Jan 1st, 12:00 AM

Tech Pack Exchange: How well can you communicate if you are not there?

Lori Wahl  
*University of Idaho*, lwahl@uidaho.edu

Melinda K. Adams  
*University of the Incarnate Word*, madams@uiwtx.edu

Follow this and additional works at: [https://lib.dr.iastate.edu/itaa_proceedings](https://lib.dr.iastate.edu/itaa_proceedings)  
Part of the [Fashion Business Commons](https://lib.dr.iastate.edu/fashion), [Fashion Design Commons](https://lib.dr.iastate.edu/fashion-design), and the [Fiber, Textile, and Weaving Arts Commons](https://lib.dr.iastate.edu/fiber_textile)

[https://lib.dr.iastate.edu/itaa_proceedings/2017/presentations/157](https://lib.dr.iastate.edu/itaa_proceedings/2017/presentations/157)

This Event is brought to you for free and open access by the Conferences and Symposia at Iowa State University Digital Repository. It has been accepted for inclusion in International Textile and Apparel Association (ITAA) Annual Conference Proceedings by an authorized administrator of Iowa State University Digital Repository. For more information, please contact digirep@iastate.edu.
Tech Pack Exchange: How well can you communicate if you are not there?

Lori Wahl, University of Idaho, Moscow, ID, and Melinda K. Adams, Ph.D., University of the Incarnate Word, San Antonio, TX

Keywords: technical, design, experiential, team

Teaching apparel production and manufacturing processes can be difficult due to lack of facilities that replicate industry settings or lack of access to product manufacturers. Labs are designed to simulate production processes that provide students with learning opportunities to apply knowledge from multiple courses in a problem-based learning situation. This project leveraged two university labs to teach pre–production processes.

INNOVATIVE TEACHING STRATEGY

Faculty discovered synergies between their teaching content areas and developed a project to provide students with a more realistic production experience during the 2017 spring semester. One faculty member was teaching Technical Line Development at the University of the Incarnate Word (UIW) in San Antonio, TX, and the other Computer-Aided Pattern Drafting at the University of Idaho (UI) in Moscow, ID.

Tech pack development is part of many technical design courses, but how often do students have the opportunity to test the effectiveness of their patternmaking and spec writing skills by having a garment created by someone outside their university? Leveraging experiential learning methods (Kolb, 1984), this project was designed to have students from the Computer-Aided Pattern Drafting course at UI create patterns and tech packs and have students in the Technical Line Development class at UIW construct prototypes based only upon the information provided. Students were not allowed to contact one another as to simulate the process of a company sending their tech packs to a factory.

PROJECT PROCESS

Faculty defined required materials, “production” timelines, and final delivery deadlines. The sewing experience of the Technical Line Development class was discussed to determine scope of student capabilities relative to designs. A pretest questionnaire was given to gather expectations from the project. Using a learning-centered approach (Henscheid, Brown, Gordon & Chen, 2014), Computer-Aided Pattern Drafting students developed a critique form for pattern and tech pack evaluation of quality.

Eight Computer-Aided Pattern Drafting students created pant designs, patterns using the Optitex software, and tech packs (style sheet, spec sheet, bill of materials, and order of operations) that were sent as a kit to UIW. The box was opened during class and appropriate available fabrics were selected based on tech pack specifications. UIW students had three classes for production, one for cutting and two for construction. Students were instructed to follow the directions literally in the order of operations. Assistance was provided when students were unclear about directions or how to complete the particular task.

The box of completed garments was opened at the beginning of the Computer-Aided Pattern Drafting course. Each student was given their corresponding prototype, the cut pattern, and the
completed critique sheet. Students were asked to compare the prototype to their order of operations and pattern and determine if errors were due to incomplete or incorrect information or due to a misinterpretation of their instructions by the sewer.

EVALUATION

Technical Line Development students saw value in the importance of communication but also the impact of improperly created samples on merchandising and costing. During the production process, questions were asked about why particular processes were selected and how these were similar to actual manufacturing. Upon completion UIW students were asked how they felt about their construction and overall process. Course evaluation was participation and process-based upon completion following the provided spec pack within the required timeframe.

Computer-Aided Pattern Drafting students saw value in this project as a way of determining the effectiveness of their communication. Each student was asked to write brief essay upon submitting the tech packs and patterns for shipping reflecting upon the quality of their work. A second reflection was written after reviewing the completed garment. Course evaluation was process-based and focused on completion of all required tech pack and pattern components and understanding through reflection of how clear communication impacts accurate prototype construction.

CONCLUSIONS

Technical Line Development students were concerned about constructing prototypes for other students. For many of the students, this was due to their inexperience with construction. This project allowed for a discussion on why order of operations and complete tech packs are so important when sending items for production as well as the importance of ensuring the factory had experience necessary to complete the garment. Technical Line Development students agreed that reciprocating the packet exchange and prototype construction would add to the simulated learning experience.

Computer-Aided Pattern Drafting students were enthusiastic to test their patternmaking, spec writing, and tech pack building skills. Although they were apprehensive when they saw their prototypes and were quick to jump to conclusions about the source of error, they carefully went through their patterns and tech packs to discover reasons for the differences in their prototype expectations and the actual prototype construction. Many discussions ensued about the importance of including detail sketches that duplicate and support the Order of Operations. Further discussions were had about the importance of clear information when working with factories whose first language is not English and may be in a time zone that does not allow for easy communication. Computer-Aided Pattern Drafting students indicated that they would have liked to have reciprocated by sewing prototypes for students at UIW.

REFERENCES
