

Problem Solving in Technology-Rich Environments

This refers to the ability to use technology to solve problems and accomplish complex tasks. It is not a measurement of “computer literacy”, but rather of the cognitive skills required in the information age – an age in which the accessibility of boundless information has made it essential for people to be able to decide what information they need, to evaluate it critically, and to use it to solve problems. In this survey, higher-order skills are identified along with basic proficiency.

Problem Solving in Technology-Rich Environments - Sample Items

An example of a problem solving item is provided below. This item involves a scenario in which the respondent takes the role of a job seeker. Respondents access and evaluate information relating to job search in simulated web environment. This environment includes tools and functionality similar to those found in real-life applications. Users are able to:

- Click on links on both the results page and associated web pages;
- Navigate using the back and forward arrows or the Home icon; and
- Bookmark web pages and view or change those bookmarks.

The screenshot shows a simulated web browser interface. On the left, a light blue sidebar contains the text: "Unit 10 - Part 1", "You are looking for a job and have located these five websites.", "You want to use a site that does not require you to register or pay a fee.", "Bookmark all the sites that meet your requirements.", and "Once you have bookmarked the sites, click Next to go on." The main browser window has a blue title bar with "Web" and a menu bar with "File", "Edit", "Bookmark", and "Help". The address bar shows "URL: www.websearch.com/jobsearch". The page content includes a "Web Search" section with a search bar containing "Job search" and a magnifying glass icon. Below this are five search results, each with a blue link and a red URL: "Find Your Job - JobSearch.com", "Work Links", "Looking for a job?", "Connections.com", and "The best jobs online". At the bottom of the browser window, there are navigation icons for back, home, forward, and search, and a taskbar with a "Web" button and window controls.

The first stimulus accessed by respondents is the results page of the search engine application which lists five employment agency websites. To complete the task successfully, respondents have to search through the pages of the listed websites to identify whether registration or the payment of a fee is required in order to gain further information about available jobs. Respondents can click on the links on the search page to be directed to the websites identified, for example, by clicking on the 'Work Links' link, the respondent is directed to the home page of 'Work Links'.

Unit 10 - Part 1

You are looking for a job and have located these five websites.

You want to use a site that does not require you to register or pay a fee.

Bookmark all the sites that meet your requirements.

Once you have bookmarked the sites, click Next to go on.

Work links

Connecting you to the BEST Jobs

Learn More

Thousands of new jobs in the last 7 days
Search job sites, newspapers, associations and company career pages.

In order to discover whether access to the information on available jobs requires registration with the organisation or payment of a fee, the respondent must click the “Learn More” button which opens the following page. The respondent would then return to the search results page to continue evaluating the sites in terms of the specified criteria, using the back arrows without bookmarking the page (correct answer) or having bookmarked the page (incorrect answer).

Unit 10 - Part 1

You are looking for a job and have located these five websites.

You want to use a site that does not require you to register or pay a fee.

Bookmark all the sites that meet your requirements.

Once you have bookmarked the sites, click Next to go on.

Section 1

Web

File Edit Bookmark Help

URL:

Work links

Connecting you to the BEST Jobs

To search for your new job, sign up for Work Links now!

First Name:

Last Name:

Your Email Address:

Re-Enter Email:

Create a password:

Re-Enter Password:

\$15.00 for 1 month or \$33.00 for monthly access plan

Credit Card Type:

Credit Card Number:

Expiration Date: