A Guide to the Romantic Planning Framework
From Sheep to Shawl: Exploring Fiber

Description:

This unit will incorporate the cognitive tools of Romantic Understanding to explore the world of fiber. It will focus on the heroic qualities of beauty, functionality and comfort.

We live in a world that is rich in fiber and textiles. It is the very thing that fills our world with beauty and function. If we pause and look around us, we will be amazed to see how prevalent fiber is in our world and how cold and uncomfortable our environments would be without it. Remove fiber, and we are left with rock, concrete, plastic, glass and skins. Through this unit, we will explore the world of fiber and its importance in our lives.

Learning Outcomes covered:

Students will be able to:

- identify natural and manufactured fibers, and describe their origins
- describe basic care of textile items, including interpreting care labels
- demonstrate basic methods of combining yarns to make fabric
- demonstrate various ways to recycle clothing and textiles

1. Identifying "heroic" qualities

What heroic human qualities are central to the topic? What emotional images do they evoke? What within the topic can best evoke wonder? In order to help students connect emotionally to the material, teachers need to first identify their own emotional attachment to it. What heroic human quality or emotion—courage, compassion, tenacity, fear, hope, loathing, delight, etc.—can we identify in the topic? These human qualities help us—and our students—see the world in human terms and give human meaning to events and ideas in all disciplines. We "humanize" each topic not to falsify it but to infuse the world with human meaning. Again, this first task is the most difficult part of planning the lesson or unit. We are asked to feel about the topic as well as to think about it; indeed, we are asked to "perfink" (David Kresch's term for perceiving, feeling, and thinking together) about it. Remember, the heroic quality you identify will be a shaping force to the narrative or story you create for this unit or lesson so identify heroic qualities that most effectively convey the content of the topic.

Identifying heroic qualities:

Main heroic quality (and the images that evoke this quality):

Beauty: a woven tapestry – each fiber, from mud browns to vibrant reds, adding to its beauty

Functionality: baskets (storage); cozy blanket (warmth); hats (fashion); fishnet (industry); upholstery (comfort); insulation (soundproofing)

Alternative(s):

Comfort: a warm, fuzzy blanket; a soft, overstuffed couch; squishy carpet

Versatility: a picture of a family (sitting in their living space) filled with fiber-related items (upholstery, carpet, baskets, curtains, clothing, dog collar, books, newspaper, wooden blinds, placemats, table runners, wooden table and chairs, flooring etc.)

Creativity: images of the expected (scarf, sweater) to the unexpected ("yarn bombing")

2. Shaping the lesson or unit:

Teaching shares some features with news reporting. Just as the reporter's aim is to select and shape events to bring out clearly their meaning and emotional importance for readers or listeners, so your aim as a teacher is to present your topic in a way that engages the emotions and imaginations of your students. As you do so, consider which of the following dimensions of your students' emotional and imaginative lives can be used to shape your lesson or unit—all related to the skills the good reporter works with:

2.1. Finding the story or narrative:

What's "the story" on the topic? How can the narrative illustrate the heroic qualities of the topic?
If you imagine for a moment that you are a news reporter, you will think about events/information in terms of human interest and engagement. Remember, everything is potentially wonderful. In order to be a good reporter, one needs to think this way about whatever it is one has been sent to report on. That is, the reporter writes about or talks about an incident in a way that is interesting, or that somehow engages the reader's/listener's imagination and emotions. And so too the teacher. Ask yourself what the "story" is on your topic; identify what is wonderful or interesting or engaging about it and how you can discuss it in a way that reflects this. Keep in mind that the main heroic quality you identify in this step will drive the drama and conflict in the story.

Throughout this unit, we will explore the world of fiber under the guidance and expertise of fiber artist, Judith MacKenzie McCuin. McCuin has an in-depth understanding of every aspect of fibers, textiles, spinning, weaving and dying and has written many books on the subject. Her interest in the history of fiber brings depth to the story and a new appreciation for something that is often taken for granted.

The story begins by reading the introduction to McCuin's book, *The Intentional Spinner*. McCuin and her children lived on a little island off the west coast of Canada. She begins her story using vivid images of an idyllic life spent watching otters and orcas from her studio window as she spun and wove.

