



Engaging Students by Developing Patterns from a Historic Garment

Key Words: Patterns, Historic, Teaching, Construction

Apparel construction courses provide opportunity for hands-on activities (McKeachie, Pintrich, Lin, & Smith, 1987) and using a historic costume collection. Hands-on learning activities in apparel construction courses that incorporated history of costume has been found to enhance students' critical thinking and analysis of skills (Barnard, 2015). These skills are valuable in the fashion industry (Barnard; Weaver, 2011). A hands-on teaching assignment was developed in which a flat pattern class made patterns from historic garments to prepare for the digitizing process and the proposed steps in product development.

Purpose/Objective of Strategy

The purpose/objective of this teaching strategy was to:

1. apply flat pattern skills to replicate a historic garment,
2. record the measurements needed to successfully replicate a historic garment,
3. critically evaluate patterns made from a historic garment,
4. demonstrate how to manipulate pattern pieces to create style lines or shape into garments via flat pattern methods, and
5. translate a design idea into a flat pattern.

Implementation of the Strategy

Using clothing from the university collection, a group of 14 students reproduced authentic patterns from observation, by measuring and implementing their basic flat pattern skills. The students were paired in groups of two and worked together to re-create two garment patterns per team. There were both fashion merchandising and apparel design students that participated in the class. Up to this point, all students had completed the same amount of construction classes. To develop the assignment, previous investigation and expertise from the instructors (apparel design and museum studies) was required. For preparation of the assignment, the instructors completed a literature search and conducted research on the textiles from the historical garments, consulted experts from a focus group, created preliminary pattern samples and analysis of the process needed to replicate the garments. The instructors chose garments from the 1940s era and then the assignment was created.

The assignment began with the selection of two garments assigned to each of the seven groups participating in the flat pattern class. The first problem in the assignment began with the analysis of the garments each group of students were given. The students analyzed unique aspects and the construction details of their assigned garments. Garments ranged from tailored suits to dresses. The students were assigned garments based on difficulty level.

The students used critical thinking to analyze the garments. Pattern analysis also requires technicians to measure each piece of the garment. Each piece included details such as yokes, sleeves, collars, and facings. The pieces of the garment were redrawn to create patterns with notches for fitting and seam allowances. To assure proper alignment of the garment, each piece

was analyzed for accuracy. After the patterns of the garments are made, they were checked (re measured). To ensure quality of the patterns, a muslin for each garment was constructed. In another computer patternmaking class, the pattern pieces were digitized into a data base using Lectra brand hardware and software. The pattern pieces were laid on the digitizing table. Using a digitizer mouse and table, pattern pieces were digitized (outlined) into a file titled group number 1. This process was repeated until the pattern pieces from the entire garment are recorded and grouped. The digitized patterns were changed from Lectra format files to PDF files necessary to print from most plotters.

Description of Effectiveness and Plans for Continuation

There were problems that occurred while making the patterns. First, the students needed to learn the basic flat pattern manipulations. They had only been exposed to very basic pattern manipulation in a previous beginning construction class. The students worked six weeks of a 16 week semester to learn the basic pattern manipulations. This left 10 weeks to re-create two historical garment patterns and a final garment of their own design that showed influences of the historical garments. It taught the students time management, teamwork and a sense of a corporate environment due to deadlines that needed to be met. regarding the effectiveness of their learning during the course. Some of the responses included;

1. they had never made patterns before this course,
2. they had no idea how precise they needed to be in their measurements of both the garment/body and the pattern itself until they had this experience,
3. some students struggled and thought that creating a muslin from the original pattern pieces would be helpful,
4. they did not realize how many flaws clothing had until they learned to create a pattern from ready-made clothing,
5. creating these patterns helped the students learned to fit the body more efficiently by learning so much about patternmaking,
6. students wanted to be more creative than the exercise allowed.

The investigators plan to use the information gained from this project to incorporate into future curriculum and create an immersive learning opportunity for students. The activity could be altered in several ways, such as having students make a portion of a garment to use in their own creative design or vary the historic era of the original garments. Related courses where the project can be incorporated include history of costume, computerized apparel design, and apparel design technology presentation.

Barnard, D. S. (2015). *Analysis and critical thinking skills: A line-for-line copy draping project*. International Textile and Apparel Association Annual Conference Proceedings, Paper 79. http://lib.dr.iastate.edu/itaa_proceedings/2015/posters/79/

McKeachie, W. J., Pintrich, P. R., Lin, Y. G., & Smith, D. A. (1987). *Teaching and learning in the college classroom: A review of the literature*. Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning, The University of Michigan.

Weaver, E. (2011). *How to excel in the fashion industry* (Unpublished honors thesis). The University of Rhode Island, Kinston, RI.