

BEYOND CUT-AND-PASTE: CREATING INTERACTIVE ONLINE RESOURCES TO INTRODUCE FIRST YEAR STUDENTS TO ACADEMIC CITATION

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Abstract

Higher education students need to master the skills that will allow them to identify as members of an academic community, including the ability to cite the work of others and avoid the mistake of plagiarism. In order to address the high incidence of plagiarism among first year students, a team composed of staff and graduate students at The University of Akron collaborated to create interactive online training in citation and plagiarism, including multimedia, text presentations, and automatically-scored quizzes. This paper reports on the design, development, implementation, and evaluation of the Spring 2015 pilot project.

Introduction

The existence of an international conference on integrity and plagiarism is an indication of the need to address “the importance of academic integrity as a way of life and reinforce the relevance of academic skills in the real world” (Plagiarism Advice Team, para. 4). University students, in particular first-year students, struggle to master the skills needed to participate in academic discourse as members of a larger academic community. Appropriate use of source material and citation is central to developing college-level information literacy and a sense of belonging to such a community.

The skills needed to master citation and avoid plagiarism have always challenged first-year students, in particular international students and first-generation students who have not been exposed to the culture of academic discourse communities. Methods to impart these necessary skills to the first-year students at The University of Akron (UA), including the effectiveness of technology, have been discussed as part of the learning outcomes for the General Education curriculum. While it is a challenge to ensure that all university students are aware of the reasons for citing material and the consequences of not citing, such a challenge might be termed “solvable” as opposed to “difficult” or “wicked” in the terms of the 2015 *Higher Education Edition Horizon Report* released by the New Media Consortium (Johnson, Adams, Becker, Estrada, & Freeman, 2015, p. 2). Therefore, as a result of the campus discussions and the need for a solution, an interdisciplinary team of UA writing and technology professionals, along with four graduate students in Instructional Technology who were taking a class in Instructional Design, collaborated on the creation of an online tutorial to address a solvable challenge by providing training on citation and appropriate use of outside source materials.

This paper will describe our team approach to designing multi-faceted online training modules to introduce students to the expectations of academic discourse, use of appropriate citation styles, and issues related to plagiarism. The modules were structured to permit instructors and students in a wide array of first-year courses to master these skills using interactive activities created specifically to meet the needs of the university's diverse undergraduate population.

The Plagiarism Problem

The existing literature surrounding the discussion of plagiarism shows that there are multiple functioning definitions used in the academic community. These definitions cover a broad range from simple to complex. For example, the definition developed by Fish and Hura (2013) in their study of plagiarism at the university level asserts that "Plagiarism is representing another author's ideas or words as your own in course documents or electronic postings" (p. 35). The University of Akron's *Code of Student Conduct* defines student plagiarism as "student misconduct" with a plethora of serious ramifications for the offender (2015, p. 6).

It is important to note that definitions of plagiarism in higher education include both intentional and accidental plagiarism. Many educators have learned that adopting all-encompassing definitions broadens the idea of plagiarism to include all possible motives, creating the flexibility to meet the problem from various creative angles.

Voelker, Love, and Pentina (2012) make the excellent point that a large majority of the research assumes that students are fully aware of what plagiarism entails. Their studies have shown that students' knowledge of plagiarism is not correlated to their education level, as many educators believe, and therefore students can be largely unaware of when they plagiarize. This is known as *accidental* plagiarism.

As these definitions imply that the act of plagiarism can have multiple motives and a large, fluctuating scale of student awareness, educators have begun to address the problem of plagiarism with both deterrents and non-judicial education.

One of the most common modern plagiarism deterrents is plagiarism detection software, many types of which are available online, such as Turnitin.com. These websites have databases with thousands of articles and will check text content against the databases to search for copied (unquoted) or closely paraphrased material. One of the main advantages of these websites is that students are able to check their own work and the work of their peers, promoting academic accountability and peer feedback. This is particularly helpful in an age where most academic information is transferred through the Internet, and research is completed largely online. The rise of internet research has distorted the already-complicated issue of plagiarism and produced an entirely new, gray field of copyright and ownership. Evering and Moorman (2012) addressed this issue in their article on digital plagiarism, asserting that educators' responses to plagiarism must change with the times. As academia becomes digital, so must the review process.

