aligned with a stated IL learning outcome.

IL Instruction in Discipline Classes

The IL knowledge students learn in first-year Gen-Ed classes carries over and is reinforced when they choose a major in their second year and have discipline-specific assignments. They still need to practice finding, evaluating, and using information as they work with different kinds of sources and assignments in the style required by that discipline.

The Curriculum Mapping of Instruct Multimedia chart linked above offers a start on integrating IL into classes in students' majors. Given the variety of majors, accreditation requirements, and other local differences, it's impossible to provide a detailed map for how schools overall can approach IL in the disciplines, but helpful guidance is available from several sources. If your school has a nursing or other health science program, see our *Information Literacy – Health Science* material, which progresses through the curriculum of those kinds of courses, from understanding evidence-based practice to writing the kinds of citations required in science classes.

ACRL's "Information Literacy In the Disciplines"⁷ offers links to standards, IL research, and curricula in subjects from dance to political science. Librarians who are designing IL courses for public health students, for example, can find guidance from Arizona State University Library on how to formulate public health research questions, as well as a document from the Association of Schools and Programs of Public Health that outlines their vision for public health education.

Remember that instructors even in the fields you're not teaching in can aid in your program. For example, the SMILE course⁸, developed by faculty members from the Departments of Biological Sciences and Information Science at University of the Sciences in Philadelphia, helps biology students become scientifically literate. Looking at it more generally, the program shows how to integrate IL in a two-semester class, and offers steps for foundational literacy in a discipline.

7 <http://www.ala.org/acrl/is/acr-insild>

8 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2995771/>



See Your IL Program Come to Life

Below are the outcomes required by SMILE; It's easy to see how “scientific” can be replaced with other terms and applied to other areas of study.

- **Distinguish** primary from secondary scientific literature
- **Demonstrate** an ability to analyze and evaluate data in a primary, scientific article
- **Critique** the research protocol used by the authors or describe a research protocol to extend the research described in the paper
- **Use IL skills** to access, retrieve, and cite scientific literature
- **Reflect** upon the relevance of IL and scientific literacy skills to their academic career

Another approach, written in a 2015 paper by Robert Farrell and William Badke⁹, describes the “CUNY model” at work in the sociology department of the City University of New York’s Lehman College. The authors describe how CUNY embraces a “situated librarianship” IL model. “Situated” sounds like it might be another name for “embedded,” but there’s a difference. While it does involve librarians working in the classroom to increase student IL knowledge, like the embedded model, in situated librarianship when librarians enter the classroom, they are entering a community of practice that has its own culture. Those native to the culture know best how information is created, expressed, found, and evaluated in it, and the librarian is there to facilitate that work, not to tell practitioners how it should look.

A few important points to consider from Lehman College’s work:

- The librarians and sociologists co-designed a series of scaffolded learning opportunities for both required and elective courses, compared to the previous one-shot classes in two sociology courses
- “To ensure that the diverse faculty, both full-time and adjunct, teaching these courses were able to offer similar learning opportunities across courses and sections, the group decided that activities would be designed to be content neutral and modular.” This would allow faculty to customize the material while still meeting departmental goals
- In conversations with librarians, Lehman’s sociology faculty came up with over 150 discipline-specific learning outcomes, a result that the authors feel would have been impossible with an “outside-in” approach (in which librarians transport their IL knowledge into a theoretical “blank slate” classroom)

Farrell and Badke explain that they aren’t necessarily advocating that libraries drop their current approaches to IL. Rather, they say, librarians must find whatever way they can to give students learning experiences that are authentic to the discipline they’re studying and that allow them to join respective discipline’s community of practice.

If you’d like to learn more about Lehman College’s librarians approach with their sociology department, please see this handbook’s section on interviewing faculty to determine learning outcomes, in “Setting Your IL Program Up for Success.” Whether your college is just dipping its toes in the water and asking for one-shot instruction in general-education classes or, at the other end of the scale, has a multi-year plan that includes faculty in scaffolded IL instruction, the library should be poised to lead the way, with your staff and resources central to planning and execution.

9 https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1079&context=le_pubs



CHAPTER 6

Library Marketing 101: Promote the Value of Your IL Program

Library Marketing 101: Promote the Value of Your IL Program



You have a new IL program and you need to get the word out about it. Where do you begin? The great news is that you've already started. Planning the program involved multiple people throughout your institution, so your marketing informally began long before any instruction was available. Along the way, you should have been delivering elevator speeches about how information literacy classes have been shown to increase students' GPAs and the number of successful credit hours they can complete in a year. Now it's time to inform your broader audience that the program is up and running. You've spent time and energy—not to mention funds—on this work, so let others know about it!

