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The simulated fit session: Experiential learning for future technical designers

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**Significance:** Research suggests that 95 percent of apparel bought by U.S. consumers was imported from elsewhere (Fasanella, 2006); thus, the need for Technical Designers (TD) persists in the industry (Glock & Kunz, 2005). Yet, the educational training for future TDs is still lacking in most fashion focused institutions (Grant, 2012). As a former TD and now a professor teaching fashion design, the author has noticed that most students are not interested in TD because is seems to lack "creativity." TD is one of the most creative positions in the fashion industry because these individuals bare the sole responsibility of ensuring that design and construction quality is upheld during the production process (Glock & Kunz, 2005). The creative process of TDs requires highly detailed analytical problem solving skills as well skills relevant to the arts.

**Purpose:** Through a Fit Simulation (FS) project, students were introduced to the creative aspects of technical design. Research shows that adult learners retain lessons more effectively when "they actively engage in the process [and] play a role" in their learning; resulting in an experiential learning environment through simulation (Fanning & Gaba, 2007). Simulated learning experiences promote deeper understanding through integrated and dynamic linking of multiple representations of the knowledge to be learned (van der Meij, 2006).

**Implementation of the project**: The FS project is a component of a course developed by the author entitled Apparel Manufacturing Processes. The class meets twice a week and there are monthly field trips to various apparel production facilities. During the first weekly class meeting, the author lectures on various topics in the production business. The second weekly class meeting consists of a lab experience where students work on projects and practice skills such as building the technical package (TP) using Excel and Adobe Illustrator, measuring, fitting, and pattern corrections.

The FS project began with students building two TPs for men's wear knits: a sweater and an active wear bottom. During lab the students learn about the production of knits and the differences between developing a TP for a cut-n-sewn knit versus sweater knits. The students built the initial TP which consisted of the sketch page, the bill of materials page, the construction page and the measurements page. Specifically, for sweaters, students learned about courses per inch and knits/stitches per inch, and sweater weight in pounds per dozen. In the industry, after manufactures received the initial TP, the production of the first sample begins. The students simulated a fit sample by purchasing a thrift store garment similar to the item they designed and altering it by shortening it, adding pockets or any other details needed. Once their "fit sample" was ready, a FS session took place with a male fit model. The author used the FS to allow

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© 2016, International Textile and Apparel Association, Inc. ALL RIGHTS RESERVED ITAA Proceedings, #73 - http://itaaonline.org students to gain autonomy over their "product" just as real TDs do in the industry. The author explained that the session must be run by the student and that the student is responsible for doing all of the altering to the garment as needed.

Providing an experiential environment was important in this FS, thus partners from the JC Penney TD team were invited via Skype to give feedback and debrief the students' approach to correcting the fit of their garment. This process allowed students the opportunity to collaborate with real TDs working in the industry. Debriefing during a simulation process has been found to be imperative as it is "at attempt to bridge this natural gap between experiencing an event and making sense of it," (Fanning & Gaba, 2007, p. 116). Lederman's (1992) Seven Elements of the Debriefing Process was used to format the FS, ending with the students taking all the information they learned from the fitting and debriefing experience in order to report any corrections in the TP in hopes of getting a better product from the manufacturer.

**Teaching effectiveness**: The partners from JC Penney were very impressed with the process and committed to working with the students again. The students shared that the FS gave them a better understanding of TD responsibilities. The alumni database shows forty-nine graduates between 2010 thru 2014 are working in the industry at TDs and of those 20 students have taken Apparel Manufacturing Processes. Recently, I had 2 students who were just recently hired for the Kohl's TD team; tell me that they obtained their positions as result of what they learned.

**Implications**: For future pedagogical experiences the FS session can be adapted to focus on other (more complex) apparel categories such denim jeans and outerwear. The continued partnership with industry professionals during the simulation process is imperative to a heightened learning experience. The positive feedback from students and industry partners is confirmation of the importance of adding more TD curriculum to all colleges and universities focusing on apparel and textiles. Preparing students for the best chances at securing a career in the fashion industry depends on TD experiences educators can provide during the students' educational career.

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