

# Using Visual Literacy to Demonstrate the Impact of Technological Space

Jennifer Natale and Eric Resnis



MIAMI UNIVERSITY

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LIBRARIES

# Assessment in Action

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- Year 1 Project
- Multifaceted Project

**ASSESSMENT**

*in Action*

**ACRL** Advancing learning  
Transforming scholarship

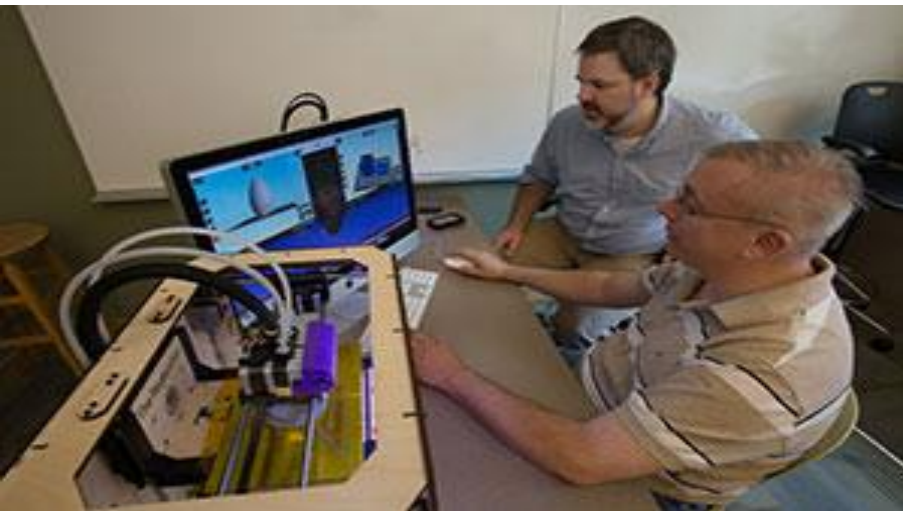
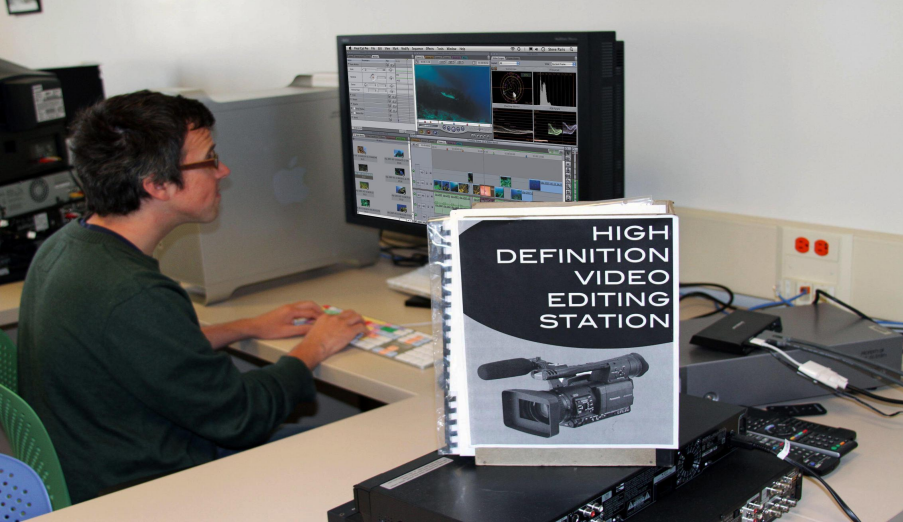


# The Situation

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- High-end tech support facilities
  - Center for Info Mgmt (CIM): 2000
  - Digital Den: 2011
- \$\$ support: capital, technology, staff
- What is the impact?





# Project

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- How does the usage of dedicated technology facilities contribute to the success of Miami student scholarship and research?