Marketing is most effective when you clearly communicate to potential users what you and your resources can do for them. Think of when you're writing a cover letter for a job application. The letter is a marketing document about yourself. You focus on how your skills and experience will help the company, not just what you can do overall or why you need the job.

Library marketing is the library's cover letter. It allows you to tell students, faculty, and others about the materials and services the library has and how those materials and services can help them to teach better or learn more easily. Your communication shouldn't just describe what the library has, nor impart the idea that library use is a good idea generally. It should mention specific benefits to the reader of using the library's materials and services. Positive statistics relating to students at your own institution are best, but before you have those, a 2017 study by the Greater Western Library Alliance¹ provides helpful numbers to include in your marketing efforts. The consortium's survey of 42,000 students in more than 1,700 courses at 12 major research universities includes some heartening news. At the universities studied:

- **Retention:** Retention rates were higher for students whose courses included IL instruction.
- **GPA:** The average first-year GPA for students whose courses included IL instruction was higher than for other students.
- **Credit Hours:** Students who took IL instruction successfully completed 1.8 more credit hours per year than students who did not.

In Defense of Marketing

Some librarians express ambivalence about marketing, perhaps because it sounds more corporate than scholarly. Consider this though: without marketing your program, your users won't know about the resources and services their tuition and tax dollars pay for. You don't have to call it marketing, but you do have to get the word out.

Start your marketing initiative by thinking about why you created this program, who it will help, and how it will help them.

1 Greater Western Library Alliance (2017). "The Impact of Information Literacy Instruction on Student Success: A Multi-Institutional Investigation and Analysis." <https://www.gwla.org/about-gwla/Announcements/greaterwesternlibraryallianceissuesetheimpactofinformationliteracyinstructiononstudentsuccessamulti-institutionalinvestigationandananalysis>



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Why Did You Develop Your IL Program?

Take a moment to consider why you created your IL program, and be ready to explain your motivation to others—enthusiasm about a project is contagious, and you can't be enthusiastic if you're unsure of why you're doing the work.

Has the recent emphasis on disinformation made you prioritize information literacy? While “fake news” is sadly nothing new, its growth creates an opening for conversations between librarians and faculty who were less enthusiastic about IL in the past. Describing your concerns about disinformation and your plan to combat it is something those outside the library can identify with.

Perhaps your institution is pushing information literacy as a graduation goal or needs an IL program to satisfy accreditors? While starting an IL program for these reasons might feel like box-checking, institutional pressure provides a chance to get institutional buy-in for your efforts. Contributions to these “outside” goals place library work in front of a larger audience.

Underuse of the library is another reason to start an IL program. You know your library has valuable resources collected with your institution's population in mind. You just need to get students in the door! An IL program can help boost your circulation and student success at the same time.

Whatever your motivation, attach a precise goal to it. This approach is recommended by library marketing expert Terry Kendrick. “The first step in creating any marketing plan is knowing what your ambition is,” noted Kendrick in an *American Libraries* interview². For example, if meeting accreditation requirements is your reason for starting an IL program, outline precisely which of the accreditation agencies' requirements you need the program to meet and by when you will meet them. If better graduation rates are the goal, how many more students need to graduate in order for you to consider your program a success? Where disinformation is a concern, make a goal that student papers will, for example, include a certain percentage of peer-reviewed resources.

Who Will the Program Help?

While library leadership has its own reasons for starting an IL program, in marketing your work, you'll have to express how IL knowledge will help your community. Promoting a product or service is about telling potential users how it will benefit them personally. Be ready to get out of the library so you can outline the benefits of IL to future as well as current users of your program.

Administration

Make Your Case

Explain to your administration that information-literate students show better retention rates and other measures of success, which in turn makes the institution more successful. This kind of marketing has the benefit of alerting the administration to

2 Potter, Ned. “Marketing Your Library: An Interview with Terry Kendrick, Guru of Strategic Marketing in Libraries.” *American Libraries* November 12, 2012.

