

THE FEMALE EDISON

A PLAY IN TWO ACTS BY
Lindsay Price



CLASSROOM STUDY GUIDE

Introduction

Margaret E. Knight was a 19th-century inventor with two big but forgotten stories.

Playwright Bio

Lindsay Price is the Vice President of Theatrefolk Inc. and the co-creator of the Drama Teacher Academy. She has been involved with theatre education for over 25 years as a playwright, adjudicator, workshop instructor, resource writer, curriculum supervisor, professional development creator, and keynote speaker. Her plays have been performed in schools all over the world with over 1000 productions a year.

Synopsis

Margaret E. Knight was a 19th-century inventor with two big but forgotten stories. At 12 years of age, while working at a textile factory, she invented a part to improve the safety of a power loom. How did she get mill management to not only listen to her idea but implement it? As an adult, she invented a machine to mass-produce flat bottom paper bags. This invention was eventually stolen from her so she hired a lawyer to take the case to court. The defense was that “there is no way a woman could have invented this.” How did Margaret persist and secure her place in the annals of invention?

Characters

MARGARET [W]: Inventor. Adult. Worked in factories and many jobs where she used her hands (repairs, furniture upholstery).

MATTIE [W]: Margaret at 12 years old. Tough. Spirited.

ACT ONE

Margaret’s Family

HANNAH: Margaret’s mother, factory worker.

JIM: Margaret's brother, Weaving Room #3 Assistant Overseer.

CHARLIE: Margaret's brother, factory worker.

Factory Operatives

HARRIET

MARY

SARAH

ELIZA

LUCY

FRANCES

GEORGE

HENRY

SAMUEL

5 ADDITIONAL OPERATIVES FOR GROUP SCENES

Factory Management

BAKER, JACOB: Weaving Room #2 Overseer.

GREEN, DANIEL: Foreman of Repairs.

LIGHTBODY, EUGENE: Superintendent of Weaving.

STICKNEY, WILLIAM: Weaving Room #2 Assistant Overseer.

PIERCE, JAMES: Mill Manager #4.

ACT TWO

CHARLES: Machinist. Inventor.

KNOX, JOHN: Factory Supervisor.

CANTWELL, DAVID: Patent Lawyer.

GRAHAM, WIL: Machinist.

ABBOT, LEWIS: Machinist.

DUNCAN, ARTHUR: Acting Commissioner.

PATENT OFFICE CLERK: Duncan's clerk.

Factory Operatives

EMMA

GRACE

RUTH

ELLIE

ALICE

FOUR FEMALE INVENTORS: Should come from cast of actors

Groups

19th CENTURY GROUP

INVENTORS GROUP

INVENTION GROUP

Themes

Economic Issues, Gender Issues, Women's Issues, Adolescence, Censorship, Family, Friendship, Overcoming Odds, Personal Responsibility, Poverty, Rejection

Pre-Read Questions

- ★ What do you dream of being when you grow up?
- ★ What invention do you think we need in this world? What would you create?
- ★ Has anyone ever made an assumption about you? How did you prove that assumption wrong?
- ★ Do you notice any patterns in your daily life?
- ★ Have you ever felt like you were different?

Pre-Read Activities

Machine Building

- ★ Tell students they are going to work together to build a machine using their bodies.
- ★ One student will start the machine by doing a repetitive movement and sound. Students will then observe what the student is doing and add to the machine with their own sound and movement.
- ★ Students should observe what everyone is doing and how the machine works as a whole when thinking about what their sound and movement will be. Creating the machine is a team effort.
- ★ After everyone has added their sound and movement to the machine, have them run the machine together for a minute then stop. Discuss:
 - » How did you decide what sound and movement to add to the machine?

- » What skills were important to use in this game? For example, did you have to listen? Why?
- » What would you name the machine you created?
- » Was it difficult to create a sound and movement? How so?

Research Project: Margaret E Knight

- ★ Divide students into groups and give them a limited amount of time to research the main character of this play, Margaret E Knight.
 - » Who was Margaret E Knight?
 - » What is her background?
 - » What did she invent? How many inventions did she create?
 - » What inspired her inventions?
 - » Was she a “successful” inventor?
 - » Was there any criticism of her work?
- ★ Decide how students will share their knowledge. Will they create a scene based on what they’ve learned? An oral presentation with a visual component? A quiz?

Guess the Leader

- ★ Tell students to stand in a circle. Tell them you are going to pick one student to leave the room and one student to be the leader. The objective of the game is for the student who left the room to guess who the leader is.
- ★ Once you pick the leader, tell everyone they must follow the movement the leader does. They should not make it obvious who the leader is by pointing or gesturing to them.
- ★ Once the leader is chosen and the movements begin, have the student who left the room stand in the middle of the circle to guess who the leader is. They have three chances to observe and guess.

- ★ Remind the group that whoever the leader is should change movements when they have the ability to do so without getting caught.
- ★ If the guesser guesses who the leader is they win and if they do not guess then the leader wins. Repeat this exercise as many times as you would like, picking a different leader and guesser each time.

Movement Exploration

- ★ Explain to students that they are going to walk around the space as if they are walking on a grid. They can only move in straight lines and make sharp turns. None of the lines should be curved. As they walk around the space tell them to keep a soft focus on the room to avoid bumping into any people or objects in the space.
- ★ Have students practice walking on this grid and then tell them they are going to walk on the grid while exploring tempo. You will say a number from 1 to 5 and students will walk at that speed with 1 being the slowest and 5 being the fastest.
- ★ When calling out numbers you do not have to go in order. For example, students can begin walking at a 3 and then go to a 5 and then a 1. Make sure they are able to explore all the tempos at least once.
- ★ When the activity is finished discuss:
 - » What did it feel like walking on a grid? What changed when you added tempos to your walk?
 - » Was there a tempo you found it most difficult to walk at? Which one and why?
 - » Which tempo was the easiest for you? Why?
 - » Were you able to stay focused throughout the activity? Why or why not?

Honoring Powerful Women Monologue

- ★ Ask students to think of a powerful woman they know who inspires them. It can be anyone from their mother to a celebrity. With this exercise they are going to honor that person.
- ★ Have students research their chosen woman.
 - » What makes her powerful?
 - » What has she contributed to the world?
 - » Why is the student inspired by her?
 - » What was her life like growing up?
 - » How did she face challenges?
- ★ After doing research, have students write a monologue about their chosen woman. It can be written as if they are the woman or it can be them talking about the woman.
- ★ At the end discuss what the process was like.
 - » How did they honor their chosen woman?
 - » How did the student feel while writing the monologue? How do they feel after presenting it?
 - » What was their favorite and least favorite part of the process?
 - » What did they discover about themselves through this process?

Breaking Gender Stereotypes

- ★ As a class, discuss societal standards/stereotypes women have had to follow in the past that no longer exist today. Create a list of them on the board.
- ★ Ask students how they feel about these standards/gender stereotypes.

- ★ Pair up students and assign each one a societal standard/gender stereotype. Have students research the origin of their standard/stereotype and what's changed.
- ★ At the end of a designated time have students present what they discovered. Decide how students will present their information: verbally, with a slide deck, theatrically, etc.
- ★ Once all the pairs have presented, discuss as a class how times have changed. How has the gender stereotype been broken? What gender stereotypes still exist today? What does it mean for a woman to be strong? How can we further the discussion of women's rights in society? How can we strive to create an equitable society?

Close Reading Analysis Questions

Close reading is an analysis tool. Students read a text multiple times for in-depth comprehension, striving to understand not only **what** is being said but **how** it's being said and **why**. Close reading takes a student from story and character to drawing conclusions on author intention. Close reading prompts students to flex their thinking skills by:

- ★ Teaching students to engage with a text.
- ★ Teaching students to be selective. We can't highlight everything in the text, only the most important elements.
- ★ Teaching students to make educated decisions. All conclusions and opinions must be backed up with a text example.

Have students analyze *The Female Edison*, individually or in groups, using the following text-dependent questions:

Read One: What is happening?

1. Which character isn't scared in the first scene?
2. What happened to Peter?

3. When was Margaret E Knight born?
4. Where does Margaret's story take place?
5. What does Mattie make for Hannah?
6. At what time does work at the mill begin?
7. What is Mattie doing that Harriet says is not allowed?
8. What is Mattie's plan to fix the machine?
9. Who is the Foreman of Repairs? Why is it important to talk to him?
10. What is the hierarchy of workers in the play?
11. How does Mattie get Green to see her drawing?
12. What did it mean to be a woman in the 19th century?
13. How do the women feel about working in the mill in Act Two?
14. How does Charles describe the Operatives?
15. What is the name of Margaret's machine?
16. Why does Margaret go to Cantwell for help?
17. How does Charles steal Margaret's invention?
18. Who wins in the case of Annan vs Knight? How does this person win?

Read Two: How is it happening?

1. Why are patterns important in this play? Explain. Use the text to support your answer.
2. Why do you think the playwright chose to break the fourth wall? What effect does it have on you as an audience member?
3. Describe the pacing of this play. Does it move quickly or slowly? How does it affect you when there is a tempo shift in the play?