Her mind travels back to the time before she and her children came to the island, to the inhabitants "who braved the roughest waters on earth, hoping to find a new life in a new world." She speaks of how they brought apple tree cuttings, raw potatoes, poppy seeds and lavender- remnants of which still grow in her garden.

But long before the European settlers came, other people, who traveled between Russia and Alaska in search of a new home, settled along the seacoast where her little cottage now stands. They left behind stone vessels, pestles and petroglyphs. "Because textiles leave no surviving shards, we can't know the full extent of their textile use, but we do know from their tools and textile artifacts that they spun and wove." (McCuin, 2009, p. 9)

McCuin goes on to explain, in vivid detail, the process by which these resourceful people collected and processed fiber into a useable format. Nettle was the 'fabric of their life', as it provided the fiber needed to make fishnets, traps and weirs (a barrier across a river) used in harvesting fish. Early people used fibers to create hats, capes and wraps to protect themselves from the elements. Baskets used for food collection and storage were made from cedar and cherry bark.

This story will evoke a sense of wonder at the resourcefulness of these people.

- *How did they think to use these plants to make fiber? Nettle stings!*
- *Why did they not rely on animal skins? (The wet climate made skins impractical).*
- *When did they discover that adding twist to a fiber increased its strength? ("Though no one can know for certain when or where the first curious mind discovered that twisting fibers produced a useful thread, each spinner shares in that exciting moment of discovery as she learns to spin.")* (McCuin, 2009, p. 14)
- *Students might wonder how the fibers used to create their own clothing was created. (Provide students with magnifying glasses to look at their clothing fibers.)*

Students will engage emotionally with the story as the vivid images are portrayed and as students gain a better appreciation of the backbreaking work that went into processing the fibers. Beauty will be revealed, perhaps not so much in the product, but in the process of making it – the rhythms of those who pounded the nettle stocks to release the strong bast fibers, the spinning of the fibers into yarn, the tying of the fibers into nets. Perhaps songs were sung to accompany the rhythms and pass the time.

As the story continues, McCuin introduces us to three main categories of fiber: cellulose (plant fiber – hemp, cotton, flax), protein (animal fiber –wool, hair and silk), manufactured fiber (regenerated fibers made from natural sources such as bamboo and synthetic fibers created in a lab – nylon). The heroic qualities of beauty, functionality and comfort are highlighted throughout.

2.2. Finding extremes and limits:

What aspects of the topic expose extremes of experience or limits of reality? What is most exotic, bizarre or strange about the topic? As you think about your topic in terms of its heroic qualities and how you will share these with students in an emotionally and imaginatively engaging way, you'll want to consider what is extreme, exotic, or bizarre about your topic. Your students' imaginations are engaged by the extremes of experience and limits of reality. As they try to make sense of reality, and their place within it, their imaginations are drawn to what is the most extreme, bizarre, and generally wacky, features of human experience. They revel in the stuff of the Guinness Book of World Records. Identify features of your topic that are extreme, that express limits of human experience. This is the stuff of the superlative tense - - the longest, fastest, shortest, hairiest, most, least (and so on) aspects of your topic.

Exotic/extreme content that best embodies the heroic quality:

We often associate yarn with grandmas and rocking chairs. But, these squishy balls of fluff have been used in weird and wonderful ways to create objects that range from the beautiful to the bizarre. Fiber artists are creative, resourceful people who are easily bored with the usual. They often seek out ways to express themselves in a manner that goes beyond the expected. Exposing students to the weird and wacky aspects of fiber will engage the imagination, and evoke wonder.

Extreme places (just because you can!):

- Underwater
- Skydiving
- Running a marathon (He knit a 12 foot long scarf!)
- Horseback riding
- Rappelling

Extreme projects:

- Rachel John (extreme knitter) knit a mattress using 1000 strands of yarn.
- "Yarn Bombing" – a type of graffiti that creates colorful displays using yarn (google 'yarn bombing' images)
- Sweaters were knit for Shetland ponies to help promote tourism in Scotland
- Arm knitting – this youtube video demonstrates how to arm knit a scarf. Students can create their own scarf by following this tutorial.
- The **largest ball of string** on record is one 4.03m (*13ft 2.5in)* in diameter and 12.65m (*41ft 6in)* in circumference, amassed by J.C. Payne of Valley View, Texas, USA between 1989 and 1992
- Dr. Who scarf – 20 feet long (Season 16)

Exotic fibers:

You can spin fiber from a musk ox?? Have you seen those hairy brutes? But when spun, musk ox yarn feels beautifully soft next to the skin. The array of fibers available to spinners and weavers stretches the imagination. Exposing students to this vast array evokes wonder and interest in a way that might surprise them.

Examples: yak, bison, camel, dog hair, cashmere (from a goat!), angora, bamboo, soy silk, llama, alpaca, seacell (a fiber made by combining seaweed with wool – the fun part is that the nutrients from the seaweed are absorbed into your body as you wear it, creating a sense of well-being), hemp, flax, stinging nettle,

But fiber is not just for knitting:

Kevlar: Kevlar is an extremely strong, durable fabric that resists tears, wear and heat. Additional strength and durability is added when the fabric is woven in a pattern similar to tiny interlocking spider webs. Military helmets made from Kevlar have been credited with saving thousands of military lives due to its superior structural stability. Kevlar has also been used for bike tires, racing sails and drum skins.

Advantages: light weight, very strong, stable at high temperatures, resistant to scratches and impact, waterproof (when combined with other materials as a composite) yet breathable, flexible

Limitations: tends to absorb moisture, reacts well under tensile force (stretching) but badly under compression, difficult to cut and shape (needs special tools), reacts poorly to UV light (degrades)

Fiber optics: Optical fibers are used to transmit communications over long distances. Optical fibers are flexible, transparent fibers that are made of high quality, extruded plastic or glass. Fibers are used instead of metal wires because their signals can travel along them with less loss and are resistant to electromagnetic interference.

2.3. Finding connections to human hopes, fears, and passions:

To what human hopes, fears, and passions does the topic connect? What ideals and/or challenges to conventions are evident in the content? Through what human emotions can students access the topic? Think of how a good movie or novel makes aspects of the world engaging. Obstacles to the hero are humanized in one form or another, almost given motives; they are seen in human terms. To do this, we don't need to falsify anything, but rather we highlight a particular way of seeing it—because this is precisely the way students' imaginations are engaged by knowledge. What content can be best shown in terms of hopes, fears, intentions or other emotions?

Man existed in a world without fiber for a very long time. Warmth and comfort would have come in the form of skins and fur. Imagine the excitement when some curious mind discovered that adding twist to fiber increased its strength and that introducing more fibers into the twist would make a long continuous thread. Simple? Yes, but what a discovery!

Student activity: Students will each be given a lock of unspun fiber. Their task will be to increase its strength somehow and join their fiber with their neighbor's to make a continuous thread.

Students can then explore the possible implications this discovery had on the lives of people long ago. (Weaving fabrics/ making nets/ rope/ yarn for knitting/ thread for sewing skins together/ ???)

2.4. Employing additional cognitive tools of Romantic understanding:

What kinds of activities might you design to deploy other tools in your students' cognitive toolkits? Our students have many cognitive tools with which they make sense of the world. It would be wise to employ as many as possible in one's teaching if one wants to make learning meaningful for students. While we are not suggesting that everything you do in your classroom must include all of the following tools, it would be useful to consider how to include as many as you can in teaching. Whether as part of your direct instruction or through student-directed activities, there are many tools that can engage students' emotions and imaginations with what you are teaching. Consider how to teach in a way that includes the following or think about some activities students might do that engage these cognitive tools:

• Collections and hobbies: What parts of the topic can students explore in exhaustive detail? What activity might engage students in learning everything they can about some aspect of the topic?

Teaching strategy: Collections and hobbies are of high interest to students during these years. Collections help students further explore and understand their topic of study by sorting and categorizing features of it. Local guilds and fabric stores are wonderful sources of items for building these collections. Provide students with an area to gather, categorize and display these them. These displays will highlight the beauty and versatility of fibers.

