

Land Transportation Communication Technologies

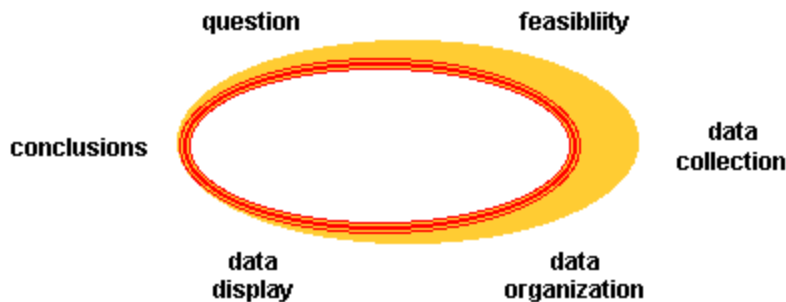
LEARNING AREA: Inquiry and Research
EDUCATION LEVEL: Middle School
CONTENT STANDARD: Accessing Information

A student shall:

access information and use a variety of sources to answer a question or support a position by:

1. Using electronic media or other available means to access relevant information;
2. Determining how to record and organize information;
3. Gathering information from multiple sources; and
4. Evaluating the relevance of the information.

Large Processes/Concepts-----



NEXT STEP: Assessment Task

Land Transportation Communication Technologies

Assessment Task-----

Description: Students will investigate communication technologies used in managing land transportation and choose an advanced transportation system to explore/research in depth and organize the information into a short report. Students will demonstrate an understanding of how new technologies surrounding transportation may affect their lives now and in the future.

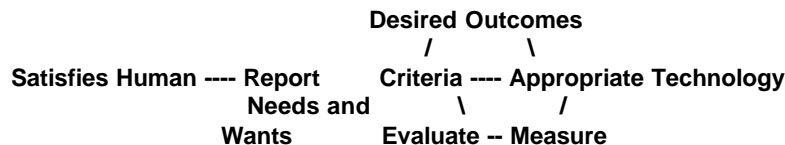
Products/Evidence of Learning:

- Define definitions
- Analyze information
- Organize information
- Apply findings
- Write a report
- Prepare an interview
- Summarize information
- Define problems
- Define solutions

Overview:

The object of this activity is for students to become aware of new technologies being used and being developed to assist in the management, control and monitoring of land transportation. Students will access information from at least three sources and gather, evaluate and organize their findings. One source should be an electronic source. Systems that could be investigated may include traveler information systems, traffic management systems, driver assistance technologies, advanced public transit systems, advanced public safety and services, and commercial vehicle operations. Since many of these students are near the verge of becoming drivers this activity is designed to use their budding interests in driving to fuel information gathering. Students could be introduced to a systems model and use this model to help organize their research and findings.

Systems Model



In organizing and preparing their information students will include the following components:

- Compile a list of terms that are associated with their topic and define them.
- Define the problem or problems solved by various communication technologies in land transportation.
- Identify the benefits and drawbacks of particular systems.

Once Information gathering is complete students will summarize their findings in an organized report to show the main technologies used in their system. The report will include the above-required components. Students will prepare a short interview to be given to the parent or guardian with questions that help the student determine if their parent or guardian is aware of the technologies involved in modern control of land transportation systems. The interview should include an area for a parent or guardian to sign when the interview is complete.

In the summary of their report students will explain how they think the technologies they investigated affect their lives now and how they may be used in the future.

NEXT STEP: Checklist

Land Transportation Communication Technologies

Checklist-----

| STUDENT | TEACHER | |
|---------|---------|--|
| _____ | _____ | Complete and correct definitions |
| _____ | _____ | At least three sources used |
| _____ | _____ | Quality of sources |
| _____ | _____ | Proper use of sources |
| _____ | _____ | Ability to access information |
| _____ | _____ | Summary of problems solved by technologies |
| _____ | _____ | Benefits and drawbacks addressed |
| _____ | _____ | Understanding relevance of technologies to student |
| _____ | _____ | Report introduction |
| _____ | _____ | Report body and findings |
| _____ | _____ | Report summary and conclusion |
| _____ | _____ | Report interview with signature |
| _____ | _____ | Understanding of communication technologies |
| _____ | _____ | Understanding of transportation technologies |
| _____ | _____ | Demonstration of problem solving skills |