4. Why do you think the playwright includes both Margaret and Mattie in the play rather than having one actor do both roles?
5. Why do you think the playwright chose to end Act One with the introduction of a new character?
6. How do you define success? How is it described in the play? Do you believe Margaret is successful in this play? Why or why not?
7. Would you consider Charles the villain of the story? Why or why not? Cite the text to support your answer.
8. Is Margaret a reliable narrator? Why or why not?
9. In both Acts, the playwright chose to have actors portray the machines used in the play rather than have sets and props. Why do you think that is?
10. How would you stage the machines if you were directing the play?
11. In the costume description for the play the playwrights says that productions should look “for something atmospheric and not authentic.” What does this mean? In your opinion, why does the playwright suggest this? How would you costume the play?

Read Three: Why is it happening?

1. Would you consider this a feminist play? Why or why not?
2. What is the playwright trying to say about success? Cite examples from the text to support your answer.
3. Why do you believe it is important that this story be told? Why do you think the playwright decided to focus on Margaret E Knight?
4. After reading this play would you agree or disagree with the statement that gender is a construct? Why or why not?
5. Why do you think the play is titled *The Female Edison*? Would you come up with another title? Why or why not?

Post-Read Questions

- ★ What is one question you still have about the play?
- ★ Which character resonated with you the most and why?
- ★ Do you recognize yourself in any of the characters?
- ★ What invention do you wish existed in the world today?
- ★ What was your biggest takeaway from the play?

Post-Read Activities

Biography Scene

- ★ Put students into pairs and tell them they are going to share facts about their life with their partner. They should share information they would want included in a biography. This can be anything from where they were born to fun facts.
- ★ Time students and tell them they each have three minutes to share as many facts as they would like.
- ★ After each partner shares their life stories, tell them they are going to write a biography scene for one another where they will introduce their partner to the audience.
- ★ Once students have written their scenes, have pairs go up and present them.
- ★ After every pair has presented discuss:
 - » How did it feel to have someone else sharing your story?
 - » Was there anything you would change about how your story was shared?
 - » How did you feel when writing someone else's story? What was it like stepping into their shoes?

My Fairytale Monologue

- ★ Tell students to free write about a difficult time in their life. This should be a time they overcame something. Give students about three minutes to free write. Remind them that when free writing they should never lift their pencil off the paper. If students don't know what to write they should write "I don't know" until they come up with something.
- ★ After students finish their freewrite, have them read and reflect on it.
- ★ Tell them they are going to write a fairytale monologue of their freewrite. Now that they have the freewrite they can edit their story to turn into a fairytale version of how they wish things would have happened. This is their chance to embellish their story and get creative.
- ★ After students have written their monologues, take volunteers who would like to share their work.
- ★ Once students have shared discuss:
 - » How did it feel to have power when sharing your story? Did you enjoy the fairytale spin on your story? Why or why not?
 - » How did you surprise yourself during this activity?
 - » What parts of your story did you decide to change? Why?
 - » Go back in time. Would the version of you in this story be proud of you now?

Letter to Younger Self

- ★ In the play the playwright has Margaret talking to her younger self, Mattie. Tell students they are going to have the opportunity to write a letter to their younger self.
- ★ Give students 5–10 minutes to complete this letter. They can answer questions such as: What are we doing now? What advice do they have for their younger self? What exciting things are in store as they grow up?

- ★ After students have written their letters, take volunteers who would like to share their work.
- ★ After everyone who would like to has shared, discuss:
 - » How do you think your younger self would feel about this letter?
 - » What was it like writing the letter? How did you feel as you wrote it?
 - » Did you face any obstacles as you wrote? How did you overcome them?
 - » How did you surprise yourself during this activity?

Create An Invention

- ★ Put students into groups of four and tell them they are going to work together to create a rendering for an invention. This can be any invention they choose to create.
- ★ The invention should have a name, be able to be used for something, and not exist already.
- ★ Encourage students to get creative. Remind them this is only a drawing, so they won't have to actually build the invention.
- ★ After students have finished their drawings, have them present their invention to the class. After everyone has presented discuss:
 - » What stood out to you about the other inventions you saw?
 - » What was the collaboration process like when creating your invention in a group?
 - » What inspired your invention?
 - » What challenges did you face when creating your invention? How did you overcome them?

Feminism Research

- ★ Divide students into groups and give them a limited amount of time to research how womanhood has changed from the 19th century to now.
 - » What is feminism? How has its definition changed throughout time?
 - » Who were some early feminists? Who are some modern feminists? Compare and contrast them.
 - » What did it mean to be a woman in the 19th century? What does it mean now?
 - » What kinds of jobs did women have in the 19th century?
 - » How has feminism transformed throughout the years?
- ★ Decide how students will share their knowledge. Will they create a scene based on what they've learned? An oral presentation with a visual component? A quiz?

