

# Technology Education for Careers for Home Economics Students (TECHES) Workshop Agenda

## Yuli Liang and Gwendolyn Hustvedt, Texas State University, USA

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**Purpose:** The purpose of the TECHES project is to pilot advanced technologies in entrepreneurship education program. By supporting student entrepreneurs in home economics courses in the acquisition of skills and technologies, the main objective of the TECHES project is to demonstrate our ability to measure student learning outcomes related to advanced technology education in Home Economics.

**Planned Outcome:** The workshop is intended to provide skills and experiences for attendees to support them with building a web store. The activities showcasing advanced technologies have been selected to help participants launch, display, and sell their products.

**Attendees:** Home Economics students.

**Schedule:** Two-hour sessions conducted over Five (5) separate days in order to allow students time to generate content between sessions and to reduce technology fatigue. The lab session on the fourth day can be removed if necessary to reduce the total time to 8 hours.

### Equipment and Software:

An eye-tracker (Tobii Pro Nano) and data analysis software (Tobii Pro Lab)  
Laptops with the Internet access (ability to install Anaconda and Jupyter Notebook)  
Students' personal email accounts to set up several accounts with online services

### Day 1: Understand Visual Attention (2 hours)

- 10 minutes – Introduction of principles of design driving consumer attention.
- 5 minutes – Introduce Adobe Express or Photoshop to make product collages.
- 30 minutes – Use Photoshop to make collages of products for a website banner which students submit via course website for addition to the eye tracking data set.
- 20 minutes – Organize image bank in the Tobii Pro Lab software while students continue working on finding screenshots of additional preferred website designs. Each attendee submits three images, eye-trackers settings-10 seconds for each image.
- 30 minutes – Demonstrate eye-tracker and allow students to observe briefly and then return to additional work on image collages. Attendees have the option to click once they finished viewing certain images.

- 25 minutes – Discuss results of the eye-tracking, including heat maps and allow students to either suggest changes to their images based on the feedback or give time for making changes during the remaining workshop time.

Submitted Assignments:

- 1) Upload banner images
- 2) Adobe Stock for images that look like the products that they want to sell

Homework Assignment:

- 1) Identify a YouTube link (url) which had the product review that likes their product

### **Day 2: Exploring Big Data**

- 15 minutes – Introduction of data scraping.
- 15 minutes – Demonstrate download and installation of Anaconda and Jupyter Notebook even if installed before the workshop started.
- 30 minutes – Practice scraping data of YouTube comments by using prepared codes. Explain how to revise codes for different videos.
- 10 minutes – Review data analysis results.
- 25 minutes – Keyword planning from Google searches, Google Ads, and understand consumer data for the website.
- 25 minutes – Introduce website domain.

Submitted Assignment:

- 1) Upload data scraping results

Homework Assignment:

- 1) Choose a brand name for their website and find a website that is an aspirational example

### **Day 3: Do's and Don'ts of Website Building**

- 15 minutes – Introduce students to website building checklists and explain the need for content such as privacy policies, accurate product descriptions and brand storytelling.
- 15 minutes – Introduce wix.com and guide attendees how to register and for site and choose site template.
- 30 minutes – Introduce the concept of text-based Generative Artificial Intelligence and then help students use ChatGPT or other accessible text generator to generate text-based content listed on their website building checklist and import the content into their website. Include a discussion of the challenges of AI “hallucinations” and plagiarism.
- 15 minutes – Explain how best to use prompts to create AI generated product images or graphics using Adobe Firefly or another accessible image generator. Include a demonstration of some of the common pitfalls of AI and how AI image sets can result in biased images.
- 45 minutes – Help students build 10-15 product examples starting with AI suggested descriptions and ending with reasonable AI generated images.

Submitted Assignment:

- 1) Copy and submit your AI generated information for your website: About Me, Privacy Policy, Return and Refund Policy, A list of your 15 products including names, descriptions, and prices, and Fashion & Styling Tips related to your categories
- 2) Upload one AI generated product image that they created for their website

Homework Assignment:

- 1) Create a logo for their website brand using online tools

#### **Day 4: Lab Session: Q & A and help with website building (2 hours)**

#### **Day 5: Displaying Product Display (2 hours)**

- 5 minutes – Introduce Virtual and Augmented product display and identify software required (Adobe Dimension and Adobe Aero) to expedite download and login.
- 5 minutes – Have students navigate to demonstration folders and download image sets taken from product websites of 360 product videos. Choose a variety of products (e.g. fashion and food) to give students choices. Explain use of photo turntable and editing that was used by producers of videos (not included in workshop)
- 15 minutes – Demonstrate production of 360 rotation of products from numbered sets of photos into a rotating product display using Adobe Photoshop.
- 30 minutes – Help students build short video (GIFs) using images.
- 5 minutes – Explain Adobe Stock and other free and/or accessible stock image websites and ask students to find or create an image suitable for their imagined brand such as the brand logo they created as homework.
- 15 minutes – Demonstrate Adobe Dimension tools and source of Adobe Stock 3D models before directing students to download a prepared 3D product file.
- 30 minutes – Help students place brand image on a product such as a food bar or a shirt and adjust model properties in 3D to change color or texture.
- 15 minutes – Export the 3D product to use as an AR product image in Adobe Aero and help students document their use with screenshots. Additionally explain the use of product AR on websites.

Submitted Assignment:

- 1) A 360 video of chosen product
- 2) Screenshot(s) from phone of AR product
- 3) Screenshots of several pages from their demonstration store website