However, this deterrent method also requires extra time and effort on the part of the instructor. As Kirsch and Bradley (2012) bemoaned in their study of distance education at the University of South Carolina Upstate,

The explosion of possibilities for plagiarism has turned the educational process into an investigation where instead of improving students' critical thinking and analytical skills, the faculty members have to concentrate on sleuthing and figuring out whether or not students plagiarize their work. (p. 80)

It is evident that the problem of plagiarism does not begin and end with the students' academic ethics or awareness. It creates a ripple effect through the entire community, which must then take responsibility to identify, hunt out, and catch plagiarism before it causes more damage.

This exhausting search has led many universities to include preventative measures of addressing plagiarism, implemented particularly through educating students about their actions and the serious effects of those actions, as well as the consequences.

Educators at Roosevelt University in Chicago developed an online module instructing students using lessons, interactive writing, and quizzes on proper citation and paraphrasing techniques in American Psychological Association (APA) style (Stetter, 2013). The module also had students define plagiarism in their own words before presenting a developed, functional definition. The purpose of this was to assess the students' comprehension prior to participating in and completing the course. For the purposes of their study on the effectiveness of the module, one group of students completed the module in a classroom setting with facilitators, while another group worked independently. This allowed the researchers to see what impact in-person involvement from facilitators had on the students' overall learning experience. At the end of the study, all of the students completed an online survey evaluating both themselves and their opinions on the effectiveness of the module.

The majority of the students, 81%, stated that they “wished that they had been involved in a similar module earlier in their time at the university” (Stetter, 2013, p. 684). This overwhelming response suggests that thorough instruction on citation and plagiarism is not being adequately provided at the college preparatory or early collegiate level. Voelker et al. (2012) make the same assertion in their study on student knowledge of plagiarism: “The field, and the students, would be stronger if an academic honesty module were included in most (if not every) course” (p. 41). Although deterrent methods are enough to scare off some would-be plagiarizing students, they do not impact the much larger population of students who are simply unaware of when they plagiarize.

Toward this educational end, our team prepared an online workshop to instruct students on plagiarism and basic citation. This module can then be integrated into any course where an instructor wishes to provide that aspect of academic honesty education. This report allows us to join the discussion of

this issue and to share our experiences of developing a multi-faceted approach to the problem of plagiarism.

Stage 1: Creation of the Project

The individuals who comprised what came to be known as *Team Citation* arrived at the project from different areas of the university. The Coordinator of the Writing Commons, Laura Monroe, was contacted by Dr. Shelley Blundell, Instructional Design/Education Librarian of UA Libraries, to develop online training on citation that could be completed by students outside of class, possibly as a component of first year courses, or embedded in the General Education *LibGuides* available to support students' research. Laura then contacted Litsa Varonis of the University's Design and Development Services for assistance with the creation of the training site in the University's Learning Management System and for another perspective on how to best meet the needs of the learners; Laura and Litsa were previously colleagues, and both had extensive experience teaching and designing curricula for freshmen writing classes. Litsa brought in additional experience with design and course delivery for distance-learning classes and online instruction and certification as a Master Reviewer for Quality Matters (2015), which defines itself as "a non-profit organization dedicated to quality assurance in online education." Also joining the team from the Writing Commons were Maria Varonis, a faculty writing consultant with experience working with first-year and English as a Second Language (ESL) students, and April Trowbridge, an experienced writing tutor. The group met multiple times beginning in January 2015 to brainstorm the topics that should be covered and how those topics would be realized in the course.

The team agreed that the focus should be on guiding students to utilize the fundamentals of citation by helping them identify themselves as members of a larger academic community, who value giving credit where credit is due. Real world examples of plagiarism, academic and non-academic, would be included in order to engage interest, demonstrate how widespread the issue is, and show how serious consequences can be. The training would be written with the assumption that students had limited or no previous experience with citation and were not familiar with the concept of plagiarism; in fact, many international students in particular report that the need for citation and the consequences of plagiarism are totally new to them.

Plagiarism is considered a serious offense at The University of Akron, as it is at most if not all institutions of higher education. According to the University's Code of Student Conduct, plagiarism is defined as a type of academic misconduct:

... including, but not limited to:

- Intentional or unintentional representation of ideas or works of another author or creator in whole or in part as the student's own without properly citing the original source for those ideas or works.
- The use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials. (2015, p. 6)

Students may be reported to the Office of Student Conduct and Community Standards for a suspected violation of the code, with consequences that can include:

- Failure in the assignment and/or course.
- Educational assignments that include researching various academic integrity issues and writing research papers.
- Depending on the nature of the violation and previous history of the student, suspension or dismissal from UA.
(Alford-Snyder, 2009, p. 1).