Student activity: Students can collect fabric swatches and fiber to add to the collection. Collections can be made and added to as a large group, in small groups or as individuals. Expert groups can be assigned to explore, in depth, various categories. Encourage the students to 'go crazy' with this, including the bizarre and unusual (fake fur, carpet fiber, ropes, wood fiber etc.)

• Change of context: What kinds of activities could change the context in the classroom? How might drama or role-play be employed or how might students engage the body's senses in learning?

Teaching strategy: If asked, most students would be unable to describe the process by which fabric is made. Most would say that fabric comes from a fabric store (just like vegetables come from the grocery store). Providing an opportunity to role-play the process of taking wool from 'sheep to shawl' will not only engage the senses, but also bring about an appreciation for final product and the work that goes into producing it.

Student activity:

- Stepping back in time, students will re-enact the process of sheering the sheep, washing the fleece, picking, carding, spinning and weaving the fabric. Experts from a local guild can be invited to explain each step, providing fiber samples (a freshly shorn fleece/washed fleece/carding paddles/a spinning wheel (for demonstration)/handspun yarn/hand-woven fabric). Students (using a variety of yarn colors and textures) will create a fabric swatch using a basic weaving technique. A display of the finished product will, again, point to the beauty and versatility of fiber.
- Divide the students into 'expert groups' that explore fiber production from the point of view of the sheep farmers, the consumer, fiber artist and the sheep(!). Students research the wants and needs/concerns/demands from their point of view and argue their position in a presentation format (poster, debate, speech, etc.).

• The literate eye: How could graphs, lists, flowcharts or other visual formats be employed in learning about the topic?

Teaching strategy: Fiber is vast a varied. Graphic organizers can be used to categorize the properties and characteristics of various fibers in a way that is visually accessible. Flow charts can be created to show a process. Comparisons can be made and processes better understood. Students feel a sense of control over the information by organizing it in a way that makes sense to them.

Student activity: Students use an organizer of choice (chart/graph/poster) to categorize information and samples collected. For example:

- create a flow chart showing the process of taking wool from 'sheep to shawl' or cotton from 'field to fabric'
- create a chart that categorizes fibers by their properties (cellulose/protein/manufactured)
- create a chart that depicts the characteristics of various fibers (soft/felts easily/warm)
- create a poster that expresses environmental concerns about the processing and manufacturing of various fabrics
- create a poster that promotes/protests an aspect of fabric production

• The sense of wonder: What kind of activity might evoke students' sense of wonder? How could you use that sense of wonder to draw students forward in thinking about further dimensions of the topic?

Teaching strategy: Fiber is such an integral part of our lives. Without it, what would we wear? What would bring us warmth and comfort? What would our living spaces look like? Now imagine a world without fiber. How would our lives be different?

Fiber is something we often take for granted. By evoking an emotional connection to items created from fiber, students will gain greater appreciation for the beauty and comfort that fiber brings to our world.

Student activity: Invite students to think about their favorite sweater, stuffed animal or blanket. Take a moment to reflect on the emotions these items evoke (comfort, beauty, security, pleasure, peace). Students will do a quick write about the emotional connections to one of these special items.

Now, imagine a world where fibers do not exist. Imagine trying to find the same comfort in things made of metal, rock or concrete, glass and plastic – the only materials left. Students will design an environment created with the absence of fiber and do a quick write about the emotions connected to that environment.

Allow time for discussion about their discoveries.

• Embryonic tools of philosophic understanding: Consider how to frame the topic in terms of a general idea or theory. How can students begin to move from the particular aspects of what they have been learning to a more general explanation? How can students' sense of agency be engaged?

Teaching strategy: The topic of fibers goes beyond the stuff you hold in your hands. There are many issues that arise with regards to the impact consumerism has on the types of fabrics that are being produced. A student's sense of agency can be engaged by looking at the role they, as a consumer, play in the not only *what* is produced, but *how* it is produced.

