

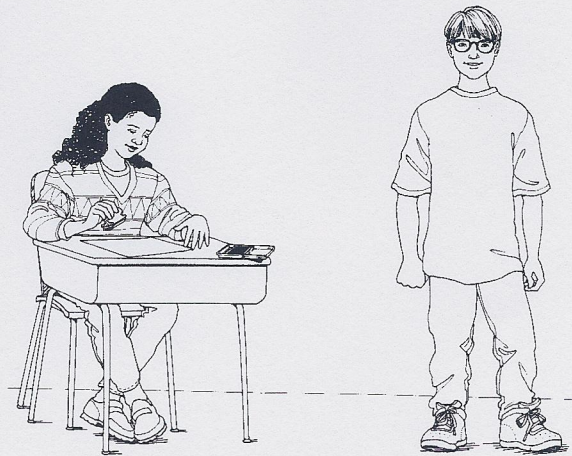
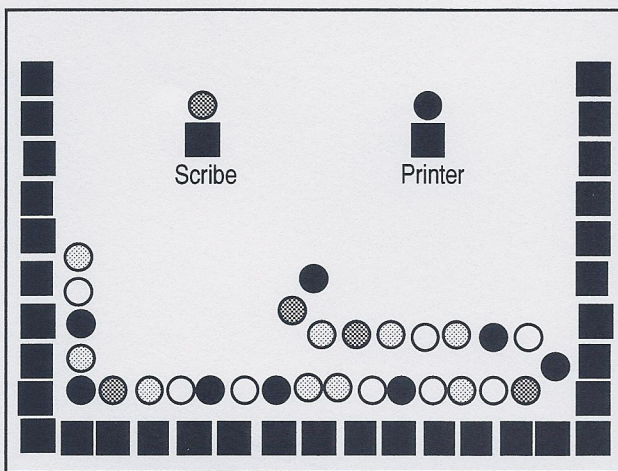


Experiencing the Power of the Press

Experiential Exercise

Overview

In this **Experiential Exercise** students discover how the invention of the printing press helped spread the ideas of the Renaissance and Reformation throughout Europe. Students line up and go either to a printer or a scribe who produces a picture, which they must identify. The printer and scribe produce the same picture but with different means—the printer with a rubber stamp and ink pad, the scribe working freehand with pencil and paper. After every student has had a chance to identify a picture, students compare the number of pictures issued by the printer and the scribe. Finally, the teacher holds a discussion to debrief the experience and compare it to the impact of Gutenberg's printing press on European society.



Procedures at a Glance

Arrange your classroom as diagrammed above. As students enter your classroom, give each student **Student Handout 2.1B**. Appoint a Scribe and Printer. Explain to students that they will be sent to one of two stations where either a Scribe or the Printer will produce a picture on their handout. Tell them that they must guess—in writing—what the picture represents. Have students form a line and then proceed to the stations one by one. When all students have received a picture from the Printer or the Scribe, count how many students were issued pictures from each station. Record the totals on an overhead transparency. Repeat the process for the remaining two pictures, appointing a new Printer and Scribe for each round. Finally, hold a class discussion to debrief the experience, and use the **Teacher's Guide** to connect it to the impact of the printing press on European society.