# Two Phases

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- Technological Self-Efficacy (TSE)
- Visual Literacy



# The Visual Literacy Rubric

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- Interpreter (describing the poster)
  - Meaning
  - Parts/Whole
  - Design
- Creator (creating the poster)
  - Product & Content
  - Design



Scoring Level	1- Ineffective	2-Effective	3-Advanced	4-Outstanding
<b>Interpreter - Meaning</b>	Student unable to interpret what the poster means. Cannot tell if the poster is representational, explanatory, abstract, or symbolic.	Student does understand some of the meaning. Can identify some representational, explanatory, abstract, or symbolic elements of the poster.	Student able to interpret the meaning of the poster satisfactorily. Can identify multiple representational, etc. elements of the poster.	Student able to carefully and thoroughly interpret the meaning of poster. Can thoroughly identify representational, etc. elements of the poster.
<b>Interpreter - Parts/Whole</b>	Student does not understand how the parts of the poster influence the message.	Student has some understanding of how the parts of the poster helped create the message.	Student understands how the parts of the poster influence the effectiveness of the whole. Shows advanced interpretation of complex images.	Student understands how parts of poster influence own reactions and/or thinking. Is aware of emotional, psychological, and cognitive influences in perceptions of visuals
<b>Interpreter - Design</b>	Student has no knowledge or understanding of design elements used to create poster.	Student has basic knowledge or understanding of design elements used to create poster.	Student can identify and explain some design elements used to create poster.	Student really knows and understands design elements used to create the poster.

**Rubric can be downloaded at: <http://tinyurl.com/ospd5xf>**



**Creator -  
Product &  
Content**

Connection not found between poster content and purpose of study, research hypothesis /question(s), method, conclusions, or implications. Content not properly cited. Product does not demonstrate learning expectations.

Content presented was difficult to understand and did not sufficiently convey a connection to the study, hypothesis, research question (s), method, conclusion, and/or implications. Some content is properly cited. Product demonstrates some learning outcomes.

The content was adequately presented but support for the study, research hypothesis, or question(s) is somewhat general. Conclusion and implications were reasonable. Content is properly cited, although some items (especially images) may be incomplete.

Strong material. Well summarized. Clearly shows development of study or research. Material appears to accurately support purpose of study, hypothesis, or research question. Strong conclusion and implications presented. All content is cited correctly.

**Creator - Design**

Headings and text are hard to read (color, size, font choice). Poor alignment of information (text and/or graphics). Space not used effectively. Graphics only somewhat relate to text. Product does not have built-in similarity/pattern. Product parts not similar in appearance; difficult to tell they are part of the same product.

Most headings and text are easily found or read. Aligns some information, other areas have too little/much space between content and graphics. Most graphics relate to the content and/or text and are of good quality. Product parts are exactly or almost the same. The color, font or theme is repeated.

Work is attractive, well-organized, visually appealing. Good balance of text, color, & graphics. Headings and text are easily found/read. Aligns information appropriately, uses space well to organize ideas & information. Graphics relate to content and/or text & are good quality. Pattern has built in similarity.

Very impressive or engagingly surprising to audience. Headings and text are very effectively placed. Creative use of text matches the message. Aligns the information, giving order to the page. Graphics are strategically placed for effect. Uses space and graphics creatively that enhance the content of the message. Unique use of patterning that enhances product effectiveness.

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# Process (2014)

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- Developed and Normed Rubric
- Sample 20 posters each from 3 sessions
  - based on usage of CIM
  - some sample overlap



# Statistical Analysis

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## Binary Logistic Regression

- Looks at the data divided into two categories (ineffective & effective) and (advanced & outstanding).
- Accounts for possible differences between raters.

**RESEARCH QUESTION:** What is the probability that those students who use specialized Library Services will achieve at least an advanced level?



# Results

RUBRIC CATEGORY	Times more likely to reach advanced level	Significance
<b>Interpreter - Meaning</b> (student can describe overall meaning of poster)	4	.049*
<b>Interpreter - Parts/Whole</b> (student can describe how certain elements of poster contribute to the whole)	2.7	.101
<b>Interpreter - Design</b> (student can describe their design process)	6.5	.005*
<b>Creator - Product &amp; Content</b> (content of poster)	2.7	.111
<b>Creator - Design</b> (design elements of poster)	6	.007*

# Overall

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Students using specialized Library services are 3.8 times more likely to reach the advanced level in total score than students that don't.

Significant Result (.044)



# Next Steps (2015)

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- Partner with Office of Research for Undergraduates to provide 1-hour poster creation workshop
- Evaluate with two goals in mind:
  - Attendance at workshop vs not
  - CIM use vs not



# Further Beyond (2016)

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- Offer Workshop
  - partner with advisors
- Tweak Methods
  - Better match of usage to results
  - Workshop → space usage?



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