Student activity:
Questions and inquiry can be evoked by asking some thought-provoking questions such as:

Where do the clothes I wear come from? (Check the labels)
Are they produced ethically or not? (sweatshops)
Is my desire to keep up with fashion trends (and thus supporting the need for cheap clothing) impacting the environment? – *The article titled: "Waste Couture: Environmental Impact of the Clothing Industry" would make an interesting read.*
Discuss the quote: "*True fashion is about non-toxicity. If fashion pollutes, it should no longer be called fashion, it should be called pollution."* (www.fashiontakesaction.com)

Other topics for discussion may include:

- Why do people still spin, knit or weave when technology exists to do it faster/quicker?
- Are there some fibers that are highly sought after compared to others? What do these fibers say about the individual? Is it connected to wealth (cashmere/Armani suit)? Students can choose a particular fiber, fabric or finished piece and comment on what that particular item might say about them (or the wearer).

2.5. Drawing on tools of previous kinds of understanding:

Somatic understanding – How might students use some of the toolkit of Somatic Understanding in learning the topic? How might their senses, emotions, humor, musicality, and so on, be deployed?

Teaching strategy: Somatic understanding employs cognitive tools that we all used, as pre-literate beings, to make sense of the world. We continue to use these tools throughout our lives. Students can use the sense of touch, smell, sight and sound and the emotions they stimulate to help them make sense of experiences. The way our bodies relate to experiences help us gain a better understanding of the world we live in. Other cognitive tools may include musicality and rhythm, emotional responses to attachments, referencing and intentionality.

Student activity: Students can participate in many activities that evoke the senses and elicit an emotional response. The responses may vary from joy to frustration and repulsion to delight. It may even spark a memory.

> *Arm knitting*: Students can physically manipulate yarn using large, rhythmic motion. Students feel the texture of the yarn as it comes in direct contact with their skin and feel the squishy softness of the finished scarf around their necks.
>
> *Spinning wheel:* Students can experience the mesmerizing rhythm of the wheel's treadle.
>
> *Carding wool:* Students use carding paddles to comb fiber in preparation for spinning. This involves loading one paddle with fiber and methodically combing the fibers with the other. Students will feel the resistance of the fiber ease as the tangles are combed out.
>
> *Balling yarn:* Before a skein of yarn can be knit, it must be rolled into a ball. One student can hold the skein taut with outstretched arms, while another student rolls the yarn into a ball. The students work in sync with each other, creating a rhythm, as the skein unwinds.
>
> At trip to a local wool farm will allow students to see sheep being shorn. They will hear the buzz of the shears and the bleating of the sheep, feel the greasy, lanolin-infused fleece, smell the sweetness of the hay and see the dust motes floating in the air. Students can help pack the fleeces into bundles, tie them tightly and heave them onto pallets.

Mythic understanding – How might students use some of the toolkit of Mythic Understanding in learning the topic? How might abstract and affective binary oppositions, metaphor, vivid mental imagery, puzzles and sense of mystery, and so on, be deployed?

Binary opposites: soft/itchy; dull/lustrous; utilitarian/exotic

Teaching strategy: When introducing the topic of fiber, it may be helpful to look at it in terms of its binary opposites. "It is as though we first have to divide things into opposites in order to get an initial grasp of them; so we easily divide the world into good/bad, high/low, earth/sky, hot/cold, courage/cowardice, and so endlessly on." (Egan, 2005, p. 16) When the topic of fiber is introduced, opposites such as soft/itchy, dull/lustrous and utilitarian/exotic come to mind. These opposities are drawn

from the students' experiences with fiber (the itchy sweater, the soft microfiber blanket) and the emotions they evoke (irriation/comfort). Further exploration of the topic reveal a host of qualities along the continuum.

Student activity: Students are given a collection of fiber and fabric samples and are asked to record words that describe how they feel or look. The samples are then sorted and organized along a continuum. Students can comment on and discuss the samples based on their qualities. Encourage students to share and explain any emotional connection to these fibers. (i.e. This silky fabric reminds me of the dress I wore to my favourite aunt's wedding. This rough, open-weave fabric reminds me of the feed sack my horse's grain came in.)

Metaphor: "Metaphor is the capacity, or cognitive tool, that enables people to see one thing in terms of another." (Egan, 2005, p. 12) We use metaphors every day (whether intentionally or not) to bring meaning and demonstrate or express our understanding of the world around us. The intentional use of metaphor can help students understand topics being taught in a deeper, more meaningful way.

Teaching strategy: Our lives can be thought of as fabric woven together by the fibers derived from our personalities, experiences, hopes and ambitions. These fibers can be frail or strong, beautiful or ugly, exotic or mundane. The resulting fabric will be as unique as the person whose life if represents. Our fabric may be threadbare in places and vibrant and robust in others. Each fabric tells a story and each is beautiful in its own way.

Student strategy: Students will collect fibers that represent aspects of their life that can be used to make a small woven fabric. Fibers can represent an event, an experience, mood, personality trait, hope or dream. A journal can be kept to explain fiber choices and what they represent. Students have the choice as to what they share, as some of the threads may evoke painful, private memories.

3. Resources: What resources can you use to learn more about the topic and to shape your story? What resources are useful in creating activities?

List of resources:

Chetwynd, H. (1988). *The weaver's workbook.* New York, NY: St. Martin's Press.

Egan, K. (2005). *An imaginative approach to teaching.* San Francisco, CA: John Wiley & Sons, Inc.

Field, A. (2011). *Learning to spin with Anne Field: Spinning basics.* Auckland, New Zealand: David Bateman Ltd.

Field, A. (2010). *Spinning Wool: Beyond the basics.* Auckland, New Zealand: Trafalgar Square Books.

Hood, A. D. (2007). *Fashioning fabric: The arts of spinning and weaving in early Canada.* Toronto, ON: James Lorimer & Company Ltd.

Lambert, A. &. *The complete guide to natural dying: Techniques and recipes for dying fabrics, yarns, and fibers at home.* (I. Press, Ed.) Loveland, CO.

McCuin, J. M. *The intentional spinner: A holistic approach to making yarn.* Loveland, CO: Interweave Press.

***Any websites used have hyperlinks attached.*

4. Conclusion

How does the narrative end? How can one best bring the topic to a satisfactory closure and how can students feel this satisfaction? Alternatively, what new questions can draw students to think more deeply about the topic? How can you extend students' sense of wonder?

One wants to end a topic in a "heroic" way, which can have two forms. The first form is to re-examine the images we started from and review the content through the lenses of other heroic qualities, including some that might give an opposite or conflicting image to that of our earlier choice. The second form is to show how the romantic association the students have formed can help them understand other topics in a new way. Or one can use both, of course. In concluding we will also want to reflect back on the topic bringing out why we should feel wonder or awe about it.

Concluding activities:

Museum exhibit – An art exhibit can be made by joining the 'life fabric' pieces that the students created earlier in the unit. These fabrics are a visual representation of the threads that make up each of the students' lives. When pieced together, fibers from one student's fabric may be woven into fabric of another, as a metaphor for how our lives are intertwined. These threads represent friendship and connectedness and point to the beauty fiber brings to our lives.

5. Evaluation

How can one know that the content has been learned and understood and has engaged and stimulated students' imaginations? Any of the traditional forms of evaluation can be used, but in addition, teachers might want to get some measure of how far students' imaginations have been engaged by the topic, how far they have successfully made an imaginative engagement with the material. In addition, the concluding exercises (above) are also evaluative in nature. Students could be asked to identify heroic qualities in stories in other disciplines to examine both their imaginative use of narrative and their understanding of the content. Heroic qualities can also be examined on moral/ethical terms.

Forms of evaluation to be used:

- "Point of View" presentation: how well did the student research and argue their perspective? (Provide rubric that clearly states criteria)
- Functionality project: Students choose an end product (sweater, socks, hat, carpet, wall hanging, etc.) and use the characteristics of various fibers (durability, luster, colour-fastness, elasticity, shrinkable, drape etc.) and create a blend of fibers that, based on their characteristics, would be best suited for the product. Students can use the cognitive tool "literal eye" to represent their ideas.
- Participation: Discussion/group work/attendance
- Journal: Entries may be in the form of reflections, sketches, fabric or fiber swatches, project ideas, articles of interest, etc. (Provide a rubric which clearly states criteria).