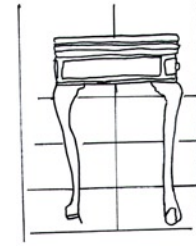


You Are the Furniture Designer!



Lesson 7

Grades: Fourth & Up

Overview: In this lesson students experience what it's like to apply art skills in a real world profession, the furniture design business. Students are asked to role-play that they are a furniture designer as they create drawings for a prototype line of furniture for a fictional business, "Chairs R Us Furniture Company." Management of the company has decided that it wants to create a new line of solid wood furniture based on one or more of the traditional furniture regions of the South. Under the pressures of a deadline, the possibility of losing their job, meeting design requirements, and other demands from upper management, students apply their drawing skills and creativity in a role play that quickly starts to feel like the "real thing."

Estimated No. of Sessions: Multiple

This is a multi-week project. If students have already studied perspective drawing, it can be abbreviated. It can also be abbreviated by limiting the number of required drawings. For example, instead of doing an entire line of furniture, students could draw just one piece (this may be more appropriate for fourth-graders).

Resources/Materials in Kit:

- 1) Article: "Working With a Furniture Designer" by Steve Hodges
- 2) Photos of the Three Regions of Southern Furniture (See: Lesson 6)
- 3.) Basic Perspective Drawing Instruction sheets (See: pouch)
- 4) "Details" – A large, life-size drawing used to build a piece of furniture.
- 5) *Selectorama*
- 6) Student-created furniture design for a bookcase.

Resources to Get:

Home decorating magazines with pictures of furniture; brochures from various furniture companies.

Prerequisites

Lessons: "Exploring Trees and Woods Around Me" and "Looking Back at Furniture Making"

Before doing this lesson, students will need to have been taught perspective drawing and have had a chance to practice this skill. For a simple technique for teaching perspective drawing, see: the Perspective Drawing Handout that accompanies this lesson.

Learning Outcomes

After completing this lesson, students should be able to:

- 1) describe the job of the furniture designer
- 2) list the common steps or phases in the furniture "product development" process and describe what happens in each phase

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- 3) distinguish a 3-D prototype drawing from a 2-D elevation drawing and recall the uses of both.
 - 4) draw a basic 3-D box
 - 5) apply a basic measurement system to a representative model to scale

Vocabulary

compass - a device used for drawing circles

details - large, life-size drawings used to build prototypes or furniture samples

elevations – two-dimensional (2-D) design drawings that include measurement and construction information

furniture designer - a person who works within given restrictions and conditions to create drawings that could be made into actual pieces of furniture

knock-off - a product based on a copy of an original design.

product development process - the step by step process designers of furniture follow when developing an idea for a furniture line from “concept” through finished designs.

prototype - an original model for something which serves as the pattern for the production of many others exactly like it

T-square - an instrument furniture and building craftsmen use to make a perfect right angle

Suggested Instructional Steps:

Show and ask questions

1. Kick off the lesson by showing the class the “Detail” example supplied in the kit. Ask students: What do you think this is? Let them try to figure out what it’s used for and why it’s so big.
2. Now that you’ve got their attention, explain that the large drawing is called a “Detail” and that it is used to build prototypes or furniture samples. Explain that it is the model or pattern from which a prototype or sample of a piece of furniture is created. Explain that in the next few class sessions, the class is going to be role-playing that they are furniture designers.
3. The furniture design simulation is self-explanatory. For notes on how to modify it for fourth-graders or to reduce the time of the experience, see Estimated Time, page 1 of this lesson.

Introduce the furniture design role play by saying something like:

“For the next several class sessions you are going to be a group of furniture designers working in the design division of “Chairs R Us” Furniture Company. I will not be your teacher anymore but the “Lead Designer” of the furniture design division. “Chairs R Us” has recently had a couple of unprofitable quarters and management has decided to make a major investment in several new furniture lines that include a more diverse range of household furnishings than “just chairs.” Before man-

agement decides what “lines” they want to manufacture, they want to see a wide range of designs on paper - everything from bedroom suites, dining room suites, to living room furniture and even home office suites.

Here are my marching orders for this division: We need to “reinterpret” in wood traditional “early Southern” regional styles of furniture (Low Country, Chesapeake, and Back Country) for today’s consumer market. Management wants a wide array of highly creative yet well executed drawings for potential furniture lines.

In a nutshell , your assignment is to “Remake History” by coming up with prototype drawings for a “world class” line of solid wood furniture.

A memo was sent to the Furniture Design division by management. It makes it clear that Designers who don’t get all their design assignments in by the deadlines and executed at an acceptable level of quality will need to start redoing their resumes and looking for another job!

