

**Subject Area:**

Business Image Management & Multimedia Web mastering

**Title:**

The Inner Workings of Internet Browsing  
How web servers and browsers communicate

**Teacher:****School:**

Mt. Pleasant High School

**Lesson Objective(s) & Career Cluster:**

Career Clusters encountered during internship: Arts, Audio/Visual Technology and Communications; Business Management & Administration; Education & Training; Information Technology; Science, Technology, Engineering & Math; Health Science; Manufacturing; Architecture and Construction

**Activity:**

Introduction: Conduct class discussion with prompting questions on what happens when searching for information from a university web site such as Harvard University.

Audio/Visual: Using PowerPoint, explain and demonstrate what happens from the time a URL is entered until the connection is made with the target website. Students take notes during the presentation.

Separate students into groups of 3 or 4. Using models of computers, servers, routers, and string (two colors) have students demonstrate how information travels from the inquiring computer to the target web site and back. One color string will demonstrate information going from and the other color will demonstrate information returning to the original computer.

**Evaluation:**

The instructor will observe each group and evaluate the result of the group work, guiding students to make corrections as necessary.

**Extension/Modification and/or Instructional Methodology:**

Give each student a diagram and have the students draw colored lines indicating the ways information travels along the networks during when conducting an Internet search.

This could be used instead of the group work, or as an extension reinforcing what the students learned during group work.

Have students conduct research from a university web site and print the results.

Have them turn in, or have them present their information to the class the next day.

**SCAN Skills:**

Reading, writing, listening, problem solving, seeing things in the mind's eye, reasoning, interpersonal, information, systems, technology

**Cooperative Learning Ideas, TAAS, TEKS Competencies:**

TEKS 126.27 C. 4) Information acquisition. The student uses a variety of strategies to acquire information from electronic resources, with appropriate supervision. The student is expected to:

(A) use strategies to access research information from different resources including local area networks (LANs), wide area networks (WANs), the Internet, and intranet; and

(B) Construct and use appropriate electronic search strategies in the acquisition of information including keyword and Boolean search strategies.

(8) Solving problems. The student uses research skills and electronic communication, with appropriate supervision, to create new knowledge. The student is expected to:

(B) demonstrate proficiency in, appropriate use of, and navigation of LANs and WANs, the Internet, and intranet for research and for sharing of resources;

**Team Project, Guest Speaker, or Field Trip:**

Guest speaker could be a networking specialist, a web master, computer consultant.

Field trip could be to data center containing Internet communications equipment, web servers, and other related technology.

**Resources:**

Paper, pencil, set of computer models and string, computer and projector, diagram, and student computers.