

Assessment

- Content learning
- Usability
- Student attitudes towards science
- Student comfort/confidence doing science

current AIM-UP! survey – good job of getting background information on students and determining their experience with and attitudes about collections and the role of collections in science and teaching.

Should we find out more? I think so.

What can we assess? The obvious – improvements in content knowledge attributable to our “intervention” – is really hard.

of course students are going to know more about phylogenetics after doing a project in that area.

But do they know more than they would have if we had simply lectured at them?

can't do the experiment

maybe the best we can do is storytelling. Do you see evidence in your class that people understand better?

Are there three things we can assess. And after reading through the list of Core Competencies and Disciplinary Practice in chapter II of the Vision and Change Document, I think it's really important that we do this.

1. ease of use of using materials. usability testing.

through questions aimed specifically at how clear and straightforward the activities are.

or through observation of students as they work through activities.



Chrome File Edit View History Bookmarks Window Help Thu 2:15 PM

Map: Circles Activity
animaldiversity.umz.umich.edu/changehinking/labs/species4/0/circles2.html

SPECIES Maps Thursday 2:14 PM

< Introduction Temperature Precipitation Conclusions >

In this activity you'll be annotating a map.



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2. Are we changing student attitudes towards science? Their understanding of how it works, and their confidence in its results? Do they understand that science isn't just experimentation – that the comparative method is also a legitimate way of testing hypotheses? Particularly important in non-science majors
3. Are we changing their confidence in their ability to do science? To recognize questions, reformulate them as hypotheses, design and carry out tests, analyze and interpret results?
4. do 2-3 through surveys done before and after the intervention. standard instruments available to help – Tricia!

Please indicate your level of **KNOWLEDGE** about how to do the following.

	Very Little Knowledge	Somewhat Little Knowledge	Neutral	Somewhat High Knowledge Level	Very High Knowledge Level
Search for evidence to improve your understanding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
of biology Interpret and synthesize evidence to reveal patterns, differences, or similarities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analyze and evaluate claims to reach conclusions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produce a report of my conclusions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your level of **SKILL** to do the following.

	Very Low Skill Level	Somewhat Low Skill Level	Neutral	Somewhat High Skill Level	Very High Skill Level
Search for evidence to improve your understanding of biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpret and synthesize evidence to reveal patterns, differences, or similarities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analyze and evaluate claims to reach conclusions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produce a report of my conclusions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please indicate your **CONFIDENCE** in your ability to do the following.

	Very Low Confidence	Somewhat Low Confidence	Neutral	Somewhat High Confidence	Very High Confidence
Search for evidence to improve your understanding of biology	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpret and synthesize evidence to reveal patterns, differences, or similarities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Analyze and evaluate claims to reach conclusions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Produce a report of my conclusions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>