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the library's worth. Without data correlating library activity with carefully watched metrics such as test scores, retention, and graduation rates, the library can appear only as a cost. If you have an office of institutional effectiveness (IE) on campus, partner with them to present your data in the best light and get it into the right hands. The IE office is used to asking the right questions to showcase how student success has been helped by a given initiative or service.

Do Your Homework

If you have to present your data alone, prepare bullet points on the benefits of IL and connect the dots for administrators. Go beyond simply noting that students who take IL instruction show better retention rates. Bring up specific retention issues at your institution, and illustrate how your program will help. You might say something like, "Last semester, five students dropped out of the engineering program before completing their capstone project. Our new program will help students gain the skills required for this project before beginning their capstone semester; we'll also offer capstone students drop-in time as a further support."

Add Your Voice

There's no shortage of committees in academia, and membership in these is a way to market the library's work. When your administration calls for volunteers for academic committees, volunteer yourself or one of your staff. You'll have a voice in creating an IL-friendly school and be able to push your services at the same time.

Faculty

Give Them What They're Asking For

How often have you heard a faculty member mention that they wish they had known that you had that one, perfect resource (that you already have!), or that you could teach their students the ins and outs of citations? If you know a professor wants to implement a certain kind of project next semester, tell them how your IL program can help. For example, if a professor is planning to have students complete an annotated bibliography, say, "I heard you're trying an annotated bibliography this semester. Our new IL program can ease your load by teaching students about finding scholarly articles and how to evaluate them. Do you want to set up a time for me to drop into your class?"

In Credo's past surveys of faculty, students' inability to evaluate resources (especially online) always topped the list of IL-related frustrations. Effective marketing to faculty should state that IL instruction can help their students better discern reliable from unreliable material. Information literate students produce better research projects and other work, making it easier for faculty to teach course content and avoid an outsize focus on research skills.

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Remedy Common Student Misconceptions

Show faculty how your IL program can help correct students' misconceptions about research, making faculty members' work easier in the long run. A recent study by Lisa Hinchliffe, Allison Rand, and Jillian Collier³ of the University of Illinois at Urbana-Champaign revealed the nine most common such misconceptions. Their list is a ready-made marketing tool—provide it to faculty as a guide to what your IL program can “cure.” ([See here for a related infographic](#))

According to Hinchliffe, Rand, and Collier, first year students:

1. Believe they are supposed to do their research without assistance.
2. Perceive the library as only a place to get books or to study.
3. Believe that research is a linear, uni-directional process.
4. Believe that freely available internet resources are sufficient for academic work.
5. Think Google is a sufficient search tool.
6. Believe that accessibility is an indicator of quality.
7. Believe that they are information literate.
8. Believe that all library sources and discovery tools are credible.
9. Think that every one question has a single answer.

Given faculty turnover and changing course offerings, you can't market your resources to this population too much.

Credo's Learning Tools

Credo's *Information Literacy – Core* and *Information Literacy – Health Science* products include materials for professors explaining the importance of IL and how the Credo materials can help them in their work. Tell faculty about Credo's standards map, showing which elements of the ACRL Framework, AAC&U VALUE Rubric, etc. are met by which video or tutorial, and in turn by your IL program. Sending links to this material is particularly important for online faculty, who may be hard to reach through word of mouth.

Students

What's in it for Them?

First and foremost, make sure to tell students that information literacy can help them:

- **Improve their GPA**
- **Save Time Writing Research Papers**
- **Boost Their Employability**

3 Hinchliffe, Lisa Janicke, Allison Rand, & Jillian Collier (2018). Predictable Information Literacy Misconceptions of First-Year College Students. *Communications in Information Literacy* 12(1) 2018. <https://pdxscholar.library.pdx.edu/comminfolit/vol12/iss1/2/>

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Real stories of past students who have had success after IL instruction will help make the benefits tangible. Keep the stories short and include clear cause-and-effect details. For example, your tale could be about a student who was completing a project about criminal justice, learned how to use a related database, and told you how he got a better grade than on previous papers. Another example could be about a student who was thinking of dropping out of school but stayed after she received IL instruction that cut through the jargon and taught her how to find library materials that simplified what was difficult for her in class.

Peer-to-Peer Word of Mouth

Student workers can give a great boost to your marketing efforts. Whether they work in the library or in other academic-assistance areas in the school like the tutoring center, be sure to make student workers aware of your IL program and what it offers. They will likely become ambassadors for your work. Penn State University has a Research Bar that is staffed by well-trained students. Staff notices that visitors are more likely to seek academic help and advice from a peer than from a librarian because they find the peer less intimidating.

Secondary-School IL Instruction

Partner with local middle and high schools that “feed” your institution to ensure students arrive with a solid foundation of IL skills. This may mean that fewer remedial courses will be necessary for your freshmen, saving their families and the school time and money.

Parents

Make Information Literacy a Family Affair

Given today’s hands-on parenting and the cost of college now compared to in years past, higher education is often a family effort. Parents are eager to know what their child is learning and how their hefty tuition payments will help the child find and keep a job.

Reach out to parents via:

- **Parent Sessions at Orientation**
- **The School Newsletter**
- **Flyers Posted in High Traffic Areas** For Parents (e.g., the Bursar’s Office, Residence Halls on Move-In Day, etc.)

In your presentation or on your flyer, try swaying parents with information from Project Information Literacy (PIL). A 2017 paper by its founder, Alison Head⁴, noted that employers weren’t satisfied with candidates who relied exclusively on Google to meet their information needs. They sought curious and engaged grads who could perform patient and persistent research using multiple sources and formats. Create a chart for parents outlining employers’ needs and show how they are met by your IL lessons. Make sure to include contact information for IL assistance at the library.

4 Head, A.J. 2017. Posing the million-dollar question: What happens after graduation? *Journal of Information Literacy*, 11(1), pp.80-90. <https://ojs.lboro.ac.uk/JIL/article/view/PRA-V11-I1-4>

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Formal Marketing Efforts

So far we've discussed relatively informal marketing methods that largely target in-house users. In order to keep your program front of mind for users and to reach non-users, you'll need to go further. Large institutions might be lucky enough to have a marketing department to help promote library efforts, but most of you are on your own. The marketing strategies you should undertake depends upon your population and the resources you have available.

Market Segmentation

Market segmentation means identifying various subsets of your customer base and targeting them separately with information tailored toward their needs. For example, if you want to reach English faculty, choose a place where they can be found—their department's mailing list for example, a departmental meeting, or the noticeboard outside their office area. Don't bombard them with information that's better suited for students or faculty in other subjects; stick to news and resources for English teachers. Links to Credo's *Information Literacy – Core* and *Information Literacy – Health Science* can be sent as part of emails so faculty can view a video or tutorial, giving them a taste of what the library has to offer their students. You know the population best, so figure out what will grab their attention and elicit a response.

In each communication, mention only a few things and include an “action item.” In an email to faculty, for example, ask them to contact the library to set up IL lessons or to attend a session in which you'll address how the library can help with devising IL-rich assignments.

Even if your library has only one newsletter that goes to everyone, or all your marketing is done on your website, you can still engage in segmentation. At the broadest levels, your site could have pages for faculty and for students, or you could offer LibGuides targeted toward those populations. You can also get more granular in these broad-audience tools by addressing an article toward online students, for example, or potential users of a particular library database.

Here are some more best practices for your marketing communications:

- **Time your communications for when the relevant segment is available** (In the business world, marketers avoid sending communications on Mondays or Fridays.).
- **Establish regular contact with your various segments** (though not so regular that you're spamming them).
- **Remember that a resource or service might still be news to them even if you've had it for a while.**

Social Media

Today, your library is expected to maintain an engaging social media presence. Select your platforms based on what resonates with your users and what you want to post. At the moment, Instagram is one of the best places to reach young people, but that may change over time. Take advantage of social apps international students are using, including WeChat, KaKao, and Line that have yet to catch on in the United States. While Instagram is largely image driven and less suited for text, Facebook and Twitter work well for textual posts.

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Social media posts can be useful as you're planning your IL progress, allowing you to reach potential users and quickly receive feedback on your plans, as well as communicate progression in your IL program. Don't forget to let your followers know how you can help them in addition to asking for their opinions and ideas.

Here are a few tips to help you get the most from your social media strategy:

- **Post at regular intervals and stick with it.**
- **Don't only post about "yourself," or in this case, about your library.** Mix it up, sometimes offering info about your collections and services, but also sharing other interesting school-related or non-academic topics.
- **Follow your users back, as well as other libraries, librarians, and schools** so that you can get tips on IL instruction and see trends and ideas spreading among patrons and potential patrons.

For a great example of a compelling, informative library Twitter account, see Darien Public Library's feed, [@darienlibrary](https://twitter.com/darienlibrary).

