# WAMC Lab Template

Math Concept(s): Represent data with plots on the real number line (dot plots, histograms, and box plots). Source / Text: Applied Math Patterns and Functions Developed by: Coord green Book E-Mail: john.hubbard@sultan.k12.wa.us Date: Summer Conference 2016

## Attach the following documents:

Lab Instructions handout

Student Handout(s) handout

Rubric and/or Assessment Tool handout

<u>Indicate "SPECIFIC" relationship to Science, Technology, or Engineering</u> Science is about data collection, and interpretation of the data

## Short Description (Be sure to include where in your instruction this lab takes place):

## <u>Lab Plan</u>

Lab Title: Drawing under pressure

Prerequisite skills: understanding patterns, finding range, finding average, graphing

Lab objective: collect data and interpret the relationship between time and quality of output

#### Standards:

Mathematics K–12 Learning Standards:

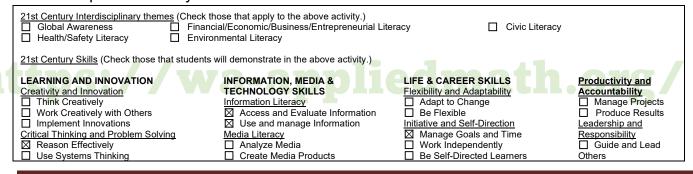
• Represent data with plots on the real number line (dot plots, histograms, and box plots).

Standards for Mathematical Practice:

- 2. Reason abstractly and quantitatively.
- 3. Construct viable arguments and critique the reasoning of others.
- 6. Attend to precision.

K-12 Learning Standards-ELA (Reading, Writing, Speaking & Listening):

• Formal complete sentence format will be used for the answers to the analysis questions Leadership/21st Century Skills:



Information, Communications and Technology (ICT Literacy) Apply Technology Effectively Social and Cross-Cultural Interact Effectively with Others Work Effectively in Diverse Teams Be Responsible to Others

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## Teacher Preparation: (What materials and set-up are required for this lab?)

Materials

• Metric ruler, pencil, worksheet, calculator

Set-Up Required:

Acquire materials

# Lab Organization Strategies:

Leadership (Connect to 21st Century Skills selected):

- Kids will work in groups, some of them will be leaders
- They have to analyze the data they collected both in table and graph form
- They only have a limited time to complete the exercise

Cooperative Learning:

• They will work in groups to compare data after they have completed the activity on their own

Expectations:

- Students will use time effectively
- Students will work together to complete activity

Timeline:

• One 55 minute class period

# Post Lab Follow-Up/Conclusions:

Discuss real world application of learning from lab

- Work related stress
- Functioning under pressure
- Quality of work output

Career Applications

• All careers

Optional or Extension Activities

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