Procedures in Detail

1. This short activity is designed to help students understand how the invention of the printing press helped spread the ideas of the Renaissance and Reformation throughout Europe. To prepare for the activity, obtain an ink pad and two or three different rubber stamps. The stamp designs should be relatively simple—a snowman, turkey, peace sign—that students can easily identify. (**Note:** Creating pictures with an ink pad and rubber stamp best simulates the speed and accuracy of the printing press. If you are unable to secure an ink pad and stamps, use simple stencils and a pencil.)
2. Before class, arrange the classroom as diagrammed on the previous page. For both the Printer and Scribe station, place one desk and a chair at one end of the room. Use **Student Information 2.1A** to label the Printer and Scribe stations. Move the remainder of the desks to the periphery of the classroom. Use the stamps and ink pad to create a model of each picture (Picture 1, 2, and 3) for both the Scribe and the Printer. Place the simplest of the three pictures and a pen or pencil at the Scribe station. Place the same picture and its corresponding ink pad and stamp at the Printer station.
3. As students enter your classroom, have them sit quietly on the floor, and pass out **Student Handout 2.1B: Picture Guesses** to each student. Tell students that they will be comparing two different ways of communicating written information. Explain that a classmate will be creating a picture for each of them—as quickly and accurately as possible—and they will guess what it is.
4. Appoint one student to be the Printer and one to be the Scribe. Have them go to their respective stations. Quickly demonstrate for them how to use the tools at the station to reproduce the model picture as closely as possible. Tell the Scribe that he or she must draw the picture by hand; tell the Printer he or she must stamp the picture. Both will reproduce the picture in the space marked “Picture” on their classmates’ **Student Handout 2.1B**. Make sure the Scribe and Printer—but not the rest of the class—know what the picture is. (**Note:** You may want to prepare the Printer and Scribe in advance so other students do not know what the pictures are or how they will be reproduced.) Tell them that the goal of the activity is for them to produce as many copies of the pictures as quickly and as close to the original as possible. Emphasize that no matter how rushed they feel, they must reproduce the picture neatly and carefully.
5. Explain to the class that you are going to send them, one by one, to one of the two stations, where either the Scribe or the Printer will produce a picture on their **Student Handout 2.1B**. Tell students that they may not look at the picture until it is completed. Once it is, they may look at the picture and then write what they think it is in the “My Guess” portion of their handout. Tell students to maintain silence throughout this process; at no time should they guess aloud. If the guess is correct, the person at the station will nod his or her head yes. If the guess is incorrect, the person will shake his or her head no. Students may guess three times. (**Option:** You may also want to impose a time limit for

guesses.) Once they have correctly identified the picture, have students go to the side of the station, sit down, and quietly observe their classmates. If a student is unable to correctly identify the picture, have him or her sit between the two stations.

6. Once students understand the directions, have them form a line. Begin the activity by sending one student to each station. As soon as a student has correctly identified the picture, send the next student in line to that station. Expect to usher the majority of students to the Printer station, where the pictures will be produced more rapidly. Students will begin to see that the speed at which the Printer can accurately reproduce the picture far surpasses the speed of the Scribe.
7. After all students have had an opportunity to guess the first picture, make a two-column chart on an overhead transparency with the headings “Number of Pictures Produced by the Scribe” and “Number of Pictures Produced by the Printer.” Count how many students received the picture from the Printer and how many received the picture from the Scribe. Record the totals on the overhead. (**Note:** The totals should reflect that the Printer produced more pictures than the Scribe.)
8. Repeat procedures 4 through 7 for the remaining two pictures, assigning a new Printer and Scribe for each round. (**Option:** Before repeating the procedures for the remaining two pictures, you may want to have students hypothesize how changing the Scribe or Printer, or the picture itself, might alter the total number or quality of pictures produced at each station.)

Connecting the Experience to History

1. Hold a class discussion to debrief the experience. Have students sit in a group in the center of the room. Center your discussion on these questions:
 - **What feelings did you experience in this activity?**
 - **How did it feel like to be the Scribe? The Printer? A person waiting in line? A person trying to guess what the picture was?**
 - **Who communicated information—the picture—to more people, the Scribe or the Printer? Why do you think that happened?**
 - **In what ways would a device like the printing press affect people’s lives?**
 - **How might a printer’s ability to quickly provide information affect the price of books? Literacy? The spread of ideas? The power of those who own the press?**
 - **How did this activity show the impact of the printing press?**
2. Finally, Project Slide 2.1A. Use the information in the **Teacher’s Guide** to explain to students the key points about the invention of Gutenberg’s printing press.



