

Automotive Technology
CIP 47.0604
“Possessed Brake Lathe” Safety Lesson
Grade 10
Mr. Payne
Class Periods (___)
Date (_____, _____)

Program of Study Standards

- 101: Explain and follow all lab rules
- 105: Demonstrate auto shop safety and hygiene
- 106: Demonstrate the use of service information.
- 201: Identify and follow all safety rules
- 209: Identify and demonstrate the safe use of shop equipment

Academic Standards

- CC.1.4.9-10.F: Demonstrate a grade appropriate command of the conventions of Standard English grammar and spelling.
- CC.1.4.9-10.M: Write narratives to develop real or imagined experiences or events.
- CC.1.4.9-10.O: Use narrative techniques such as dialogue, description, reflection, multiple plot lines, and pacing, to develop experiences, events, and/or characters; use precise words and phrases, telling details, and sensory language to convey a vivid picture of the experiences, events, settings, and/or characters.
- CC.1.4.9-10.P: Create a smooth progression of experiences or events using a variety of techniques to sequence events so that they build on one another to create a coherent whole; provide a conclusion that follows from and reflects on what is experienced, observed, or resolved over the course of the narrative.

Instructional Objective

Given a job safety analysis (JSA) and a brake lathe demonstration, the student will compose a written, fictional, horror story that highlights *all* of the dangers of using the brake lathe, when compared to the JSA with 100% efficiency.

Instructional Aids/ Resource Materials

AAMCO bench brake lathe with tooling, a brake micrometer, brake rotors (slip on and bearing hub type), specifications for the rotor being serviced, (optional previously recorded video of the brake lathe demonstration), written procedure sheet, brake lathe job safety analysis, projection equipment, computer with word processing software, paper, writing

implement, “The Brief Penguin Handbook With Exercises” *Lester Faigley*, grading rubric for the final product

Instructional Outline

Administration: (10 min)

- Take Attendance
- Ask students to gather writing paper, writing implement, and safety glasses (unless watching video instead of an actual demonstration)

Introduction: (15 min)

- Play the movie trailer from the *Stephen King* movie “Maximum Overdrive” (Available on youtube.com)
- Link <http://www.youtube.com/watch?v=lqz2rejJS6M>
- Discuss the premises of the film and recommend that they watch it at home for additional inspiration.
- **“Imagine that one of the machines in the shop began to mysteriously injure or kill people.”**

Content presentation: (May span a few days or class periods)

- Hand students the procedure sheets and instruct them to read.
- After sufficient time has passed, begin a brain storming session.
- **“Who can think of some possible ways that a person can get hurt while using this machine?”**
- Once a master list has been composed as the students to make notes using the list. (Cornell Notes)
- *Demonstration: (Either)*
 - Turn on the projection equipment and play the video
 - Ask the students to put on safety glasses, follow you to the shop, and perform a thorough demonstration.
- Following the demonstration, ask the students to add other ideas to their notes from the brain storming session.

(Optional break)

- After sufficient time has passed, project the brake lathe job safety analysis, hand out copies, and review the document with the class.
- Hand out, and review, the brake lathe safety rules.
- **Read the instructional objective (Additional explanation may be needed)**
- Instruct the students to proceed as follows:
 - Use all of the information provided to formulate an outline using the hazards listed in the JSA as headings.

- Check to verify that all students have created an outline.
- Instruct the students to use the outline to create a rough draft. (Typed or written)
- Check rough drafts for completion and content, have students add content as needed.
- Review the requirements of the MLA writing style with the students. (Refer to “The Brief Penguin Handbook”, *Faigley*)
- Make the book available to the students or refer students to an on-line source.
- Instruct students to compose their stories, print a copy for their portfolio, and submit an electronic copy for grading

Summary: (10-30 min)

- Ask volunteers to read their stories
- **“Now that you have had a chance to carefully consider the hazards, you should be able to observe safety while using the brake lathe.”**

Application: (time frame undeterminable)

- The student will demonstrate knowledge of, and utilize the steps required for quality writing.
- The student will proceed to the brake lathe lesson with added safety awareness.

Accommodations/ Adaptations:

- Help with reading various texts
- All writing, including outline and rough draft, can be done using word processing software. (Grammar and spell check)
- Some content is a group activity
- Extra time

Assessment/ Evaluation:

- Outline is checked and grade is recorded for completion
- Rough draft is checked for content and grade is recorded for completion; the content must contain at least one example of each hazard listed in the JSA
- Final work will be evaluated for spelling, grammar, and format.

Teacher Reflection: