

Appendix 1: Implementing Teaching Standards

Common Core Geometry, Writing and Language standards will be revisited through the teaching of North Carolina's Essential Standards for Apparel and Textile Production I and II. This curriculum unit will take an interdisciplinary approach to the study of hosiery. The essential standards for Apparel and Textile Production, while vaguely stated, encompass a depth of knowledge about pattern engineering, North Carolina's rich history in the field of textiles industry, as well as textile science and development. Geometry skills will be strengthened as students participate in the assigned hosiery construction project. Applying practical math skills, with precision, as stated in the common core math practices, are crucial to designing and executing a product that, while one dimensional in its inception, must fit properly to the human form (cylinder like). Other components of this curriculum challenge the student to study, reflect, write, and argue topics centered on hosiery. Some topics include modesty, hosiery for both genders, and science history with regards to knitting technology. Women entering the workforce, super heroes, and medical innovation are other topics of interest to investigate using various media (social media, art, and journaling).

Common Core State Standards

Writing and Language Standards 6-12

- W1** - Write arguments to support claims with clear reasons and relevant evidence.
- W2** - Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.
- W9** - Draw evidence from literary or informational texts to support analysis, reflection, and research.
- L4** - Determine or clarify the meaning of unknown and multiple meaning words and phrases based on grades 11-12 reading and content, choosing flexibility from a range of strategies.

Geometry-Congruence and Modeling

Make formal geometric constructions with a variety of tools and methods (compass and straightedge, string, reflective devices, paper folding, dynamic geometric software, etc.)

Use geometric shapes, their measures, and their properties to describe objects (e.g. modeling a tree trunk or a human torso as a cylinder).

Apply geometric methods to solve design problems (e.g. designing an object or structure to satisfy physical constraints or minimize cost; working with typographic grid systems based on ratios).

Apparel and Textile Production I

- 1.01 Remember the apparel industry.
- 1.02 Understand apparel design.
- 2.01 Understand fibers, fabrics, and finishes.
- 3.00 Understand apparel engineering.

Apparel and Textile Production II

- 1.02 Understand technical design and textile science.
- 2.01 Understand product construction.