Volume 2, Number 4
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ANNOUNCING

Summer ‘08 Intern Project: Life Cycle Analysis of Apparel and Textiles
CHARLOTTE COFFMAN, SUSANNE LOKER and NICOLE CASTELLI

FSAD was awarded one of the College of Human Ecology/Cornell Cooperative Extension summer internships to develop programs that apply the Life Cycle Analysis concept (right) to textiles and apparel in order to assess the impact on the environment of a product’s design, production, distribution, and end-of-life. The goals were to link with the 4-H Youth Development program’s emphasis on science, technology, and engineering (SET) that includes recycling, and to complement the materials developed by Dr. Suzanne Loker for two online FSAD courses, Redesigning Green Apparel—Design, Sourcing & Packaging and Producing Environmentally Responsible Apparel.

Nicole Castelli, FSAD student, accepted the challenge. She studied the research literature and searched for businesses with “best practices” in environmental responsibility. She was introduced to the National 4-H (SET) initiatives, the NYS 4-H SET plan, the FSAD Youth program, and the broad Cornell Cooperative Extension system.

From these explorations, Nicole developed or assisted with a series of small projects:

reFashion Entrepreneurs (see reFashion Entrepreneurs in Engaging Youth below)
- Develop and implement workshops on how to salvage used garments through re-design
- Study businesses that emphasize reuse

Textiles/Apparel Life Cycle Website
- Collect ideas and instructions on how to alter clothing for reuse
- Browse websites that feature ideas for redesigning t-shirts and create links list

Entrepreneur Interviews
- Contribute to eCLIPS video taped interviews with key business people

Nicole describes part of her experience in this way:

The internship that I have through CHE/ CCE and the FSAD Department has allowed me to be creative and do some hands-on work while at the same time exploring ways to keep down textile waste through re-design of clothing. We are working on youth workshops this summer where old t-shirts are made new again through appliquéd techniques, and discussions of other techniques that will hopefully spark ideas that they can take home with them and keep working on. This way, a t-shirt with a stain or hole in it can be covered with a hand-made patch, not only fixing the problem and keeping it out of a landfill, but also personalizing it while learning a handy skill. We are also trying to work with more advanced sewing groups to rework second-hand clothing other than t-shirts into new fashions.
ENGAGING YOUTH

FSAD Fall 2008 Youth Calendar
CHARLOTTE COFFMAN

<table>
<thead>
<tr>
<th>Date</th>
<th>Program</th>
<th>Location</th>
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<tr>
<td>September 17</td>
<td>Poster: Adapting</td>
<td>Galaxy Conference, Indianapolis, IN</td>
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<td>October 7</td>
<td>Horticulture Class: Indigo</td>
<td>Cornell University, Ithaca, NY</td>
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<td>October 15</td>
<td>Poster: 4-H Clothes Line</td>
<td>NYSACCE4-HE Conference, Rochester, NY</td>
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<tr>
<td>October 15</td>
<td>Poster: 4-H/YD Sci-Tech Program Work Team</td>
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<tr>
<td>October 15</td>
<td>Workshop: reFashion Entrepreneurs</td>
<td>NYSACCE4-HE Conference, Rochester, NY</td>
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<td>October 18-19</td>
<td>NYS Make It with Wool Contest</td>
<td>Sheep and Wool Festival, Rhinebeck, NY</td>
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<td>November 15</td>
<td>Workshop: Science Toolkit</td>
<td>NYS 4-H Volunteer Forum, Auburn, NY</td>
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Hands-on Activities at the NYS Fair
CHARLOTTE COFFMAN

The 2008 New York State Fair drew approximately 928,000 visitors. A good portion of those passed through the UPromise Youth Building/4-H to view exhibits and try hands-on activities. Many thanks to the 4Hers and 4-H volunteer leaders who led these four FSAD-based programs.

<table>
<thead>
<tr>
<th>TXA Program</th>
<th>Counties</th>
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<tr>
<td>Fabric/Flight Connection</td>
<td>Seneca, Suffolk, and Erie</td>
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<td>In-Touch Science</td>
<td>Otsego</td>
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<td>Plants &amp; Textiles</td>
<td>Wayne, Livingston, Monroe, Ontario, Ontario, and Wyoming</td>
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<tr>
<td>Simple Gifts</td>
<td>Oneida, Dutchess, and Herkimer</td>
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reFashion Entrepreneurs
CHARLOTTE COFFMAN

This program brings together the work of summer intern Nicole Castelli and the 4-H youth development program in exploring ways to reduce the environmental impact of apparel and textiles. Some of the major events and outcomes are outlined below.