The online training was therefore envisioned as a way to both encourage students to identify as members of an academic community and discourage them from engaging in acts of academic misconduct. Originally, it was decided that the material would be divided into seven units:

1. Introduction to Citation: Why We Cite
2. What Is Plagiarism?
3. Mechanics of Citation
4. MLA Style
5. APA Style
6. Other Citation Styles
7. Resources for Citation

After completing the workshop successfully, students would earn a certificate that could be shared with their instructors.

It was further decided that learners would have to show mastery of the concepts in one module before being able to move on to the next. That would be demonstrated through a multiple-choice quiz at the end of each module that could be scored automatically.

A dedicated site was created in the University's Learning Management System, Desire2Learn Brightspace, branded *Springboard* at UA, and the team began to gather resources in a *Scratch Module* for later utilization in specific modules.

Stage 2: Design of the Site

In this beginning stage, the team met face-to-face at the Writing Commons and began to gather resources and create new ones. Resources included video files, audio files, links to news stories about high-profile examples of plagiarism, and a presentation on plagiarism that had previously been delivered to UA faculty and staff through UA's Institute for Teaching and Learning. These resources were collected into the Scratch Module for review by team members before a decision was made on what resources to include and where to place them. In addition, Maria Varonis wrote the opening script for the workshop that placed citation and plagiarism into a context that first-year students would understand and relate to.

Modules were added to Springboard reflecting the topics of the original units. Each module was envisioned to contain:

- An overview and learning objectives for each module
- Instructional materials, including text and multimedia resources
- Opportunities for practice and/or self-assessment
- An assessment that would allow students to demonstrate mastery

Our intent was to complete the design and development of the site in Spring 2015, implement a pilot in Summer 2015, revise as necessary, and offer the training as an online “citation workshop” in Fall 2015.

Stage 3: Development of the Site: Team Citation

In mid-February, Wendy Lampner, the manager of Design and Development Services, who was also teaching an online graduate class in Instructional Design (ID), approached Litsa Varonis to consider allowing a team of ID students to incorporate work on the site into a class project. Her e-mail explained “It would be ideal if we could give the students real-world problems to work on.” She further elaborated that she was soliciting instructors with “teaching challenges in any of [their] courses” and willingness “to have a small group of students work on a solution” (personal communication, February 17, 2015). Specifically, we were requested to:

- Describe the instructional problem we were trying to solve.
- Meet with the students once or twice to discuss the project.
- Offer students feedback on drafts or prototypes.

The strategy fit both with our ambitious timeline and with the abstract submitted for our ICICTE presentation, which had been envisioned as focusing not only on the product but also on the team process. Each of the four ID students assigned to our project was a full-time employee of an Ohio K-12 school, and each taught in a different county. Katherine Gulliford, who was the lead for the ID class team, is a high school English Language Arts instructor; Cliff Holcomb is a second grade teacher; Jack Reyes is an Intervention Specialist for elementary and middle school students; and Marty Smith is a math and science teacher for emotionally disturbed high school students. Their initial contact with the original team was via an e-mail of introduction to Litsa Varonis on February 24, followed up by a phone conversation on February 26 and subsequent e-mails to set up an initial meeting date. While we hoped to meet with the ID students face-to-face, at least at the beginning of their involvement on the project, in fact that would prove to be impossible. They had never met each other face-to-face as their program consisted exclusively of online courses. As a result, we met with them exclusively evenings online, utilizing the WebEx web-conferencing system supported by UA. This tool allowed us to see and hear each other as well as share desktops to view documents or the Springboard site as a group.

The ID students were charged to apply the ADDIE model of instructional design originated by Branson, Rayner, Cox, Furman, King, and Hannum,

(1975), which in its current format includes analysis, design, development, implementation, and evaluation phases. To implement this model, the students needed to pilot the training during Spring 2015 to complete all phases and meet the requirements for their course. As a result, we needed to adjust our schedule to accommodate their need to complete all of the ADDIE phases by the end of Spring semester.

