VOILA: Building an Assessment Tool Isn’t (Always) Enough
Stephanie Margolin
Philip Swan
Hunter College Libraries

About VOILA

The Hunter College Library created VOILA, an online tutorial and assessment tool, in the early 2000s over the course of approximately two years. It was created in response to ORSEM, a college wide freshman orientation program which was to include some library orientation and bibliographic instruction. Fearing a crunch on the library’s teaching capacity, this online tool was developed. Even though ORSEM was dropped a few years after it began, VOILA has remained geared towards freshman exclusively, through a required English 120 course. Currently, students enrolled in English 120 review the VOILA tutorials and take the quiz before meeting with a librarian for their scheduled instruction. In recent semesters, it has become apparent that the tutorial/assessment combination is no longer relevant. This past academic year, we reviewed both in order to determine how best to move forward.

VOILA was very much a product of its time. In the early 2000s there were many other online tutorials being developed by college libraries, most notably TILT at the University of Texas, Road to Research at UCLA, and SearchPath at the University of Michigan. The software needed to create the tutorials was easy to use, allowing non-experts to create the pages, and a web presence was considered virtually free,
which also made creating online tutorials attractive. Following the best practices of online education development, the assessment portion of the project was critical. In Hunter’s case, one of the project leads, Anita Ondrus, was an expert in assessment. In the first iteration of development, the assessment portion most definitely determined changes made both to the tutorials and to the arrangement of, and questions in, the assessment itself.

From the start, it was believed that this review would be an on-going and important piece of the process. In 2003, Dent noted, “The team working on the questions also decided that ongoing evaluation of the quiz and its effectiveness would be necessary.” (39) And in 2005, that idea was pushed further, “As a locally-devised information literacy assessment measure, VOILA’s most unique component is its long-term and rigorous review process. The Hunter librarians have learned how the routines of examining test results, comparing past to present year student performances, and reviewing and revising questions are a necessary part of test development.” (Ondrusek et al., 411)

However, more recently, the Hunter librarians are no longer actively and collectively engaging in these review routines. In the past decade, we believe that both the content and some of the methodology has grown stale. We agree with Swoger that “Making changes” is often overlooked in assessment and can include “adjusting teaching methodology, changing program structure, altering assignment requirements or working with faculty to devote more class time to library instruction.” (252) Based on our experience with VOILA, we have come to understand the very real challenge of how to make review of these results an integral part of our teaching plan; one that cannot be readily ignored.

As we began our review of VOILA, we had two key elements to work with: an historical question set (which we will unpack later in this paper) and over 10 years of assessment data. Our assessment data includes results and responses of 15,788 completed quizzes from 1208 sections, with scores ranging from 100% to 13% (average score of 78.6%). While there is a lot of data here, we are missing something significant: context. We have no evidence (quantitative or qualitative) of what was taught in the library or subsequently in the classroom to address gaps in student knowledge. Of what was taught, we don’t know what (if anything) worked. We don’t have any later assessment or evaluation of student work to see what students might have learned or retained in the long run.
As the pie chart illustrates, the distribution of questions, overall, seems out of step with current student needs. The focus on arrangement, for example, emphasizes print materials which, as we will see later in this paper, are often not the focus of our students’ needs. The only electronic materials represented are those found in the OPAC; these questions comprise 15% of the total. (Distribution data from Ondrusek et al., 393-4, 404)

As further evidence, we offer two sample questions, from among those most often missed by students (particularly current students).

(1) True or False? In Hunter Libraries, the biography of President Bill Clinton is shelved in the same section as the books written by President Bill Clinton.

(2) True or False? Hunter Libraries use call numbers on journals.

The first question, with its reference to President Clinton, feels wildly outdated. The question is also built on the assumption that students would look for something on the shelves, rather than looking for a book’s location in the library’s catalog. The second question, as we will discuss later, imagines students using print journals when a negligible percentage of our first-year students do so.

The overall question that we are considering is how has student research changed? Can we update VOILA to more effectively address those changes? In looking at the VOILA question set, we have examined three key themes that we believe speak to critical changes.
**VOILA presents the library as a restricted space with its own special language**

Beginning with the quiz itself, which is password-protected (and thus restrictive), often in VOILA we feel that students get a message of “Enter at your own risk.” Questions can be needlessly confusing, lending to this feeling that the library is a very tricky place where the uninformed patron can trip up very easily. For example, one question asks: “When magazines and journals first arrive in the library they are shelved in a section called (A) periodicals bound (B) new periodicals (C) periodical reserves (D) current periodicals?” Asking students to differentiate between “new” and “current” periodicals seems nonsensical when most librarians would consider the terms interchangeable.