2008 Career Explorations - Focus for Teens

Concerned about tossing your used clothing into the landfill? Intrigued by clothing design? Interested in starting a business? Join us to learn about clothing life cycles and businesses based on recycled textiles and apparel. Develop a podcast of this course, including interviews with your classmates and with local entrepreneurs.

Fifteen teens from across New York answered the above invitation and joined us for the annual three-day Career Explorations event. They learned to use easy hand-sewing techniques such as the whip stitch and the running stitch to add appliqué and reverse appliqué designs to old t-shirts, a strategy borrowed from Natalie Chanin’s book, The Alabama Project. (To learn more about Chanin and her business, view her eClips interview at file://localhost/<http://eclips.cornell.edu/entrepreneur.do%3Fid=315&clipID=8230&tab=TabSpeakersPage>
Shelley Blackler, a local businesswoman, explained how she started a knitting business more than twenty years ago. She noted some of the challenges she faced and contrasted her experience with that of female entrepreneurs today. She also outlined practical “how to” steps for starting your own business.

The group visited two Ithaca establishments: Sew Green http://www.sew-green.org/, a community action organization, and Tuff Soul http://www.tuffsoul.com/, a unique clothing store. Wendy Skinner explained how Sew Green encourages the use of organic materials; engages the community in recycling activities, and promotes sustainability through public events such as fashion shows, sewing classes, and competitions. Autumn Newell discussed her decision to move from traditional fashion design and apparel production to an emphasis on reuse. Housed in an attractively remodeled space, Tuff Soul features organic, vintage, and cleverly re-fashioned garments with an upbeat style.

In addition, this summer course helped acquaint youth with the Cornell campus, introduced them to our department, and provided an opportunity for them to conduct and film interviews. After editing, these interviews will be posted on both the NYS 4-H Office website and the FSAD website. Watch future newsletters for details.

Post-event evaluations showed that the youth learned:
- the concept of going green and their impact on the environment
- how the fashion industry works and the rights/wrongs of business
- what it takes to open a business
- the art of recycling clothing
- different sewing and embroidery stitches
- how to design an appliqué/reverse appliqué

**County 4-H Workshops (July 10 and 11)**
Nicole worked with Ulster County staff to offer two textile recycling workshops. “New T-shirts from Old” taught 4-H members to revitalize old t-shirts using the hand-sewing techniques tested at Career Explorations (above). The “Redesign a Discarded Garment” workshop required that participants know how to use a sewing machine and have at least basic sewing skills. Nicole demonstrated size adaptation techniques such as pleats, gathers, and darts and shared clothing-alteration ideas such as using the pleated yokes from the back of a man’s shirt for panels in a pleated skirt. Workshop participants purchased garments from a used clothing outlet, created individual designs that they presented to the other participants for feedback, and then sewed their designs into reality.

**NYS Fair Teen Workshops (August 22, 27, and 30)**
Kristen Wilson, Ulster County, and I supported the statewide 4-H T-shirt Challenge by leading reFashion workshops on three evenings. Teens who worked at the fairgrounds learned to use appliqué and reverse appliqué techniques to redesign old t-shirts. They also shared their own ideas as many had been part of the 4-H Textiles & Clothing Projects for years and are experienced sewers and exhibitors.

**Conference Workshop for Adults (October 17)**
I will lead a workshop for adults at the NYSACCE4-HE Conference, Trans-4-mations, in Rochester, NY. The goals are to alert educators to the youth interest in this area and to introduce educators to the reFashion Entrepreneurs kit now available.

**reFashion Entrepreneurs Kit for Loan**
Nicole assembled a kit for loan to counties that would like to try this program with a 4-H club, afterschool program or others in the broad age group of 9-18. The kit contains the following:
- The Alabama Project book
- A journal for recording how the kit is used
- Single-use cameras for photographing designs
- List of websites that post ideas for t-shirt redesign
- Handout of embroidery and hand stitches appropriate for this project
- Samples of appliqué and reverse appliqué technique
- Sample t-shirts that demonstrate these designs
- Swatches of knit material
- Buttonhole twist or carpet thread
- Needles and threaders
- Stencils
- Markers
- Pins

If you would like to borrow the kit, please contact Charlotte Coffman, cwc4@cornell.edu, or Karen Steffy, ks247@cornell.edu. No rental fee is charged and the initial shipping is free, but the borrower must pay the return shipping (or otherwise return the kit). The loan time is limited to 2 weeks.
A new website, 4-H Clothes Line [http://hosts.cce.cornell.edu/4h_clothes_line/](http://hosts.cce.cornell.edu/4h_clothes_line/), shares the ideas, designs, patterns, and sewing instructions developed by former FSAD student Denise Green under the supervision of Dr. Van Dyk Lewis and in cooperation with the Tompkins County 4-H Urban Program.

