

Lecture 20 – Creating an Assessment Tool

Discuss:

In what ways are visualizations and visual objects assessed for research (according to Ware)?

Assessment tools

Structured interviews

Surveys

Peer critique

Rating (likert) scales

Reproducibility

Method of adjustment

Eye tracking

Reaction timing

What to assess

Visualization structure

Accessibility

Appropriateness for audience

Viewer interactions

Accuracy in information transfer

Data representation

Discuss:

Which of these methods may be most appropriate for assessing our final projects?

Assessment tools

Structured interviews

Surveys

Peer critique

Rating (likert) scales

Reproducibility

Method of adjustment

What to assess

Visualization structure

Accessibility

Appropriateness for audience

Accuracy in information transfer

Data representation

Discuss:

What are the most important aspects of a visualization?

Accuracy in data representation

Accuracy in viewer understanding

Accessibility

Ease of understanding/simplicity

Reproducibility/Well cited

**Relevance to viewer
(Visually salience)**

**Relevance to viewer
(Information content)**

Aesthetics

Discuss:

Do these fall into major categories?

Graphic construction

**Accuracy in data
representation**

Accessibility

Reproducibility/Well cited

Aesthetics

Viewer cognition

**Accuracy in viewer
understanding**

**Ease of understanding/
simplicity**

**Relevance to viewer
(Visually salience)**

**Relevance to viewer
(Information content)**

Graphic construction

Accuracy in data representation	Is the author supporting their assertions with data? (LS)
	Is it obvious that the graphic is an accurate reflection of the entire data set? (LS)
Accessibility	Pass a color blindness check (scale, yes/no)
	Are there other supportive elements? (yes/no)
Reproducibility/ Well cited	Rerunning code (scale, yes/no)
	Find source data (scale, yes/no) (optional)
Aesthetics	Guides (Likert 5 scale)
	Color palettes (Likert 5 scale)
	Whitespace (Likert 5 scale)
	Pleasingness (Likert 5 scale)

Viewer cognition

Accuracy in viewer understanding

What was the main topic of the graphic? (SI)

The ideas presented are very complex. (LS)

Ease of understanding/ simplicity

I easily understood the content of the graphic. (LS)

Given its complexity, I found the graphic easy to understand. (LS)

Relevance to viewer (Visually salience)

I found the graphic visually pleasing. (LS)

Relevance to viewer (Information content)

I found the content interesting. (LS)

This graphic follows an OCAR structure. (LS 0-4)