Activity name: What Do You Do With Your Time?

This activity is meant to provide a real-world application of the math, science, technical, and critical thinking knowledge and skill concepts identified by ATEEC Fellows as necessary preparation for environmental technology occupations. It should be especially effective at the beginning of a term so that students may not only be motivated to set personal time management goals but also develop data collection and interpretation skills. These are all skills that are generally valued in industry.

Appropriate for which course(s)? Tech Studies I or high school mathematics

Concept/skill learned (i.e. from <u>k/s tables</u>: Accurate data collection, graphing, data prediction and interpretation

SCANS Skills:

- 1. Managing resources manage time.
- 2. Basic skills arithmetic, mathematics.

Personal Skills:

1. Self management

Systems:

1. Monitor and correct performance.

Approximate time to complete activity: 30 minutes for explanation of data to be collected, 24 hours to a week for data collection, 1 hour to graph and interpret

Source of idea or activity (for published source, please include author, title, publisher, date): Brainstorming session with math teachers at school

Materials/resources needed (equipment, print media, electronic media, videos, supplies, etc.):

- forms for data collection
- rulers to assist with graphing or graphing software (spreadsheets) on computers if available

Description of activity:

After an explanation of data collection, students will collect data about their personal lives. Have the students develop a time log sheet for data collection, or you can supply a

pre-designed form. Students can brainstorm to develop categories for what they do, such as sleep, eat, work, do homework, class work, watch TV, etc. Pick a time period to collect data. We have used 24 hr. or 48 hr. from start of class, over a weekend, or a whole week. To make data collection easier to graph later, you can have them measure time in 10 or 15 minute blocks.

After the specified time period have students bring in their data and total their time in each category. They then can make a pie chart or bar graph to show what they do with their lives. This becomes a real eye opener for some students if they track their time for a whole week. It may be easier to give them this task only 24 hr. at first, then after a class discussion on problems with data collection, have them collect for a whole week.

Extension activities could include:

- change the graph type from pie chart to line or bar graph; this is easier to do on the computer
- give them a poorly designed form the first time and then let them design a better collection form for a second collection period
- frequently students will come up with different or additional categories after actually logging their time
- solve problems with data collection, like what category to use to enter time when they eat while also watching TV
- have the students make a projection of how much time they perform one category over an extended period of time (how much TV will they watch in one school year)
- have students create a total collection form for the whole class and determine how much an 'average' student spends per category
- this can also lead into a good lesson on time management

Activity submitted by: Ray Wishart Assessment:

- 1. Evaluation of final graph or chart.
- 2. Assessment can be measured at: data collection; form decision; and final chart.

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