Marketing Once the Program is Underway

The elevator speeches you gave while developing your IL program are still useful when the program is underway, only now you can include success stories related to your institution. For example, you're used to telling professors that IL instruction helps students to better complete research papers. Now, with permission from the instructor involved, you might add that ever since Prof. So-and-So's students came to the library, she notices them utilizing a much greater variety of sources and completing better citations.

After an IL interaction, follow up with the faculty member or students involved and ask about outcomes. Use follow-up questions to discern how IL knowledge has affected the student or faculty member personally. For example, if a student mentions they now have a better understanding about how to use databases, ask about what that improvement means for them: Less time per paper? Reduced anxiety about future work? Potential users of a service want to know what's in it for them. Hearing concrete examples can show them how they, too, might benefit from the service.

The various outlets you used while planning the program—social media, newsletters, speeches at faculty meetings, etc.—should remain in play after your IL program starts. Make sure people all across campus know about your upcoming classes, successes, new initiatives, and more.

Once your IL program has some satisfied customers, ask them to talk up your program. You might even be able to get some users to write about their experiences for your blog or present at new student orientation or an event where you're pushing your IL services.

Remember, however you choose to market your IL program, have a measurable goal for the work, tell users how the program can help them, and then do it all over again.



CHAPTER 7

Continuously Improving Your IL Program With Assessment Data

Continuously Improving Your IL Program With Assessment Data



In recent years, educational inputs (what material to teach) have taken a backseat to outcomes (what students know and can do). Assessment has accordingly become a buzzword among educational stakeholders from politicians to accrediting agencies, because in order to figure an approach out what students can do, you have to assess them. The AAC&U, for example, lists the following as some of the benchmarks against which its VALUE Institute members are measured:

- Robust and actionable assessment evidence that can be used by students, faculty, programs, institutions, states and consortia to enhance student learning achievement, as well as reporting for accountability and accreditation;
- An assessment tool that faculty scorers report as valid and useful metrics for evaluating specified learning outcomes¹

A thoughtful approach to the examination of what students know may be due to this pressure to measure everything. If done well, assessment can be as much about finding out how well a given set of lessons delivers the desired outcomes as it is determining who passes the class. Assessment can also prepare students for careers (happy news for parents, employers, and college career services!) by testing how well students can perform when solving problems in situations that mimic real life, a movement called “authentic assessment.”

The results of assessments may identify gaps in how information literacy is taught throughout an institution thus spurring curricular changes. The emphasis on assessment by accreditors happily means that information literacy is now often listed as a desired outcome in institutional-level documents such as university strategic plans. However, assessments may show that the plan hasn’t trickled to micro levels, such as in some departments or classes². If this is the case where you work, list the classes that lack IL instruction and need it. Use the information in the previous chapter, [Creating a Dynamic, Interactive Curriculum Across Disciplines](#), to set up a curriculum that ensures your accreditor sees its requirements fulfilled at all levels of the institution.

Authentic assessment takes time, as it aims to measure student knowledge. This approach can include in-depth assignments taking place over multiple weeks, a whole semester, or even multiple semesters. Qi Wu et al offer an interesting case of authentic assessment in which students at teaching-focused and research-intensive universities were evaluated to better understand their perception of assessment environments.³ Although not as popular lately, mini assessments, such as in-class quizzes, are useful to test discrete skills that students need to know and allow you to quickly pivot curriculum plans. Another type of assessment, journey mapping, examines the user experience in order to understand how to best help students. The end result of journey mapping is a customer story, a type of narrative data that can help you improve your services or plan new ones.

1 <https://www.aacu.org/VALUEinstitutemoreinfo>

2 Janet Pinkley and Debra Hoffmann. “Opportunities in Disguise”: The Continuing Evolution of an Authentic Information Literacy Assessment. *Codex: The Journal of the Louisiana Chapter of the ACRL*. Vol. 5 (1), 2017.

3 Qi Wu et al. “Formative assessment: missing in action in both research-intensive and teaching focused universities?” *Assessment & Evaluation in Higher Education*. Volume 43, Issue 7, Jan. 2018.

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This chapter will look at types of assessments and how the quantitative and qualitative insights gained from them can be implemented to improve your work. We'll look at quizzes (assessments that can be implemented immediately), more in-depth assignments, and journey mapping.

