



## Exploring the Inclusion of Sewing Pattern Development in a Fashion Design Course

Addie Martindale and Ellen McKinney, Iowa State University

Keywords: patterns, home-sewing, curriculum, technology

The innovative teaching strategy was to develop, deliver, and evaluate the effectiveness of a curriculum to teach undergraduate students majoring in fashion design to design, produce and market digital patterns to home sewers. The interest among consumers in sewing garments at home has seen growth in the last few years (IBISWorld, 2014). From an entrepreneurial standpoint, the independent digital pattern sewing market, in particular, is a low cost, easy-to-enter market. The majority of fashion design students already have the skills needed and need to be taught how to apply them in a new way. The home sewing market offers fashion design students another avenue to use their design skills for freelance work or to become entrepreneurs.

The purpose of this teaching strategy was to explore the implementation of home sewing pattern development into a fashion design course. The teaching strategy had four objectives, each accompanying a learning module. First, was to introduce fashion design students to the independent pattern design market. Second, was to teach advanced patternmaking students how to make sewing patterns from their pattern designs using Adobe Illustrator. Third, was to teach fashion design students how to write sewing pattern instructions for home sewers. Last, was to expose fashion design students to specific avenues in which they can market their patterns.

The teaching strategy was incorporated into an existing creative apparel design class and was set up as a six-week class project. A pre-test and post-test were included to evaluate the effectiveness of the teaching strategy and student interest in learning home-sewing pattern development. The tests included questions about specific skills that were taught in the four modules. Eighteen upper level undergraduate fashion design majors at a Midwestern university participated during spring 2016. The authors used a number of technologies to develop the home-sewing pattern curriculum in a way that could be used by distance and in-person learners.

Instructional content was delivered as a series of online video modules along with in class project explanation and discussion of each required assignment component. Handouts and reference materials were developed to accompany the videos. For module one, students learned about the independent sewing pattern market. For module two, the videos contained steps required to develop a home sewing pattern. The instructor created short video demonstrations of herself by capturing her Illustrator screen and voice while completing each step of the assignment. Each video covered a single technique or tool. This allowed students to perform or practice that one component before moving to the next (e.g. how to use the *Move Command*) and replay the videos as they needed. For module three, along with video demonstrations students were provided with an example pattern and instructions developed by the instructor. Students were also provided with a live editable sewing pattern and set of instruction to assist in their learning with how to set up the documents. For module four, students learned how to

independently sell their patterns and how to pitch ideas to sewing magazines. Students submitted each of their assignments for each unit digitally through a course management system.

Prior to the first learning module, a pretest was completed by 88% of the enrolled students. Fifteen students had experience using commercial home sewing patterns but none had sewn an independent pattern. Just over half of the students had previously written sewing instructions in another fashion design class. Only 19% of students had experience using Adobe Illustrator to work on garment pattern designs and only 31% were aware that Adobe Illustrator could be used to grade patterns. All of the student tested expressed interest in learning how to create a sewing patterns and write sewing instructions.

The pre and post test included questions pertaining to interested in home sewing pattern development, the perceived benefits of learning how to create sewing patterns and sewing instructions, knowledge on creating patterns in Illustrator, and skills in Illustrator. In both the pre test and post test the majority of the student (93.75%) thought fashion design students should learn how to create sewing patterns and write sewing instructions. All students in the post test though that learning how to design home sewing patterns would benefit them in their future fashion design careers compared with the majority of the students in the p test. The test results indicated knowledge about creating sewing patterns for at home printing and labeling sewing pattern pieces increased after completing the training modules. Students knowledge on Adobe Illustrator and the tools used to create sewing patterns also showed an increased.

Following the completion of the learning module, 83% of the students completed the post test. Ninety-three percent of the students indicated that learning to make a home sewing pattern had improved their pattern making skills. Seventy-three percent felt that the project expanded their future career possibilities and 83% had increased interest in creating home sewing patterns.

Student performance and 100% passing project completion provides evidence that the online video modules were an effective way to distribute the project lectures. No students expressed any issues with the video delivery. A few students needed assistance accessing the videos for the first time but did well after that assistance. All students enrolled in the class completed the project and attained at least 80% of the project points. In the future, scheduled individual video conferences with all students to discuss their project and receive in person feedback would be beneficial to both the students and the instructor. A student assessment of comfort and skill level with computer programs used prior to the project would also help to insure that all needed video modules and student resources were created.

Based on the positive response by the fashion design students, the instructor will continue to explore ways to incorporate home sewing pattern development and non-tradition pattern making opportunities into fashion design curriculums. The instructor plans to discuss the possibilities of this incorporation with other fashion design faculty, as well as discuss the interest and perceived benefits with other fashion design students.

IBISWorld Inc. (2014, December). *All sewn up: The popularity of do-it-yourself fashion will strengthen industry growth*. (Report No. 45113). Retrieved from <http://clients1.ibisworld.com.proxy.lib.iastate.edu/reports/us/industry/default.aspx?entid=1081>.