The website explains that Denise wanted to share her passion for design, to connect with young people, and to contribute to the community. Teaching sewing skills through the local Urban 4-H Outreach Program seemed ideal. But what if the young people were bored sewing sample seams and learning construction terms? Denise solved the motivation problem by reversing the learning process — she allowed youth to first create their designs and then learn how to sew. You, too, might find this 4-step process useful.

**Step 1. Design a garment.**
The 4-Hers began by browsing fashion magazines and imagining what they wanted to make. Dr. Lewis helped the young designers translate their ideas into sketches. Denise turned those sketches into patterns and sewing instructions.

**Step 2. Learn and practice sewing skills.**
Once the youth were motivated, Denise taught sewing skills through mini-projects. Thus, members practiced cutting fabrics on grain and sewing straight seams by making a patchwork pillow. They were introduced to curved seams and basic garment construction when they made pajama pants. They learned hand sewing and embellishment techniques by re-fashioning recycled jeans into a bag.

**Step 3. Make the garment.**
Young sewers used their new skills and Denise’s patterns to sew hoodies, skirts, shirts, dresses, and pants of their own design. Yes, in some cases they could have purchased a pattern but designing the garment themselves motivated them to practice sewing and strengthened their self-confidence and self-expression.

**Step 4. Participate in community.**
The 4-H members showcased their products at a fashion show for their parents and exhibited their work at the county 4-H Fair. They also sewed a banner for the city festival parade and made a collaborative strip quilt for a local charity.

### RECALLING TRADITION

**Zipper Mania**
CONSTANZA ONTANEDA

The fast, practical, ingenious zipper is essential to today’s on-the-go lifestyle, but it was not an immediate hit with consumers. Elias Howe, in 1851, designed the first zipper prototype, a hook-and-eye device he called a “continuous clothing closure,” but consumer response was unfavorable so he did not pursue production. In 1893, Whitcomb Judson marketed the “clasp locker,” a similar device to Howe’s. Customers noted that the device was not reliable, but Judson stubbornly pursued the idea, founding the Universal Fastener Company. He later hired Gideon Sundback, a Swedish electrical engineer who, by 1913, had designed the modern zipper. Sundback named his device the “hookless fastener No. 2”, and patented it in 1917.

So how did we get from the “hoodless fastener” to the “zipper”? Credit the name change to the B. F. Goodrich Company who used the fancy fastener on a new type of rubber boot. In its early years, the zipper was mainly used in shoes, boots and galoshes. No one thought about using zippers in other garments.
In the 1930’s, zippers were introduced into children’s clothing. The zipper was marketed as a useful tool that allowed kids to dress themselves. In 1937, French fashion designers started using the zipper in men’s trousers, and ever since then the zipper has been rapidly gaining popularity in every garment. Today, we have double ended zippers on jackets, closed end zippers on luggage, invisible zippers on dresses, metal zippers on jeans, extra long zippers on sleeping bags, and the list goes on.

Today, zippers are manufactured by international companies such as YKK, Olympic Zippers Ltd, Opti, TALON, Ideal, NEO, KCC Group, and Tex Corp. The YKK plant in Macon, Georgia, is the world’s largest zipper factory, producing about seven million zippers a day.

Fun Fact: During the 1930’s, the zipper earned the disapproval of the clergy who claimed it allowed people to remove their clothes too quickly, contributing to promiscuity. For this reason, zippers did not become popular in women’s clothing until the 1950’s.

Resources:
1. About.com: Inventors
   [http://inventors.about.com/library/weekly/aa082497.htm](http://inventors.about.com/library/weekly/aa082497.htm)
2. Wikipedia, The Free Encyclopedia

**BROWSING WEBSITES**

**T-shirt Redesign**

NICOLE CASTELLI

Below are a few websites where folks share their ideas and techniques for re-styling t-shirts:

- Distruk: Style, Fashion, Environment
- Instructables
- Etsy Labs
- Community Live Journal
  [http://community.livejournal.com/t_shirt_surgery/4179702.html#cutid1](http://community.livejournal.com/t_shirt_surgery/4179702.html#cutid1)
- SuperNaturale/Chaos T-shirt Reconstruction

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