Context Matters

When you assess a student's level of IL knowledge, you're not just measuring what they've learned from the class in which the assessment took place. A student progressing through an institution where IL has been scaffolded across courses and into each year may bring multiple semesters of IL knowledge to an assessment. Being aware of what students have previously learned will add clarity to your results. For example, when an assessment of students' IL knowledge was conducted at the California State University, Channel Islands, they found the highest IL scores were among students in a class that didn't offer IL. While the finding was initially discouraging, they found the class in question included students who had previously taken more IL instruction than other students who were part of the study. [See here for more details](#) about the CSU's assessment study.

Quizzes and Skill Assessments

In *Test Better, Teach Better*,⁴ W. James Popham, Emeritus Professor in the UCLA Graduate School of Education and Information Studies, explains that assessment is designed to solve the problem that most of what teachers want to know about students is invisible. A student has to take a test, do an assignment or project, take part in a discussion, etc. in order for the teacher to gauge what knowledge has been imparted. However, any one assessment only measures how well the student knows the material on that particular quiz, assignment, etc. Popham's explains the purpose of assessment in the below "map":

Student's Overt Test Performance » Teacher Makes a Test-Based Inference About » Student's Covert Knowledge

One way the teacher can make a reliable inference about students' covert knowledge is to have them take multiple tests over time. While one test may not tell much, multiple snapshots of student knowledge add up to a more reliable measurement of how well the student is doing.

Pre-Tests

Giving students a pre-test at the start of a semester or a unit is another great way to tailor learning toward actual needs. **(Credo's Information Literacy – Core product offers a pre-test to customer libraries.)** In an ideal world, the results of the pre-test would be used to create custom courses for individual students. This is seldom an option, but it is still possible to adapt learning to individual differences by having students take more or fewer modules in the same course.

4 Test better, teach better <http://www.ascd.org/publications/books/102088/chapters/The-Links-Between-Testing-and-Teaching.aspx>

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This approach is described in a 2017 paper by Johannes et al, researchers at Germany’s Leibniz Institute.⁵

The paper by Johannes et al describes an information literacy class in which psychology students’ individual needs were addressed. After taking a pre-test, students were assigned online materials to read and were required to attend a single in-person seminar. Students were given recommendations about what portions of the course reading would fill the knowledge gaps revealed by their performance on the pre-test, though they could ultimately choose themselves which chapters to read. How recommendations were made were as follows:

The test items were assigned to the chapters of the online materials [...] Each chapter was assigned at least five items. When deriving recommendations, all items related to one chapter were averaged. If a participant achieved less than 66% of the maximum score, the recommendation was given to complete the relevant chapter. Chapters in which the participants were not deficient [...] were marked as optional. Drawing the line at 66% seemed appropriate, as there are always several equally effective ways to find information.

Students accessed the reading on the course LMS, making it possible to track who had read what. During the seminar, attendees worked on research that was important to their current classes, with the professor available to help if needed. The Leibniz study used flipped learning—it’s worth noting this is an effective approach in classes with varying ability levels. Students who already understand what peer review is, for example, can be told the relevant video or other item you assign on a topic is optional for them, but they’ll still need to participate in the class discussion that follows. (Of course, it’s best not to let the class know who’s in which group, for privacy reasons—nobody wants to be known as being in a group that’s behind.)

The research by Johannes et al shows that students react well to personalized recommendations for what to read outside of class. If your data shows that most students are at the same level, but a few students either need extra help, or conversely, more challenging material, recommend items for those students to read that meet their specific needs.

Short Assessments

If you’re looking for ways to help form your next instruction steps, try giving students short assessments about midway through your one-shot or individual class. These planned assessments should focus on what was just covered to keep students alert and help you adjust course if necessary. These frequent “formative assessments” were recommended by Karen Doster-Greenleaf, Instruction and Reference Librarian at the Dunwoody campus of Georgia State University Library in her presentation at the 2018 Georgia International Conference on Information Literacy. See [Doster-Greenleaf’s slides from the conference](#) for various ideas on short assessments that can work in time-crunched IL classes, and even more ideas in the [Authentic Assessment Toolbox](#) created by psychology professor Jon Mueller of North Central College in Naperville, IL.