The first meeting of Team Plagiarism took place on March 2, 2015 in Litsa Varonis' personal WebEx meeting room, the first occasion that the ID students, Laura Monroe, and Litsa Varonis were available at the same time. That meeting focused on the analysis phase of the project as it had already been identified by the original team: the learners; the learning situation; the learning problem; the learning goal, and key learning tasks. During that first meeting, we identified three needs:

- Making material, activities, and assessments more interactive and engaging for students.
- Designing a pathway so students could navigate through the material in a user-friendly format that promoted learning and mastery of the content.
- Identifying a measurable goal as the benchmark for students to earn a certificate after completing the final summative assessment.

We envisioned both self-checks and a summative assessment within each module so that students could practice skills and demonstrate mastery of one topic before gaining access to a subsequent topic. Since many of the summative assessments were developed to contain five questions, it was agreed that the benchmark performance would be 80% on each.

To facilitate continued conversation among the ID students as they discussed incorporating the project into their own class requirements, after the first and subsequent meetings, they continued talking in the WebEx meeting room after the others had left. Our first meeting took place during Week 8 of their 15-week semester, with their final project involving an online presentation on their work during Week 15 and a final paper due the following week.

Meanwhile, the onsite team continued meeting face-to-face to consider resources and provide feedback to the work of the ID students, e.g., to the broad learning objectives drafted for the workshop as a whole, to module learning objectives as they were produced, and to the types of self-checks that would be included. We shared materials in a scratch module within the LMS site for the workshop, including a presentation on plagiarism previously delivered to the faculty (Bove, Qammar, & Varonis, 2010) that included information that was incorporated into the modules. We utilized e-mail to keep each other informed and to schedule WebEx meetings, though there were challenges in coordinating the schedules of the six individuals—the ID students, Monroe, and L. Varonis—who attended the WebEx meetings. (Scheduling the second meeting, for example, took 17 e-mails.)

The ID students were given the freedom to divide the development tasks among themselves, and each took responsibility for specific modules. We strongly encouraged the use of multimedia as a way to address students with different learning styles and to make the materials more engaging. Jack Reyes registered for a free trial of GoAnimate software to create cartoon-like videos, and as a result of his initial success, a license was purchased to allow the development of more segments. For example, the script developed by Maria Varonis for live actors was used instead in a GoAnimate video.

During this phase, to stay focused on the behaviors we wanted students to practice rather than the ones we wanted them to avoid, our friendly term for the group changed from *Team Plagiarism* to *Team Citation*. It was also decided to drop the module on *Other Citation Styles* in order to stay focused on those styles that first year students were most likely to be required to use.

The MLA Style and APA Style modules were sub-divided into three sections: (a) general formatting, (b) in-text citation and (c) references; each of the sections included readings, activities, and a quiz.

Stage 4: Implementation

As Litsa was co-teaching a small learning community section of UA's first-year course, Akron Experience, she suggested piloting the workshops' implementation with her students. Nine international students were enrolled in the class, which met in a computer lab to guide students in the use of technologies that could help them achieve success in their academic careers. Several of the students had already submitted work that the instructors identified as being plagiarized. These incidents were handled privately, and students were advised they would not receive credit unless they revised and handed in their own work, and also that a repeat incident would result in their being reported to the Office of Student Conduct and Community Standards. During class discussion of citation and plagiarism, a number of students commented that in their own cultures, they were only expected to submit a response to the assignment given, and it did not matter how the information was obtained. They revealed that they had no background at all in providing citation for sources used in assignments and were surprised that incidents of plagiarism could have such serious consequences.

The students were given the option to decide as a class if they wanted to complete a 25-point activity already on the syllabus, which involved attending a lecture and writing a paper about it, or completing the Writing Commons Citation Workshop and earning five points for each of the module quizzes they completed at an 80% level. There were three modules that all students had to access and an additional three in both the MLA and APA tracks, totaling six modules with quizzes in either track. Students were told that they did not need to complete both tracks. This allowed them the option of earning five points for each of five completed quizzes as well as five bonus points for completing the sixth quiz. In addition, they could earn an additional 25 bonus points for completing the project evaluation that was added as a seventh module. The students were unanimous in their decision to opt for the Writing Commons Citation Workshop as a replacement for the original assignment.