**VOILA all but ignores e-resources**

In 2004-5, this was understandable. At the time, our library subscribed to 1,500 print journal titles, but today print journal titles have shrunk to 450 while our collection of electronic journal titles in full text has grown to 78,000, meaning that print titles represent only .4% of the periodical collection at this time. In addition, today there are a far greater number of resources appropriate for scholarly research that can be found online. Tools like Google, Google Scholar and Wikipedia have, since 2004, largely changed the way students (and librarians) access information. Today’s students arrive in their first bibliographic instruction session in a far different place, and with far different skills, than the cohort who arrived in 2004. As change is likely to continue at this brisk pace; we must have tools and routines in place to remain on top of these rapid changes.

**VOILA focuses on mechanics, but needs to move to critical thinking**

With questions like “Does the library use call numbers on journals,” VOILA focuses on the mechanics of information-seeking, rather than broader questions of why or how. Both the assessment questions and our own instruction need to move beyond mechanics to questions that encourage critical thinking like “How are journals useful in scholarly research?”

**Broader changes that need to be addressed**

Moving past the content of the questions, let us think about what else has changed in the last decade that might not be reflected in our tutorials or in our assessment. This is an opportunity to consider broader changes in library education – and in education more generally – as we consider what to do with VOILA.
Pedagogy has changed

From threshold concepts to critical information literacy, countless journal articles and conferences have been devoted to documenting changing trends in pedagogy and how those changes might be incorporated into our own instruction in academic libraries. In the study, “Academic 15: Evaluating library and IT staff responses to disruption and change in higher education,” provides a nice overview to the changes. They describe a “shift towards learner-centered pedagogy,” and note “increasing interest in flipped classes, blended learning, collaborative projects, interdisciplinary courses, and active learning.” They also find that, “Although some faculty still lectures, others are focusing on interactive, problem–based learning.” (Stephens et al.) These tie in with trends we have already noted, such as the movement away from teaching students about tools and mechanics, instead favoring work in the realm of critical thinking.

We have methods to better understand our students

We have found that VOILA makes assumptions about student knowledge that occasionally seem off the mark. That said, we do have sources of information that help to inform us of current students’ knowledge. When we staff the reference desk and chat reference, we often see patterns in what students don’t know (and sometimes what they do). We need to more effectively capture and share those patterns and let them inform our instruction. Similarly, in the instruction itself, we often get a clearer picture of where students succeed easily and where they fall off the rails.

We also have excellent research available to us, especially studies like Project Information Literacy (PIL). While these studies are national, and not specific to our students, they certainly give us guidelines that can inform our teaching. In a recent survey, for example, PIL found that, when searching for information for their own decision-making, students were most likely to use:

- Search engines, including Google
- Friends/family
- Wikipedia
- Classmates

(findings from Head and Eisenberg, Figure 2)
With this knowledge, we can take the opportunity to begin our instruction in places like Google and Wikipedia, build on what students know (and where they feel comfortable) and show them how to make the transitions to scholarly research.

**We can use a full range of assessment tools**

When it was created, VOILA’s developers were forward-thinking in their use of online tutorials and auto-graded questions. Students were able to receive immediate feedback on their work, the full system was online with no human intervention required, and an accumulating collection of data was relatively easy for librarians to access. However, now that the first flush of online tools has faded, we can again consider the broader spectrum of assessment tools, many of which can be adapted for online use, and which may better serve us, and our students. A review of recent literature shows other academic libraries using surveys, pre- and post-test combinations, one-minute papers, free-writing, and a Research Writers Journal, to cite just a few examples.

Further, while auto-grading saves time and builds a certain efficiency, in removing humans from the equation, it makes it easy for librarians to “forget” to review the assessments, both immediately before teaching and in the longer term. Quickly flipping through 25 one-minute papers, for example, keeps students’ responses to instruction front of mind, better preparing the librarian for her next class.

**We have a continuing need to collaborate with faculty in a meaningful way**

VOILA was built to support collaboration between teaching faculty and librarians. There is a faculty login so teachers can see how students in their section did on the VOILA quiz. However, the mechanics are clumsy, requiring a generic, but often-forgotten password and, more importantly, in recent years, there has rarely been specific follow-up between librarians and classroom faculty to discuss results and possible actions to take. In a single one-shot session, for example, we rarely take the opportunity for ongoing collaborative conversations that might extend library instruction back to the classroom.

Strong librarian-faculty collaborations have value for both parties, as well as for their students. Teaching faculty who value librarians as collaborators will pass that feeling of value on to their students who, in turn, will hopefully utilize the library more frequently and improve their research accordingly. A strong collaboration can also extend library instruction outside of the library and provide appropriate subject-area context while in the library. Ultimately, we librarians cannot forget that students are more likely to
become information literate from their semester-long work in the classroom (or their college career) than from one or two library sessions.

*We can use this tool with a broader range of our students (we’re not just English 120!)*

Despite the fact that Hunter College Libraries offer instruction in a broad range of courses across humanities, social sciences and sciences, and for both undergraduates and graduate students, our VOILA program has remained focused on freshman English. We need to make sure that any tools or assessments that we develop are relevant for our broader population of students. Additionally, we should seize the opportunity for longitudinal assessment. Ideally, we should be able to assess how well students are learning to do research over the entire arc of their time in college, rather than only addressing their research needs when they are incoming freshmen and are swimming in a world of new experiences where the ideas of proper research practice may get lost in the pressing needs of negotiating a new world among new peers and new surroundings.

**Lessons learned**

In conducting this analysis and related reading, we have been able to distill lessons learned into four distinct categories.

**Implementation**

As the title of our work suggests, merely creating an assessment tool is not enough; it must be supported by a multi-pronged implementation plan that will successfully stand alone, long after the librarians who developed it are gone. This plan must be incorporated into librarians’ busy schedules semester after semester and included in new librarians’ orientation. Ideally, implementing a regular review of assessment will provide several meaningful opportunities to review the teaching goals of the department and ways librarians can better integrate these goals into the overarching goals of the subject departments they work with.

First – and perhaps most obviously – such an implementation will improve our teaching, both in the short-term and in the long-run. A “just-in-time” review of student knowledge can help a librarian better teach his/her instruction session. Similarly, a post-session review helps instructors to know what did and did not work. In the longer run, a full-scale annual or biannual review can help all of the library’s teaching faculty to improve instruction programs more broadly. Teaching librarians can collaboratively review all of the results over time, in order to consider changes in the teaching program.
An ideal implementation could further support meaningful collaboration with classroom faculty. Together, librarian and teaching faculty can review what a section of students does and does not understand and plan for appropriate remediation. Such review is also an opportunity to look constructively at research assignments.

Context for our data
As we look ahead, we need more than one data point around our instruction programs. We feel a pre- and post-test cycle would be a marked improvement on what we have now. We like the knowledge survey model as a pre-test, believing that it would be a useful (and non-threatening) tool for all students who come for library instruction, not exclusively for first year students taking English 120. There are a variety of post-test options, and perhaps we will make use of a range of them, rather than determining a single best solution. In some cases, a one-minute paper might be best; in others, perhaps a re-test on the original knowledge survey. Regardless, it is important that we book-end our instruction in some way. This is not just an opportunity to measure library impact (though that might be a nice side result), but to start to see what students learn about information, where and how our teaching is effective, and also to keep an eye out for changes over time.

It is also time for us to consider some longitudinal models. In some cases, we might track where the students are at the end of the semester (this might be particularly useful in a course like English 120). In other cases, a pre- and post-test of some sort at the senior thesis or capstone level might help us to draw conclusions about students’ overall experiences of research and information-seeking as an undergraduate at Hunter (in the classroom, in the library, and even on their own).

Finally, it would be helpful to consider partnering with other programs or departments to build on the idea that information literacy is a critical aspect of students’ intellectual development, and that students can also learn these skills and concepts outside of the library.

New assessment options
If we are no longer tied to VOILA’s online quiz, we can look at the broader array of assessment options, as alluded to in the previous section. More options might enable us to get a more nuanced picture of our students and their needs – and perhaps take their classroom faculty into account as well.
Ease-of-use is critical

At a basic level, this is common sense: when we create a tutorial, it must be quick and easy to modify or to re-build from scratch, if that is needed. And we intuitively know that the same holds true for assessment. However, in looking deeply at VOILA, we see how important this step can be. An assessment must be flexible enough that users can update questions, or even change format if need be. It must be fast and straight-forward to review a single section’s results in time for a class, but also to compile multiple sections over multiple semesters to review more broadly. As we look at results over time, we should be able to ask questions like: as tool X becomes more prevalent, do students gain skills in related areas? And our assessment results must be flexible enough that we can compare our results with results of other assessments, including those outside of the library.

What are our plans for VOILA?

We approached this project asking ourselves where to go from here. Our present thinking is that we will keep the three tutorials that are associated with VOILA (“Virtual Library Tour,” “Do We Own It?” and “How to Use Call Numbers?”), re-packaging them with a few other home-grown tutorials that we have available. These could be used in flipped classroom settings, and also as supplementary materials for students and faculty.

We are definitely scrapping our assessment, in favor of something that better keeps with the themes that we have explored in this paper. We are considering a knowledge survey or something similar as a pre-test (before library instruction, and in lieu of VOILA), with one or more post-test options, at the discretion of the librarian. As we consider our assessment efforts, we also want to work with departments, where appropriate, to add information literacy components to rubrics for research papers and projects.

We specifically brought this “work in progress” to the CUNY library assessment conference with the idea our challenge was likely one faced by other academic libraries, not just ours. And we post our paper with the same thought in mind, and with the idea that others who have solved some (or all) of the challenges that we have outlined here might offer their solutions.
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Articles about VOILA


Works Cited


