Scenario 2: Making semantic connections between ‘ideas’

Anna is a last year Civil Engineering student who wants to learn more about global warming and carbon emissions effect on the earth temperature. She starts navigating the web and googleing different keywords such us “carbon emissions”. She ends up annotating and tagging many websites. At some point on one OER site (http://www.teachersdomain.org/resource/nsn08.sci.ess.watcyc.capcarbonint/) she finds an interesting idea created by another user, Ivana. Ivana highlighted a couple of paragraphs in the OER and annotated them with the following ‘idea’ “This OER speaks about several potential means of storing carbon dioxide”. Anna finds this ‘idea’ interesting and she bookmarks it by clicking on the star icon at the bottom of Ivana’s idea, since she considers that she may use it in the future of her investigation.

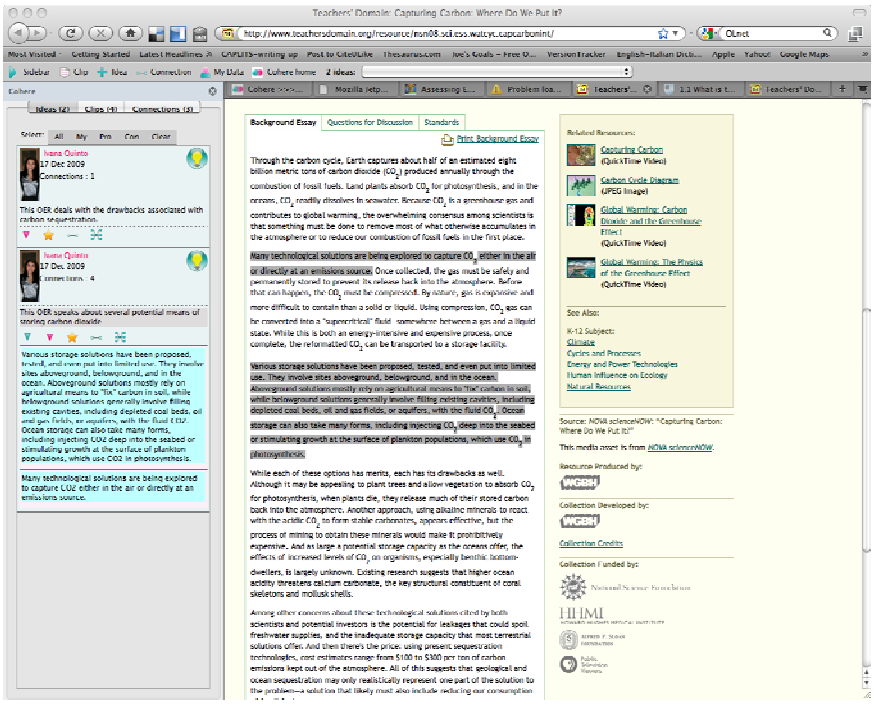

Figure 1

She keeps navigating OER repositories and looking for OERs about carbons emissions. Finally she finds an interesting OER on the Open Learn site (http://www.open.ac.uk/openlearn/home.php). She searches Open Learn units typing ‘carbon emission’ in the search box. The system retrieves two modules. And one of these is particularly interesting for Anna because it explains ‘what is a carbon footprint’. She decides to tag and annotate the page with an idea underlying “How effects of carbon emissions can be measured”.

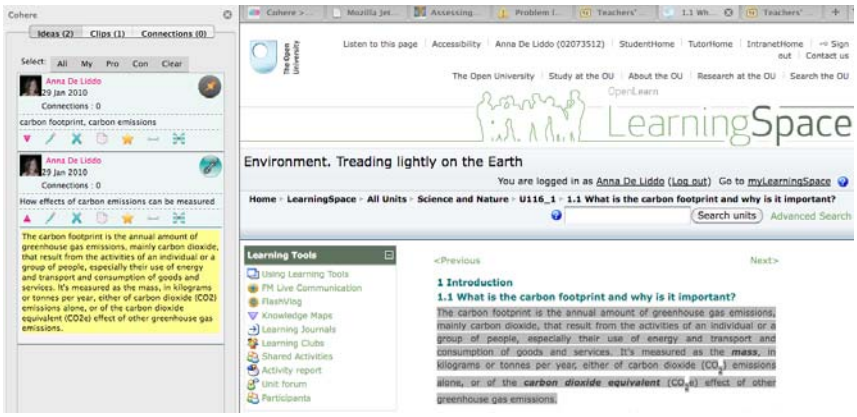

Figure 2

At this point Anna remembers this ‘idea’ relates to Ivana’s idea so she decide to create a connections that links these two ideas. She clicks the ‘create a connection button’ and this opens a dialogue box in which her idea is already filled in. Now she has to state the semantics of the connection: “how she want to link the two ideas?” Since Anna would actually like to suggest this resource to Ivana, she decides to label the connection as “is relevant resource for”. This link type does not exist yet so she decides to add a new one.