Students were given time during class in weeks 13 and 14 to begin work on the modules, both to make sure that the training was working as envisioned and to allow for modifications if needed. The students seemed to respond well to the training and clearly enjoyed playing the games that had been included in each module as self-checks. Most of them completed the modules outside of class. Two American-born student assistants working for Design and Development Services were also asked to work through the modules during down time and to provide feedback. Some students needed to repeat the module-final quiz multiple times to score the threshold 80%, and not all students finished all the modules as a result.

Stage 5: Results and Evaluation

Modules were completed by anywhere from 1 to 11 people, including nine students in the Akron Experience course and two other students that were asked to give it a try. The fewest individuals completed the modules on APA Style, which sequentially followed the track on MLA style. Successful completion of a module was identified as scoring at least 80% on the quiz in that module. The average number of attempts to completion ranged from 1 to 3, though some students did not successfully complete a quiz, and therefore their efforts were not included in this analysis. The quizzes that required the highest average attempts to successful completion were those in the APA module, which averaged 1.4, 2.3, and 3 attempts, and those in the Plagiarism module, which averaged 2.22 attempts. However, the number of those who completed the APA modules was very low, and the APA quizzes were longer than the others, a factor that will have to be addressed before the workshop is made more generally available.

Eight students in the Akron Experience class completed the Student Implementation Survey designed by the ID students. Most of the questions were open-ended and most of the responses were positive. In general, the students found the modules easy to move through, of an appropriate length, and easy to understand; one actually commented that the material was “amazing.” All agreed that the materials were easy to access and that the “attempted levity” made the subject matter “more palatable.”

There were differences of opinion on the review games, the GoAnimate videos, and the PowerPoints, but the selected responses were mostly positive. With respect to the review games: six thought they were “engaging, fun and helped me master the material,” one thought they were “boring and childish, but helped me learn the material,” and one decided they were “a waste of my time.” With respect to the GoAnimate cartoon videos: five thought they were “engaging and a great way to introduce the material,” one thought they were “engaging, but I didn’t learn anything,” one thought they were “boring and childish, but helped me learn the material,” and one thought they were “a waste of my time.” With respect to the PowerPoint presentations: six thought they were “engaging and really helped me stay on track”; one thought they were “engaging but there were technical issues”; and one thought they were “Annoying, because I had to download the PowerPoint in order to go through the self checks.”

Students were also asked to rate their confidence using citation on a scale of 1 (not confident) to 10 (very confident); responses ranged from 4 to 10 with an average of 8.75. Another question on a scale of 1 (low) to 5 (high) prompted students to rate their experience as a whole; scores ranged from 2 to 5 with an average of 3.875.

Finally, students were asked to identify what course component they found most useful: three selected the videos, three selected the PowerPoints, and two selected the study games.

Although the design, development, implementation, and evaluation phases of this project were rushed, both the quiz results and the results of the implementation survey suggest that the workshop holds great promise as a way of providing online, self-paced instruction in citation and plagiarism, matters of great academic importance in higher education.

Lessons Learned

Overall, the multiple components of Team Citation worked well together to create the content of the online citation workshop. The partnership, although comprised of busy individuals from a wide variety of backgrounds, juggled schedules and work flow to move the project forward on a tight timeline.

Communication was key to the project. The graduate students on the design team lived and worked at a distance from the university, so the WebEx meeting space was crucial to provide opportunities for synchronous discussion and planning. However, setting meeting dates and times proved problematic. One suggestion for future collaborations, either local or long-distance, would be to use a scheduler to establish common availabilities quickly and easily. Using Google Docs made sharing materials and drafts easier.

Another important area that needed to be addressed was consistency among modules. Once the content had been created and piloted with the Akron Experience class, Litsa, Laura, and April worked on strengthening organization and checking for consistency across modules. Thematic submodules were created for each module, and each component was edited for consistency and clarity. At the same time, the team members looked carefully at each element of content to check for components with questionable commercial links. Thus, certain elements were dropped and others added.

The biggest lesson learned from this project is timing. The team could have probably used more time to devote to planning and developing the content of each module and more extended time to test and pilot content with target audiences. However, this workshop will be ready for a Fall 2015 launch for first-year students, with the understanding that it is a work in progress and will be open to ongoing revision. If successful, it is likely to serve as a model for similar online training in other areas important to students.

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