Understanding Virtual Prototyping to Assess Fabric Performance

Project Specifics
- **Level**: Freshman
- **Suggested time for completion:** 2 weeks
- **Website page:** Fabric Performance Assessment

Learning Objectives
- Understand how to evaluate and predict fabric performance of textile products utilizing virtual prototyping software.
- Identify limitations and benefits of evaluating fabric performance of textile products utilizing virtual prototyping software
- Recognize how fabric and textile firms might use virtual prototyping technology.

Instructions
1. Choose Optitex.com, clo3d.com, or Browzwear.com and visit the developers' websites <u>and identify clearly which website you have selected.</u>
2. OPTION 1 (Preferred) Create <u>a 3-5 minute</u> informational video by answering the following questions related to fabric performance when utilizing virtual prototyping software:
   o What are some potential limitations and benefits of using virtual prototyping technology to analyze fabric performance and physical properties (drape, stretch, etc.)?
      ▪ Describe at least 3 potential benefits.
      ▪ Describe at least 3 potential limitations.
   o How does the software you selected overcome these limitations? Describe in detail the functionalities of the tool used to assess fabric performance.
      ▪ What is the tool called?
      ▪ What does the tool do?
      ▪ How does it help to overcome the limitations you mentioned above?

- o Your argument of why or why not the software can fully replace the physical assessment of fabric performance.
  - Give at least <u>one</u> specific reason.
  - Provide a compelling justification.

OPTION 2 If you prefer not to create a video, you may narrate a PowerPoint (it must be PowerPoint, not another program) and answer the above questions.

3. Write a bulleted one-page summary of the important key points you mentioned in the video or PowerPoint.
   - o Please bullet points to capture your thoughts, but you may also include graphs, charts, visual depictions, etc. in addition to bullet points.

Competencies: critical thinking and creative problem solving