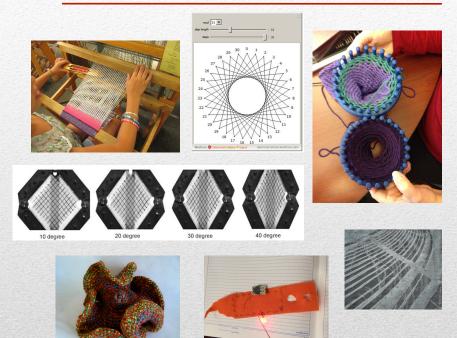
Inclusion Through Textiles:



Lowell Tex Our 12-member interdisciplinary team includes faculty, expert fiber artists, and community partners and is working to create and deliver curriculum modules for STEM learning.

Sarah Kuhn PhD, UMass Lowell

Creating a Pathway To and Through STEM

- Textiles, garments, and the fiber arts are a STEM learning opportunity *hiding in plain sight*.
- Robotics is not the only pathway to STEM—only the most used.
- Textiles are ubiquitous, including across cultures, and may be in the comfort zone of the underrepresented.
- Textiles support K-20 learning.
- SOFT can be HARD!
- Looms and sewing machines belong in labs and maker spaces.

Topics: material properties such as resistance and capacitance; math concepts in transformational geometry, combinatorics, and linear algebra; manufacturing concepts like those related to incorporation of electronic materials into the yarns and fabrics; design strategies for incorporating discrete devices such as microcontrollers, sensors, actuators, displays.

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