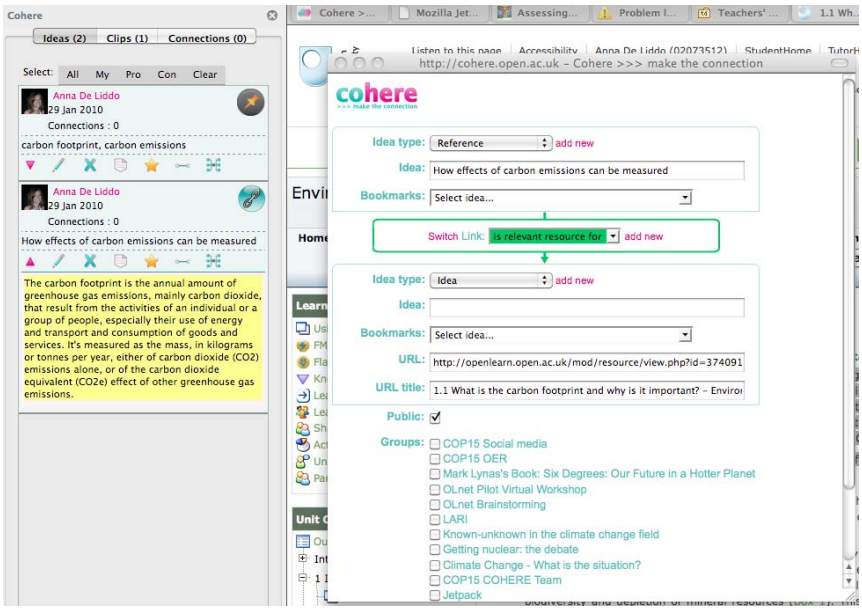

Figure 3

In order to finish filling in the connection dialogue box Anna also has to fill in the second idea. So she browses her bookmarks and she selects Ivana’s idea. Then she clicks on the ‘create connection’ button.

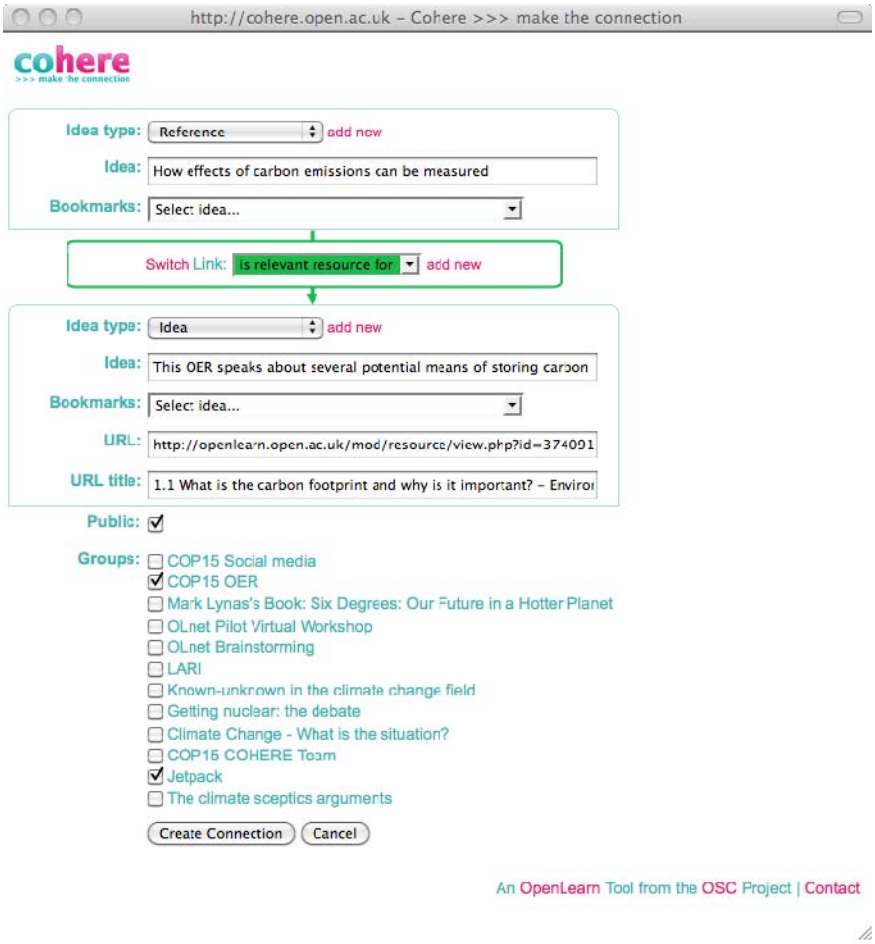

Figure 4

At this point the connections tab in the Cohere Jetpack slidebar will show the connection Anna created.