19th Century vs Now Scene

- ★ Put students into pairs and tell them they are going to create a scene where one of the characters is from the 19th century and the other is from modern times. The scene should be 1–2 minutes long.
- ★ In the scene ask students to explore what is similar and different about these characters and how times have changed. What surprises them? What has stayed the same?
- ★ After students have been given time to rehearse, have them perform their scene for the class.
- ★ After every pair has performed discuss:
 - » What challenges did you face as you created your scenes? How did you overcome these challenges?
 - » What surprised you about the scenes you saw? Why?

- » After watching and reading these scenes do you think much has changed in society? Why or why not?
- » What was it like stepping into the shoes of someone from a different century?

How It's Made Scene

- ★ Put students into groups of four and assign each group an object. You can either assign an object directly or have students pick an object out of a hat. Tell students they are going to create a scene demonstrating how the object is made.
- ★ Allow for students to have time to research how the object is made and get creative with their scene. Remind students that the scenes do not have to be literal and that they can have fun with their scenes.
- ★ After students have rehearsed, have each group perform.
- ★ Once everyone has performed discuss:
 - » What challenges did you face as you created your scenes? How did you overcome them?
 - » What surprised you about the scenes you saw? Why?
 - » How did you become creative in your scene? What artistic liberties did you take?
 - » How did you surprise yourself when writing your scene?

Quote Tableaux

- ★ Put students into groups and assign each one a quote from the appendix. Tell students they are going to create tableaux inspired by the quote. It can be one elaborate tableau or a series of tableaux if they think that best represents the idea and themes of the quote they were assigned.
- ★ After students have created their tableaux, have them perform for the class.

- ★ Once everyone has performed, discuss:
 - » What did it feel like interpreting words with your body? How did you decide what pictures to form?
 - » Is it easier for you to tell stories with your words or your body?
 - » What challenges did you face when creating the tableaux? How did you overcome them?
 - » How did you surprise yourself throughout this activity?
 - » What stood out about the tableaux you saw?

Playwright Process

Playwright Lindsay Price talks about her process writing The Female Edison. Have students read and then discuss/reflect on how their perception of the writing process compares to the playwright's.

What was the inspiration for writing this play?

This is a perfect example of “always be open to ideas.” I was researching something else, and was in an internet rabbit hole that led me to 19th century inventor Margaret E Knight. I had never heard of her before and I’m thrilled that I found her story.

What challenges did you encounter during the writing process?

The first is that because Margaret is a 19th-century figure, there’s not a lot of primary source information on her. And some of that is inaccurate — the picture that is often used for her online is absolutely wrong (it’s from the 1940s). The biggest saving grace was her Patent Office interference hearing transcript and judge’s outcome was available online. That gave me a lot of insight into her story.

The second challenge is that there are a lot of holes in her story. It’s written down that at 12 years old she invented a safety measure for a loom. But how on earth, as a factory worker with no education, did she get anyone to listen to her? It does mean more room for theatrical imagination though.

Another challenge is that historical facts are not a play, no matter how fascinating those facts are. It's not theatrical to say "this happened, and then this happened, and then this happened." Add to that there's a lot of courtroom material which is deadly on stage. I had to figure out how to share Margaret's story in a theatrical manner.

What was it like to see the play performed?

This is one of those plays where I saw a first production and went "Hmmmm, I need to address some things in the script." It happens. I'm so grateful for that first production for allowing me to see the text come to life and be able to realize what needed to be done. That's part of the writing process. And then when I saw the second production, it brought tears to my eyes. I really loved it. And every time I see the play come up in my productions report I give a little cheer!

As a playwright, what is your favourite moment/character in the play and why?

Margaret is my favourite character. I love her spirit and I love how she defied 19th-century expectations in all regards. In the 19th century when married women were not even allowed to make money off of patents, and when someone tried to steal her patent with the argument "No woman could have invented this machine," she won her patent back. That is amazing.

Which is harder for you, first drafts or rewrites?

I adore first drafts. The act of getting everything on the page without judgement is freeing and fun. I fully embrace messy first drafts with lots of plot holes and things that need to be solved. And then you actually have to solve those problems in the rewrites which is always more a challenge for me.

What's your writing process like?

I love to write initial ideas down in notebooks. I always start with pen and paper. I keep writing notes and ideas and characters until I feel that pen and paper is actually getting in the way of my progress. That's when I know I'm ready to move to the computer and start compiling a first draft. I often start my writing process thinking about the play and letting it roam in my head for a while. So after thinking and taking notes I'm ready to dive into something more tangible.

What engages you about playwriting?

I love seeing characters live a story and I love watching it happen right in front of me (rather than be distant from the experience through a movie screen). It's an intimate experience and that is very engaging!