

Targeted Research Guides to Improve Student Engagement

Joseph Taylor
Access Services Coordinator
University of Nebraska at Kearney

Author Note

Initial research for this proceeding was conducted while the author served as the Undergraduate Services Librarian at Kansas State University – Salina. Analysis of data and drafting occurred at University of Nebraska at Kearney.

Correspondence concerning this article should be addressed to Joseph Taylor, Calvin T. Ryan Library, University of Nebraska at Kearney, 2508 11th Avenue, Kearney, NE 68847, United States. Email: taylorj7@unk.edu ORCID <https://orcid.org/0000-0002-5762-6480>

Abstract

Research Guides play an integral role in library instruction and often serve as students' introduction to library materials and resources. While a majority of research guides are developed to be specific to a given subject or discipline such as Biology, English Composition, or History, evidence exists that supports the development of course or assignment specific guides. Guides developed in this manner provide students with resources and materials that aid in the completion of a specific assignment or course unit. These guides can be integrated directly into the learning management system to provide students with relevant information at the point of need. This paper documents a scenario in which such a guide was developed and used over the course of Spring Semester 2023 to provide business students with resources to complete a major course project.

Keywords: research guide design, libguides, course based research guides, learning management systems.

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Introduction

During the Spring Semester 2023 the author, while occupying the position of User Services Librarian at Kansas State University's College of Aerospace and Technology, was tasked with redesigning the branch libraries research guides and instructional material. Previous iterations of research guides were created using basic websites based on pre-developed templates through the hosting provider. The research guides had fallen into disrepair and had not been updated over several years and no longer reflected current course offerings. While redeveloping the research guides using SpringShare CMS provided by the Kansas State University's Hale Library, the author sought to make the new research guides more relevant to course materials and assignments thus improving student usage of the research guide and engagement with both course materials and library resources. The approach to research guide creation in this paper is more involved than the more widespread method of creating research guides based on general subject matter. The method is supported by an adequate body of research and evidence to support greater student engagement.

Literature Review

In 2011 Dana Oullette, then Information Services Librarian at Concordia University in Alberta Canada, conducted a student focused usability study of subject guides, also known as course guides, finding aids, or research guides. Oullette found that design is a contributing factor in how students perceive a research guide. Indeed, the results of this study indicated that a one size fits all approach to research guides does not appeal to students and that librarians should assess the need of students and faculty when creating guides (2011).

In addition to design considerations, Brewer, Rick, and Grondin maintain that guides must be introduced early in the course or assignment and that suggestions for regular updates to content should be obtained through regular student feedback (2017). With regard to content, a student usability study conducted at Cal Poly Pomona University Library found that librarians should be careful in selecting resources to ensure that they are relevant to students needs and reflect the directed activities of a specific course rather than a broader subject (Conrad & Stevens, 2019). It was also noted that research guides could contain too many resources and diminished student perceptions of guide efficacy due to information overload (2019).

In some cases, students may not even be aware of the existence of research guides, and it would seem that even among students who are aware of research guides, usage is relatively low regardless of class standing, academic level, major or college (Carey et al., 2020). While usage statistics may not be encouraging, it should be noted that students who use research guides have reported them to be useful (Brewer et al., 2017). It has been suggested that using the research guides in teaching sessions and during individual consultations may boost usage among students (Carey et al., 2020).

Manual matching and suggesting of research guides for inclusion in specific courses can enhance the effectiveness of library resources within the LMS and improve library-faculty relations while

seeking to improve student resource utilization within the course (Clever, 2020). The creation of research guide modules embedded directly within the LMS offers a particularly beneficial approach in that it places library resources into a system that students use and interact with on a daily basis (Karplus, 2006).

This approach for the direct integration of library content into courses provides students with seamless access to resources tailored to their curriculum needs. This method not only enhances the visibility of library resources but also ensures their relevance and accessibility throughout the learning process (Smith et al., 2023). In order for integrations of this nature to achieve success, it is crucial for academic librarians to engage faculty and student in feedback to enhance user experience and overcome challenges in organizing materials.(Gibeault, 2018).

Background

In Spring of 2023, a member of the business faculty approached the author to create a research guide for a strategic management course. The purpose of this course was to introduce students to the challenges of establishing an international business office in a foreign country, in this case, India. Students were required to provide an analysis of a given city or region of the country using evidence available through the library and outside resources. Students were then expected to write an evidence-based justification for their selected site of operations. The course instructor was concerned that previous students had simply relied on Google to gather information for the assignment. He wanted to find better sources through the library and the author suggested that the best course of action was to create a research guide based specifically on the project. The instructor provided a copy of the course syllabus and the assignment guidelines on which the author based the creation of the research guide.