5 Johannes Peter, Nikolas Leichner, Anne-Kathrin Mayer & Günter Krampen (2017) Making information literacy instruction more efficient by providing individual feedback, *Studies in Higher Education*, 42:6, 1110-1125, DOI: [10.1080/03075079.2015.1079607](https://doi.org/10.1080/03075079.2015.1079607)

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Credo Information Literacy – Core gives customers a handy set of formative assessments to use. The multimedia learning materials are interspersed with quizzes that can help librarians and professors gauge student understanding of topics such as the research process, the anatomy of a research paper, and academic integrity. The learning materials can also help students measure their own progress in a low-intensity way.

After students have completed the assessments, have a conversation with them (and gather whatever they completed for later, deeper perusal and, if applicable, grading). From the conversation you'll be able to discern what was difficult for them, provide more instruction on those topics, and direct them to relevant material to read or watch outside class as flipped learning. If they found some of the material easy, you can cut back on future in-depth coverage of it (though don't forget you'll still need to review the easy material later to scaffold upon it successfully). If students found some of that day's learning surprising or especially interesting, consider drawing upon that topic or the teaching method you used in future classes and even when addressing other learning outcomes with the same students.

In-Depth Assessments

In the previous section, we discussed short, formative assessments that can be used to shape teaching and learning during relatively brief interactions. Authentic assessment requires students to be able to tackle lengthy projects completed over weeks or one or more semesters—just like in the work world. Outside of authentic assessment reasons, research papers and similar, multi-step assignments are expected at the institutional and accrediting-body levels.

Final exams and other “end of term” assessments are “summative,” meaning they provide a summary of how well the student has mastered the learning outcome being assessed (assuming the assessment is effective). The best examples contain multiple parts taught over the semester, coming together to form a picture of that portion of the student's education. On a granular level, the teacher can take formative lessons from the summative body of work.

Let's look at an example of a summative assessment. A student is taking a humanities course and must produce a 20-page research paper at the end of the class. Ideally, sections of the research paper would be due every few weeks throughout the course. Below are some ideas about how to conduct your assessments:

- Ask the student to pick a topic and formulate a research question. This can be a formative step in that after the student selects a topic and creates a question, you can help the student pick reading materials, videos, and offer constructive critiques to improve the question. If the research question is fine as is, consider asking that student to pair with another student in the class who could use some help. If all of the participants need help, try a mini-lesson on how to formulate a research question.
- Credo offers a couple of great videos on this subject, namely our “How to Narrow Your Topic” and “Thesis Statements” videos.

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- The next activity could be for students to find, in a hands-on class session, scholarly articles they will consider using for the paper. The data from this assessment will be informal—the librarian will offer students help and feedback as necessary and suggest extra reading or multimedia on search techniques to students who need that assistance. The librarian may suggest a trip to the library or tutoring center for extra help.
- Other activities can include lessons and assignments building up to the finished term paper. These can look at how students organize their paper, edit, cite their sources, etc.
- The final, summative, assessment is the completed research paper itself.

How students do overall is another data point, of course, but from the library’s point of view it is more helpful for guiding future instruction than helping the students who earned the grades. How a given class does overall should help you make changes for your next class—which concepts to concentrate more or less on and which to move to a different point in the semester or to a different point in a student’s college career.

Summative data must be compared to institutional IL goals, if any, and to accreditation requirements. Where there are holes, use the data to create a plan for more comprehensive IL instruction. Do second year students, for example, show acceptable general-education research skills but struggle to do discipline-specific work? If this is the case, consider partnering with professors in the relevant discipline to create a curriculum. If they can’t make time for you, talk to students who are advanced in that major about what they wished they knew IL-wise early on in their study. If your summative assessments show significant gaps, consider a program targeting the students in question, such as a second year experience program. Since retention could become an issue if these students aren’t given enough assistance, include your data in a request for funding for this dedicated program.

Journey Mapping—What is It?

“Journey mapping” is a practice that has emerged from the field of [customer success](#), a new name reflecting what librarians have been about all along: helping customers do their best work using your products and/or services. Also called CX, customer success is related to user experience, or UX, another “it” term that came to prominence some years back.

To learn how to explicitly look at your work from a business point of view, try this [recent webinar featuring Jeannie Walters](#), Chief Customer Experience Investigator and Founder, 360 Connex. 360 Connex is a consulting firm that specializes in evaluating and improving what it calls “the customer journey.” If you replace the companies and customers with libraries and patrons in the webinar, you’ll see these ideas, while corporate, can easily cross over to our field, and assessment of the patron journey through library offerings can be enlightening to what is working well and what needs to be changed.

