The Submarine
By Susan Rosinski
Pennsylvania Academic Standards

1.6.5 E Reading, Writing, Speaking, and Listening
  • Listen to an interview

2.3.5 B Mathematics
  • Measure size of figures with accuracy

8.3.6 B History
  • Identify and describe primary documents
Inquiry-Based Learning Model

**Ask** – The teacher will ask the students comprehension questions about submarines and tell about experiences.

**Investigate** – Teacher will create a hand out explaining measurements of a submarine, ex: bunks, eating area, restroom, etc.

**Create** – Teacher will divide classroom with masking tape, showing the same measurements as a submarine.

**Discuss** – Students will express their views on how small submarines and how they wouldn’t have dealt with the closeness.

**Reflect** – Students will be given time to reflect on the difference between living on a farm and living on a submarine.

Figure 2. The Inquiry Cycle
Descriptive Walk Through

**INTRO** - The teacher will begin the lesson by having the students listen to an audio oral history interview with David W. Dickens. This is available online from the Library of Congress (LOC) Veterans History Project (VHP), at [http://lcweb2.loc.gov/diglib/vhp-stories/loc.natlib.afc2001001.21507/](http://lcweb2.loc.gov/diglib/vhp-stories/loc.natlib.afc2001001.21507/)

Mr. Dickens is a veteran from the Korean War. He grew up as a farm boy in Springfield, Missouri and when he got called to war, he was assigned to submarine duty, where he spend 20 years of his life. He states in his interview that he had never seen a submarine before, so he was a little terrified. Most students have probably never seen or been on a submarine, so they will be able to relate to Mr. Dickens. The clip from the interview is about 2 minutes long.

**ASK** - After we have listened to the clip, I will ask the students how many of them have heard of a submarine. From there, I will ask how many have seen one, whether in a picture or in person, and how many have ever been in one. If there are any students who have been on a submarine before, I would allow them to share what they thought of it. I will tell my story of how I toured a submarine at the Carnegie Science Center and what my impressions of a submarine are.

**INVESTIGATE** – The teacher will have a teacher-created worksheet that he or she will pass out. On this worksheet it will have a picture of the outside of a submarine and pictures of the inside of a submarine. Alongside the
pictures, there will be measurements of the actual sizes of the rooms. Students will have a few minutes to view the handout by individually. As the students are reviewing the handout, the teacher will be busy dividing the classroom with masking tape.

**CREATE** – The teacher has measured out the classroom with the exact measurements as what is on a submarine, ex: eating space. Some desks may have to be moved for this experiment. The teacher will have already made signs explaining which section is which. First, the teacher will ask how much land and area is on a farm. If students are not too familiar with a farm, the teacher will explain that farms are acres long and you have a lot of room to roam free. He or she will explain that Mr. Dickens was used to living on a farm where he was able to roam with the animals that he raise; if he wanted to be alone for a little bit, it probably was easy for him to do.

The students will then try to relate to how Mr. Dickens went from living on a farm to living on a submarine. One by one, the teacher will have the students step into the eating quarters or into the bathroom quarters. The students will see how many people would be able to fit comfortably into the space. Then they will see how many people can actually fit into the space, even if they are touching arms. Each student will have the chance to fit into a space with other students to see how it would have been during the Korean War.

**Discuss** – When the students are finished with experimenting the spaces, they will return to their desks and discuss what they thought about the
submarine living quarters. It is expected that he would have gained an understanding of how tight the living quarters were and how hard it would be to be constantly in motion and to not see land on a regular basis.

**Reflect** – Students will be given time to think of similarities and comparisons between living on a farm and living on a submarine.

**Assessment of Activity**

For the assessment, the students will do an individual Venn Diagram and compare living on a farm with living on a submarine.

**Rubric for Venn Diagram** (10 points in all)

10 pts. – 4 valid comparisons for each circle and 2 valid similarities

Each valid statement will receive one point. If the student only has 3 valid statements for comparisons and 1 valid statement for similarities then the student will only receive 7 points.