These Product Development steps should be followed over the course of the Furniture Design Project.

(Note: Pages 7-4 through 7-5 may be copied as a student hand-out.)

Steps in the “Product Development” Process

“Remaking History”

A. Concept and Research Phase

This phase involves “searching for a new take on an old style” of home furnishings. Use the photos developed by the research department of the three Traditional styles of early Southern furniture: Low Country, Chesapeake, and Back Country to help you create a new furniture line. Also, look at the many magazines and other “visuals” and brochures the Research Department has provided us. Be sure to catalog in your sketchbook the various furniture elements that interest you as you look at the furniture visuals: Hardware, edge cuts, carvings, patterns, etc. and think about which elements would best help you “remake” the regional style of furniture that you feel would be a big hit in the consumer market.

Homework Assignment: What Does Furniture in My Home Look Like?

Chairs R Us management wants designers to come up with designs that maintain the traditional flavor of the three regions BUT ALSO are in keeping with what consumers actually like and buy. Take an inventory of all the furniture you find in one room in your home, i.e., a bedroom, living room, great room, TV room, etc. Include the following:

- a list of each type of furniture in the room (chair, sofa, table, etc.)
- select one piece of furniture that you think exemplifies the “taste” or ”style” of the room. Focus on this one piece of furniture that in your opinion “defines the style of the room.”
- describe that one piece of furniture in detail, its line, list of material used to build it, etc. Draw a quick sketch of it in your sketch pad so you can remember exactly what it looks like.

B. Preliminary Sketches Phase

Using one of the three styles of traditional Southern furniture and the piece of furniture you selected at home, brainstorm and flesh out in your sketch book your ideas into concrete designs. Remember this is where you as the furniture designer have to think about what customers will buy, what the company requires, the deadlines and budgetary limits given you by the lead furniture designer, and the particular furniture region you are “reinterpreting.” As a talented young furniture designer, you must bring all of these concerns together in a strong and creative way in the form of dynamic new line of “traditionally-inspired” furniture!

C. Final Sketches Phase : (Prototype Sketches With Elevations)

Once your preliminary sketches are approved by the Lead Designer and management, you will need to work like a mad person trying to reach your deadline for final sketches. From final sketches the full-size working drawings (or DETAILS like we saw at the beginning of this lesson) will be made. Remember that the prototypes and samples are built from the Details so your final sketches have got to be very good and very accurate!

Let's face it. Some time outside of your regular 9-to-5 job at Chairs R Us will most likely be needed to complete this vitally important assignment. (In other words, students will have to do some work at home on their projects).

Some things to remember

- ✓ Be neat in your drawing style (sharp pencils are the key).
- ✓ Placement is critical when you are developing prototype drawings and elevations. Think about what you've learned as an artist about composition and use of the picture plane to organize your work.
- ✓ Color may be an added advantage in “selling” your idea to management and to a “prospective client.”

A Few Requirements

- The deadline for the drawings is _____.
- Designs must fit into one of the three Southern regional styles (if it is not apparent how the furniture reflects or interprets the particular region, you must be able to explain the connection).
- You must design a set or room of furniture with at least ___ pieces of furniture (i.e., bedroom, dining room, living room, great room, etc.).
- Designs must include prototype 3-D drawings (one point/ two point) along with three elevation drawings (front, side and top) for each piece of furniture.
- Elevations must include design measurement and custom construction information (i.e., wood type/s, special features, regional style, design firm, name of collection).
- Color pencil or pencil may be used to create wood and other material. The elevations must be created in pencil line drawings.

Assessment

Are students able to:

- ✓ describe the job of the furniture designer?
- ✓ demonstrate that they understand the various constraints and conditions that furniture designers must meet?
- ✓ meet the requirements of the basic steps in the furniture “product development” process?
- ✓ tell the difference between a 3-D prototype drawing and a 2-D elevation drawing and explain their different uses?
- ✓ draw a basic 3-D box?
- ✓ apply a basic measurement system to a representative model to scale?

Extensions

Have a group of parents or administrators role play Management. Students present their completed designs to management in a “Presentation” meeting in which each student takes a few minutes (3 to 5) to present their designs to management and to convince management to produce their designs as a real line of furniture.

Remind students to:

1. Plan the 3 to 5 things they want to say in their presentation.
2. Practice their demonstration, including how they will demonstrate their drawings.
3. Remember that their goal is to “sell” or “motivate” management to want to produce their designs into real furnishings so be positive and convincing!

Ask students to:

Develop a brochure for their line of furniture that describes how it has “remade history.” Use descriptive language and try to write it in such a way that will motivate the reader to want to buy it.