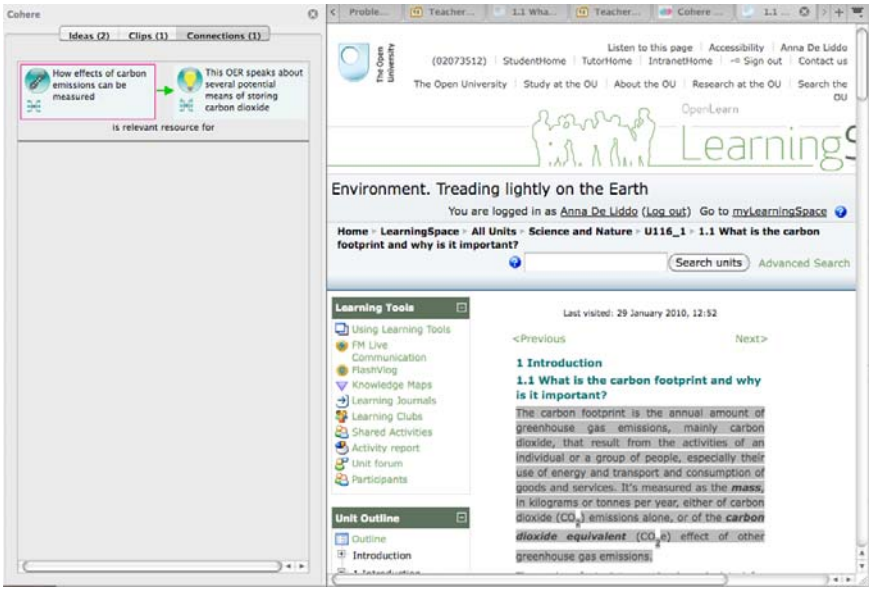

Figure 5

Each idea box has a connection icon from which Anna can access the view of other connections around that idea, either created by herself or by other people. Anna clicks the connections icon and opens the network view of connections focused on that idea. By doing so she discovers many connections that Ivana has created.

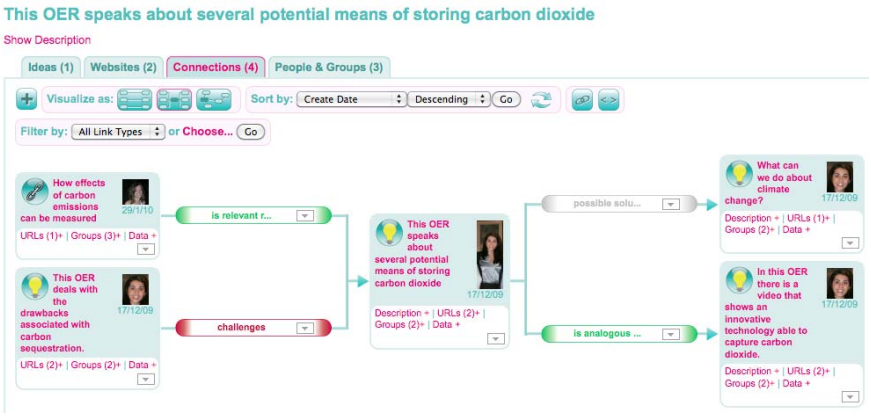

Figure 6

By exploring connections Anna discovers other interesting sites. What she really likes is that those sites are not simply grouped by tag, they are specifically linked semantically, which helps Anna to understand in which sense these Websites are relevant to the topic. i.e. in the example in figure 6, Anna discovers that there is another OER, identified by Ivana, which challenges the idea that carbon sequestration is a good option to reduce climate change. Since so far she has studied learning resources explaining the positive sides of this option she is really interested to learn about the drawbacks. She would have never found out about that if it had not been for Ivana and the semantic connection she created.

Summary and reflections

By using Cohere-Jetpack extension Anna could discover and bookmark Ivana's ideas, and reuse them to create semantic connections between Ivana's ideas and her ideas. This helped Anna to discover other Websites and ideas relevant to her investigation. By exploiting the description of the type of connection (semantic of the connection) she was also able to identify resources that triggered her critical thinking, since Ivana had labeled them as "challenging" her idea. Moreover from Ivana's point of view, next time she explored her workspace she discovered a new connection, created by Anna, pointing directly to one of her ideas, and suggesting a new interesting reference to explore. The simple connection that Anna has created has established, from now on, a meaningful link from Anna's and Ivana's network of ideas and connections. These ideas and connections can be used by them and by any other learners to enrich their understanding on carbon emissions. In fact any other user navigating that OERs, and with a Cohere-Jetpack add-on installed, will be able to access Anna's and Ivana's ideas, semantic connections and Websites directly from the sidebar while they are navigating the Web.