



Using Thrifted Garments as a Learning Tool in an Introductory Textiles Course

Charity Armstead, Iowa State University, USA

Keywords: Textiles, teaching, resources

Background and objective. The use of thrifted garments in an introductory textiles course was developed to address a problem with the transfer of learning. Transfer of learning refers to a student's ability to use information learned in one context and apply it to a different situation; transfer is facilitated when students are taught to apply information to more than one context (National Research Council, 2000). In previous classes, prior to the introduction of the thrifted garment assignment, students had difficulty transferring the information into contexts beyond the small lab samples they were asked to analyze. This assignment was created so that students would have an opportunity to apply course content to garments that they selected.

Implementation. On the first day of class for the Spring 2017 and Spring 2018 semesters, students were assigned a "Thrift Store Scavenger Hunt" and asked to purchase garments to cut up and analyze throughout the course of the semester. They were required to purchase garments in five specified fibers, including at least one woven garment and at least one knit garment. Students were encouraged to select garments that were stained, torn, or showing significant signs of wear to minimize the destruction of usable garments. Throughout the semester, various tests and analyses were conducted, first on lab samples and then on the thrifted garments. At the end of the semester, each student assembled the results of their analyses into a final report on the five thrifted garments. Students used microscopy, burn testing, and chemical solubility tests on lab samples, then predicted the results of each test on their thrifted garments and ran the tests to determine if their predictions were correct. Students identified the fiber characteristics, yarn types, fabrication (weave, knit, etc.), coloration, and any observable finishes on each of the garments. They also analyzed the care instructions for each garment and explained why the manufacturer recommended the care instructions, based on the fiber and fabrication. Finally, the students summarized the performance of each garment and discussed what they would change about the fabrication of each garment to improve its performance.

Effectiveness. The assignment was initially tested in Spring 2016 with one garment per student as an extra-credit opportunity. Students who chose to participate enjoyed the assignment and reported that the project helped them to learn more effectively, so the decision was made to expand the assignment into a course requirement the next time the course was taught. Adding the analysis of the thrifted garments to the course gave the students a real-life application for textbook concepts. The assignment may have been effective in helping to overturn some student misconceptions: One student did not initially believe that a garment she was testing was 100%

silk as labeled, because it did not fit her preconceived ideas of what silk should look and feel like. After testing, she concluded that the fiber content on the label was correct. The students seemed to appreciate the opportunity to experiment with the garments; one student went beyond the requirements of the assignment, testing different care methods from what was recommended by the manufacturer and including the results in her report. Most students included all or almost all the required information; however, the quality of the students' organization and formatting varied. The students' selection of their own garments for the project increased student engagement, particularly in cases where students chose garments that they particularly liked or found interesting. Overall, the project was effective for student learning, as they were able to practice the skills learned in the class on garments that they had chosen, while receiving direction and feedback from the instructor.

Plans for revision/continuation. This project will continue to be used in the textiles course. Because the quality of formatting and organization varied significantly from student to student, more guidance may be needed. Therefore, the best examples of student work will be saved and utilized as a reference for future classes to examine as guides for their own projects.

References

National Research Council. (2000). *How People Learn: Brain, Mind, Experience, and School: Expanded Edition*. Washington, D.C.: National Academy Press.