What kind of journey are you looking for when you assess your patrons’ path through your information literacy program? Walters believes a successful customer journey involves customer engagement, which leads to success. The most effective engagement, she says, is the kind that involves the customer being proactive, but also serves the company. An analogy would be a savvy student in one of your IL session that helps you become a better teacher. To create this kind of activity, Walters recommends “stepping into your customers’ shoes and understanding the experience they are actually having, which is not necessarily the one you envisioned or want for them.” Keep in mind their real life, she suggests. “This is not their job. They don’t want pressure. They want to feel success in the beginning.”

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In Walters' webinar, she advises having a plan of action for proactively checking in with customers in the first 90 days, as early days are crucial. This is like First Year Experience programs that connect and establish relationships with students when they first arrive on campus. Call customers that you know had issues in their first 90 days and find out what they would have needed to make things run better. In library terms, this means reaching out to struggling or failing students. Because of privacy concerns, you likely won't be able to find out by yourself who is failing, but if students self identify as failing or even just struggling, ask them not only what they need but what they feel is missing from their initial library and school experience.

Walters also recommends creating a journey map. This is distinct from mapping your processes, she notes. A journey map shows the customer's *actual* path through your offerings, while a process map shows your desired path for them. The steps on a journey map are high level. They include steps such as "satisfaction," "loyalty," and the ultimate, "advocacy," the happy situation where your customer becomes a champion part of your company or library's marketing team (we've all met those students and professors who become library ambassadors). A journey map should use "I" statements, to indicate the map is describing library experiences from the customer's perspective. Don't just go on instincts, says Walters. Seek customer perspectives, but don't force yourself to collect data on things you already know.

As always, when gathering data, respect how customers want to be communicated with.

Journey Mapping in the Library

Another webinar, with Alicia Lillich of the National Library of Medicine, describes the practical steps of creating maps of your patrons' experiences in the physical and virtual library. Lillich recommends the following steps to creating your map. The notes produced at each of these stages can go on Post-it notes that are laid side-by-side as you begin a draft map that you will later refine. The map will help you see areas of improvement, for example, where there are redundancies in your work or where things take too long. Best of all, says Lillich, the process of creating a journey map instills a user-centered focus.

Note: Where Lillich used "customer," we will substitute "student."

1. **Select a student to map.** You can speak to a particular student or group of students, but Lillich recommends the creation of personas, representative users whose experiences are documented by your journey-mapping team. Personas should represent the major needs of your most important users (see [usability.gov](https://www.usability.gov) for more information). At each stage of mapping described below, add any data you have available—for example, you may have completed quantitative and/or qualitative surveys about your population. Don't discount anecdotal data, says Lillich, who mentions that some libraries have only discovered major problems when they read about them in social media comments.
2. **Document, step-by-step, what students encounter** when they use your library.

Continuously Improving Your IL Program With Assessment Data

3. **Identify “touch points” and “pain points.”** These are what the customer sees or interacts with (referred to as “on-stage touchpoints”) and what happens behind the scenes to facilitate these encounters and interactions (“off-stage touchpoints”). For example, on-stage touchpoints may include getting help from an embedded IL librarian and getting library assistance about how to search a database. Off-stage touchpoints are the work the library puts into creating IL LibGuides and informing professors of IL resources and services that are available through the library. Pain points are touch points that create an issue—times when a student interacts with the library in a way that causes annoyance for them or may even make them leave the physical library or stop using your online services.
 4. **Add information about the students’ attitudes and how their needs and goals are affected by their experiences with your service.** There are several important questions to ask at this point. Why does the student feel this way? Can you identify specific steps that led to this moment? How did your staff and services contribute to this moment?
 5. **Identify problems and opportunities and prioritize them.** “Focus on the moments that matter,” says Lillich, advising librarians to first create a “low-resolution view” of your target students’ experience and then fill in the details.
 6. **Create a neat, visually appealing version of the map your team has brainstormed as you’ve worked through the above steps.** Your map should include a prioritized set of points at which your products and services can be improved or areas in which you need a new aspect to your service.
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After reading this handbook, we hope you’ve gathered some useful takeaways to help you begin an information literacy program at your institution or improve an existing one, ideas about how to promote your program to users, and tips for adjusting your program using reliable assessment data. To close, we’d like to wish you well with your current and future IL endeavors.



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