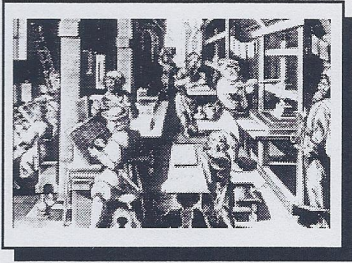
Idea for Class Notes: On the right side of their notebooks, have students create a T-chart that compares their experience in this activity with the effect the printing press had on the spread of ideas during the Renaissance and Reformation. A completed chart might look like this:

Classroom Experience	Historical Reality
<ul style="list-style-type: none"> one student copied a design by hand one student used a stamp to reproduce the design three different designs were used all students tried to guess what the designs might represent it was easier to understand what the student using the stamp produced the student using the stamp was able to communicate designs to more people 	<ul style="list-style-type: none"> specialty trained monks copied books and manuscripts by hand during the Middle Ages teams of trained individuals operated printing presses during the Renaissance entire books or manuscripts had to be copied or printed a limited number of people could read written documents printed documents were often easier to read than manuscripts copied by hand the printing press made written material available to many more people



Idea for Student Response: After completing this activity, have students respond on the left side of their notebooks to this prompt: *Which invention—the computer, the telephone, or the television—will future historians say had the greatest impact on the spread of ideas in the twentieth century?*

Teacher's Guide



Here we see a drawing of a printing shop in the 1500s. At the left, handwritten copy is taped to the wall. Workers take letters from type cases to make up a page. Another man (center, rear) inks a page of type that has been set. At right, a man pulls the handle of the press that prints the sheets. An apprentice (front) carries away the freshly printed pages to dry.

- *The printing press is considered one of the most important inventions in European history. Before the introduction of printing technology in the fifteenth century, the making of books was a slow, expensive process. The professional scribe spent 4 or 5 months copying a 200-page text. After the introduction of the printing press, more books were produced in a few decades than had been copied by hand in several centuries. As production soared, prices plummeted, and books became accessible to millions of people. Since the invention came at a time when humanist ideals encouraged people to read and think for themselves, new ideas spread rapidly. Consequently, education—and the means to form one's own ideas—was no longer the domain of the clergy and the wealthy.*
- *Johann Gutenberg is often called the inventor of the printing press. However, block printing, in which whole pages of words and pictures were pressed onto paper, was known in both China and Europe before Gutenberg. Gutenberg, though, improved existing techniques and equipment so that written material could be printed with greater speed and accuracy. Specifically, he developed a metal alloy suitable for type, a mold for casting blocks of type precisely, an oil-based printing ink, and a more efficient screw-and-lever press. Gutenberg was born about 1400 in the German city of Mainz. His best known work, The Gutenberg Bible, was printed there around 1454. Contemporary sources indicate that he did not have a particularly good sense for business and that he never made much money on his invention. Gutenberg died in Mainz in 1468.*
- *Although the printing press significantly reduced the time required to produce written documents, operating the device was a cumbersome and tedious process. In preparation for printing, a sheet of paper was placed securely on the tympan, a piece of parchment stretched over a wooden frame. Next, hundreds of metal letters were assembled, or “set,” into words, lines, and pages in the type bed. The letters were then inked with leather-covered pads. Another framed piece of parchment, called the frisket, with a rectangular hole cut from it to match the type bed, was positioned over the tympan and paper. This entire assemblage was placed under the press's screw mechanism. By cranking the long lever, the printer lowered the screw until its flat wood surface pressed the paper against the type, making an ink impression. The frisket, sandwiched in the middle, protected the margins of the paper from ink smears but exposed the type to the paper through its cut-out rectangle. The total process of printing one sheet on one side took early printers about 2 minutes.*

PRINTER

PRINTER

SCRIBE

SCRIBE

Picture Guesses

Directions: Hand this sheet to the person at the station your teacher sends you to. After a picture has been produced, write what you think the picture is in the space after "My Guess." Show your guess to the person at the station, and he or she will let you know if your guess is correct. You get three guesses. When you have guessed correctly, sit down behind the station.

Picture 1

My Guess: _____

Picture 2

My Guess: _____

Picture 3

My Guess: _____