Methods

The course guide was developed considering major portions of the assignment. Students were required to consider factors such as climate, local politics, transportation, education, and demographics. The instructor and the author agreed that it would be best to create portions of the research guide to reflect each one of these concepts and to include additional information from the local GIS. Within each of these sections resources were provided from a mix of available library databases, journals, and outside information from the government of India at the local and national level. The inclusion of Indian government-based websites provided students with real world information that was not readily available through academic sources. It also served to introduce students to the fact that internet connectivity is not always up to western standards and that they could experience interruptions in the country.

Distribution

The research guide was created 3 weeks prior to the introduction of the assignment using feedback from the instructor and suggestions from the author. Upon final revisions, the guide was quietly launched one week prior to the assignment. It was agreed that this was the best policy in order to account for any unforeseen errors and to fully evaluate the guide's features. A few link errors were discovered at this time and repaired or removed as needed. This also

allowed the author time to create video tutorials and walkthroughs for the guide that were embedded in the Canvas Learning Management System (LMS).

The guide was introduced to students through an information literacy session conducted for each of the three sections participating in the class. Students were introduced to the guide as a resource to assist in the completion of the assignment. The author briefed students on the resources to be found in each of the sections and how they might be used to find pertinent information. The author also provided information on the video tutorials and how to access them in the Canvas LMS. Students were also given the librarian’s contact information as well as instruction on how to set up a reference appointment if further assistance was needed.

Results

Initial use of the research guide was promising with well over one hundred views in the first week alone. By the end of the project one month later total guide views were at 757 which placed the guide in the top fifteen most used guides for the entire university system. The most used portions of the guide were the sections on Demographics, Politics and Education, and the guide homepage, which provided some background information on the nation of India and a brief explanation on the relevance of the site to the assignment. A chart of total page views for each section can be found below in Table 1.

Table 1

Total research guide pageviews for all three course sections over a period of 1 month.

Page Views 03/08/2023 - 4/10/2023		
Page ID	Page Name	Views
9598449	APA 7 Citation Guide	14
9597900	Demographics	215
9596847	GIS Information	61
9596846	Home	208
9598116	Politics and Education	136
9598313	Transportation	79
9598417	Weather and Seismic Conditions	44
Total Views		757

In addition to data collected through SpringShare Analytics for the research guide. The author was able to collect analytics from Canvas LMS. This information is significant in that it shows that roughly 50% of students accessed the research guide through the LMS rather than through an external link. See Table 2 below for more information.

Table 2

Canvas usage statistics for research guide divided by class. Online section is noted. All other sections were in-person.

Canvas LMS 03/08/2023 - 04/10/2023

Course Section SB				
Resource	Students Enrolled	Unique Student Accessed	Percent Accessed	Page Views
How to research for the Paper	28	19	67.8%	57
Section SA				
Resource	Students Enrolled	Unique Student Accessed	Percent Accessed	Page Views
How to research for the Paper	31	21	67.7%	74
Section TA - ONLINE				
Resource	Students Enrolled	Unique Student Accessed	Percent Accessed	Page Views
How to research for the Paper	30	16	53.3%	62
Totals	89.00	56.00	62.9%	193.00

Discussion

These numbers suggest that embedding research guide links in the LMS in conjunction with library instruction lead to greater use of the research guides rather than simply providing a link or integrating the guide through the LMS using a Learning Tools Interoperability (LTI) (Fagerheim et al., 2017). While there is a significant amount of research supporting the use of LTI to integrate research guides into the LMS, the LTI also tends to embed a subject or generic guide (Fagerheim et al., 2017). This can result in low usage due to lack of perceived relevancy and placement of the LTI link in the learning management system. The numbers provided by both SpringShare and Canvas LMS in Tables 1 and 2 seem to support the assertion that direct

embedding of the research guide into the LMS, supported by information literacy instruction, provides a viable strategy to induce student engagement with library resources.

The method described above provides a viable and replicable method for creating research guides that are focused on a given course or a major course assignment. In replicating this approach, the author suggests integrating a qualitative survey to gauge student perceptions of the guide and its usefulness. This would provide insights beyond mere statistics and could inform the librarian of improvements that can be incorporated in general and specifically within guide sections. As an example, the APA 7 Citation Guide, Weather and Seismic Conditions, and GIS Information were the least used portions of the guide. A qualitative analysis of these sections through survey or open-ended response from the students could yield valuable information on why these sections were not as well used as others. Results of the analysis may reveal the need to redesign these areas or even remove them from the guide entirely.

Conclusions

While general research guides and subject specific guides tend to be the most favored options for research guide creation, they tend to have very low usage numbers suggesting low student engagement with library resources. The method described in this paper suggests that the creation of course or assignment specific guides supported by library instruction and distributed direct integration into the LMS results in higher student engagement with the guides and library resources. Future studies exploring this methodology should incorporate qualitative measures to gauge student perceptions of the guide.

This study involved a very small number of students, 89, distributed over three sections of a single course. The methodology of research guide creation and distribution described holds promise as a means of improving student engagement with research guides and library resources. Further studies should assess the viability of the course or assignment specific guide method over a larger distribution of courses and students. Such a study would provide crucial feedback on the sustainability of this method.

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