Microlearning in Academic Library Instruction
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Overview and Definition

Chances are you have probably engaged in microlearning at some point. Ever take that short Lynda (now LinkedIn Learning) course? Follow a link on a blog to learn a specific skill? The term microlearning has as many definitions as there are types of microlearning due to the various contexts in which it is used. However, in most cases, microlearning refers to skill-based eLearning that is delivered in small chunks, which can be structured in units or individual activities (AllenComm 2019). Microlearning also provides a high level of learner control, giving learners the ability to set their own goals and learn at their own pace (eNyota Learning 2018). Microlearning has become commonplace for workplace and skills-based training, and this article will explore microlearning in libraries.

Why Do You Need to Know?

With the meteoric rise of learning platforms such as Skillshare, Khan Academy, Udemy, and Lynda (now LinkedIn Learning), folks around the world are able to access quick skill-based instruction at their fingertips. These courses are advertised by social media influencers, increasing the likelihood that university students will have at some point engaged in microlearning. Some microlearning courses also offer badges or certificates which transform them into micro-credentials allowing the user to keep a record of their learning activities. Given the popularity of microlearning and the nature of library instruction, it is worth investigating whether there are opportunities for academic libraries to embrace some of these principles.

Academic libraries have provided their own brand of microlearning for over a decade, everything from small flash tutorials to more complex interactive information literacy tutorials. Libraries are uniquely situated to provide microlearning opportunities on a university campus, given the numerous skill-based foundational activities that can be learned in conjunction with the deeper information literacy strategies outlined in the ACRL Framework. Therefore, microlearning can be part of an overall strategy for library instruction integration that allows for flexibility of learning, wider reach, and deeper classroom learning experiences.

Current Applications in Libraries and Higher Education

Microlearning can be adapted to a variety of formats, which allows creators flexibility to design a strategy that fits the needs of their learners or institutions. For example, microlearning may take the form of video tutorials, interactive learning objects, text guides, micro-courses, or more. Learner achievement can also be represented in a multitude of ways—from earning credit, certificates, and badges, to the achievement of personal professional development goals. The adaptability of microlearning allows for great variation in the reach and scale in academic libraries to match an organization’s needs and established infrastructure. The sections below will explore three separate academic institutions’ applications of microlearning.

University of Wisconsin–Madison

The Libraries’ Teaching & Learning programs collaborate with faculty and students to identify information literacy and research needs of both distance and residential graduate students. Needs
assessments revealed that students were eager for opportunities to engage with content they could complete at their own pace, revisit at any time, and personalize to create their own learning pathways. In response, we developed a strategy of creating general-concept microcourses that map to the Graduate School's academic and professional development goals for students, DiscoverPD, and discipline-specific microcourses for graduate programs. The microcourses are developed as open-access inventory websites, which are accessible to users around the world and allow for integration into the learning management system and other digital learning environments. We are also collecting assessment and analytics data in order to make regular changes to ensure learner success. This microlearning strategy has been successful and we are continuing to strategically expand our microcourse offerings.

Boise State University

Albertsons Library incorporated a micro-credential into the campus foundational undergraduate program. When faced with potentially losing our First-Year Experience instruction with access to about 3000 students a year, the librarians maneuvered their instruction into a required self-paced foundational information literacy skills course delivered via the campus LMS. Although the course is self-paced, librarians grade two student assignments as key artifacts in determining eligibility for certificates which contribute towards students’ final grades in the Foundations Course. Students must respond to librarian feedback and resubmit the assignment until the objectives are met in order to earn credit. Although this micro-course requires some coordination between librarians and faculty, the library now has a wealth of student performance data and Foundations faculty have noted a difference in performance in many of their students. These students have also reported that they prefer this independent, self-paced way of learning information literacy curricula.

Pennsylvania State University

The Penn State Libraries have led an innovative and successful microlearning program to meet the information literacy needs of students. The microlearning strategy was established after an analysis of information literacy practices at the university revealed that the lack of an institutionally required information literacy component led to a number of students receiving the same information literacy instruction in multiple courses or not receiving any instruction at all. Digital badging was identified as an instructional strategy to extend our instruction reach to more students, its flexibility to integrate into a multitude of courses through a variety of instruction modes (online, flipped, in lieu of in-person), and its integration into the established infrastructure of Badges at PSU. Penn State Libraries established their Information Literacy Badges at Penn State program in 2012-13. To ensure that students achieve the desired outcomes, librarians are involved in evaluating the student work and providing personalized feedback. Student and faculty feedback is also captured through a survey in order to continually improve the instructional materials. Since the launch of the program 4,600 badges have been issued. The future focus is on scaling the program with the implementation of further instructional technologies.

Potential Hurdles

Microlearning content is focused on a single concept or learning outcome. It is important that the creator does not attempt to cover too much content in a single microlearning object. It is better to break down a complex concept into microlearning chunks at natural breaks and then compile those chunks into a larger micro-course, micro-credential, or badge—that way, learners can choose where to enter or exit the content based on their needs (Trowbridge, Waterbury, and Subdoby 2017). Small chunks of materials are easily modified when changes occur. Depending on the format of the microlearning developed, it can be initially produced inexpensively and rapidly. However, it can require a large amount of staff production time to maintain materials. Particular skill sets may be required if you are using advanced software, developing a badging infrastructure, or incorporating it into curriculum. Libraries can incidentally end up building themselves into an expensive and maintenance-heavy microlearning model. To avoid creating unsustainable microlearning materials, librarians should avoid developing a large suite of resources and materials that can not be easily managed. Lessons can be learned from corporate and workplace publications due to their tenured experience with intentional microlearning for trainings. For example, the online professional community, eLearning Industry
emphasizes that one of the largest mistakes a creator can make is to skip conducting a needs assessment of the learners (Hunter 2018). Assuming the needs of our learners can lead to materials that miss the mark and are rarely used. It requires a well-thought-out plan and an identified individual or team within the libraries in order to implement microlearning successfully.

Conclusion

Microlearning has become an established instructional model for workplace training and independent learning, and within higher-education. The skills-based and point-of-need services that libraries provide to learners are ideal for the adaptability and reusability of microlearning. A barrier for instructional librarians has always been time, whether it’s the short time of a one-shot, not enough time in a semester to reach certain students or courses, or a lack of time in an instructor’s syllabus for in-person instruction. The ability for microlearning materials to be mixed and matched and completed at a learner’s pace, plus its flexibility to integrate into courses in a multitude of ways can alleviate some of the time burden that librarians face. The examples provided by the three different institutions highlight that the flexibility of microlearning can aid current instruction partnerships and extend librarians’ reach to engage with new students and audiences. Librarians play an important role in aiding students to achieve their academic and career goals and microlearning provides another avenue for meaningful and integral engagement.

Tools Discussed

Tools used to develop UW–Madison micro-courses

- Articulate Storyline 360
- Adobe After Effects
- Bootstrap
- PHP

References


Further Readings