



## Product ReUse in a Product Development Class

Connie Ulasewicz, San Francisco State University, USA

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In 2010, discarded textile products were estimated at 13.2 million tons, or 5.3% of all municipal solid waste collected by garbage services in the United States (USEPA 2010). With less than 17% recovered, re-used or exported (USEPA, 2010), the time is now, to prepare our students to better understand how to develop products that extend the lifecycle of discarded textiles, to divert them from the landfill as long as possible. The three-fold innovative teaching strategy for this senior capstone product development class, was for apparel design and merchandising students to a) explore and discover the decision process in determining the imbedded value in the reuse of discarded textile products, b) identify and develop viable strategies for target markets based on revalued products, and c) document their challenges and successes of designing products, including costs, spec sheets and marketing strategies, using discarded materials for revalued products.

The course curriculum is based around three projects, due dates spaced equally apart throughout the semester. Project I and Project II evolve around a product line students envision to be created from a textile product, from market research to product analysis with no product construction required. Project III, encompasses design through construction, spec sheets through costing, labels and hangtags, through to line sheets and retail selling plans. The discarded supply of one-product category, woven tablecloths, collected from the local hotel industry, was the product/textile source for this product development project. This particular product for reuse was chosen because they had been identified in a previous research project (Ulasewicz & Baugh, 2013) as a perfect source for waste stream diversion and revalue analysis. Originally designed as flat yardage with few sewn seams potentially allowed tablecloths to be repurposed, cut, sewn and/or printed for new textile-based consumer products by the students.

Implementation of the project began at the beginning of the semester when each of the 42 students in the class was given a clean, white/off white tablecloth, 54 " x 54" to begin their project reuse investigation. Students initial response ranged from surprise and disappointment at, "not being able to choose my product materials," to delight with project relevancy or, excitement with " not having to pay for fabric and materials." Throughout the semester an energy grew in the class, almost a territorial challenge, as all students started with the same materials, yet the target markets they explored and the products they produced were so diverse. It seemed they

knew they were developing techniques, be them dyeing, printing, pleating or selvage usage, that were novel and made their reuse products unique and marketable.

The reuse product development project was more successful than anticipated. Student responses heightened the awareness or belief that sometimes in group projects, those with the money to afford higher quality fabrics and trims have the ability to create a “better project.” With that element removed, students experienced equality and created their own strategies and hierarchies from the same basic material. The final presentation for Project III included an oral presentation, students were able to view all projects, and ask questions regarding the processes and ingenuity of fellow students. From a faculty grading perspective, it was evident who experimented more with dyeing, printing, fabric usage, and this seemed to allow for a more equitable grading, as all students began with similar constraints of a reused tablecloth. Pictured below is an example of several of the required elements of a simple product, aprons, with a clever label and pictured targeted market.



Plans for project continuation are already in place as this Fall 2013 ReUse project has influenced 3 students to develop their spring senior 2014 showcase lines from discarded tablecloth, one creating wedding dresses. As for the Product Development class for Fall 2014, we will continue to experiment with reuse, the actual materials yet to be determined. Possibilities include uniforms, banners and tote bags as the author has been contacted by campus administration and community business partners for student input on reuse of these materials.

Ulasewicz, C., & Baugh, G. (2013). Creating new from that which is discarded: The collaborative San Francisco tablecloth repurposing project. In M.A. Gardetti & A.L. Torres (Eds.), *Sustainability in Fashion and Textiles: Values, Design, Production and Consumption*, (pp.164 -181). Sheffield, UK: Greenleaf Publishing.

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