Lesson 5: Regression

Transcript

Welcome to the *Statistics and Risk Management Technology Application* section for **Regression**. In this

this lesson we will discuss integrating **Wolfram Alpha** into the classroom. Wolfram Alpha goes beyond a

typical search engine such as Bing or Google. Wolfram Alpha is considered a computational knowledge

engine. It adds a new thread to Internet search results – the thread of facts. Let's take a look! To begin, a

user will need to navigate to WolframAlpha.com.

Now that we are at Wolfram Alpha, let's see how this new search engine works. As an example, if I

wanted to ask, "What is the GDP of China and Japan?" Google or Bing would point me to websites with

this information. I would then need to search through several sites to compile this information. With

Wolfram Alpha, the results are listed on one page and show a side by side comparison.

Now, let's take a look at some examples. From the home page, select Examples. Next, we see many

examples available. Examples range from Mathematics, to Chemistry, to Weather, to Sports, and even

colors. For this demonstration, let's look at Statistics & Data Analysis. From here we see an example of

Regression Analysis. After selecting the example we see several examples using various types of data. After selecting one of the examples, we see a visual representation of the information.

In addition to the standard web version of Wolfram Alpha, there are many add-ons and widgets available. Such software can be added to lab computers by your technology department so students can have easy access to these resources. Let's take a look at some of the add-ons and widgets. To navigate to the widgets and add-ons section, we will need to click on the resource link on the right hand side of the page. This page indicates that there are browser tool bars available and several other resources as well. On the right hand side, there are also videos from an educator viewpoint.

Now that you have seen this resource think of how it can be incorporated into your classroom. It can be used to assign homework based on information in Wolfram Alpha, as a reference in computer labs and libraries, and even for research papers and group projects. As seen on the resource page, they have an Educators section. On this page, there are examples of lesson plans and other creative ways to use this computational knowledge engine.