Expertise Around Digital Media

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Purpose & Objectives

• Exploratory in nature; framed from the perspective of the humanities
• Exploring the tools and techniques that are used when building interdisciplinary expertise around digital media
• Concerned with the gray areas that surround the “disciplinary” boundaries of digital media
• Before attempting a solution, we must better understand the problem space
A Critical Awareness of Interdisciplinarity

• ‘Interdisciplinarity’ has something to please everyone. Its base, *discipline*, is hoary and antiseptic; its prefix, *inter*, is hairy and friendly. Unlike fields, with their mud, cows, and corn, the Latinate *discipline* comes encased in stainless steel: it suggests something rigorous, aggressive, hazardous to master; *Inter* hints that knowledge is a warm, mutually developing, consultative thing.

— Roberta Frank qtd. in Moran (2002, p. 3).
Three Parts

1. What is expertise in an interdisciplinary context?

2. What issues and problems are associated with building expertise in an interdisciplinary context? In other words, why is this so tricky?

3. How do we share expertise around digital media?
Part I

WHAT IS IT?
Data vs. Information vs. Knowledge

• Data = observations about the world.
  – Ex: Facebook has over 400 million active users

• Information = data endowed with relevance and purpose (Peter Drucker).
  – Ex: There are 10,000 Facebook users in my network that I can advertise to.

• Knowledge = information with the most value.
  – Ex: Facebook click-throughs to purchases happen approximately 2% of the time in online ads.
Tacit vs. Explicit Knowledge

- Tacit knowledge
- Explicit knowledge

From Tacit knowledge:
- Socialization
- Internalization

To Explicit knowledge:
- Externalization
- Combination
// Public Methods

public function showInventory()
{
    if (this.hasOwnProperty == true)
    {
        this.inventoryItemStatus.text = this.currentItemName;
    }
    else
    {
        this.inventoryItemStatus.text = "Inventory is empty."
    }
}

public function resetInventory()
{
    this.hasOwnProperty = false;
    this.currentItemName = "";
}

/**< This public function is used to add a single item to the inventory system */
public function addInventoryItem(itemName: String): Boolean
{
    // trace("Has item: "+this.hasOwnProperty);
    if (this.hasOwnProperty == false)
    {
        this.hasOwnProperty = true;
        this.currentItemName = itemName;
        return(true); // successfully able to add inventory item
    }
    else
    {
        trace("Inventory full. Can't add anything else.");
        return(false); // unable to add new inventory item
    }
}

// Protected Methods:
Interdisciplinary Expertise

• As apposed to multidisciplinary practices, which “speak as separate voices in an encyclopedic alignment,” interdisciplinary practices integrate “disciplinary data, methods, tools, concepts, and theories in order to create a holistic view or common understanding of a complex issue, question, or problem” (Klein, 2005, p. 55).
Part II

WHY IS IT SO TRICKY?
Why Expertise is Tricky in Digital Media

• The problem of interdisciplinarity (disciplinary issue)
  – Faculty come from different backgrounds.
  – Students have different interests.

• The problem of complexity (systems issue)
  – Technology changes, multiple domains of study, etc.

• The problem of expectations (psychological issue)
  – Entertainment media sets the bar high.

• The problem of public policy (political issue)
  – Everyone’s already an expert in digital media.
The Zombie Problem

• “Consciously doing all we can to free ourselves from the last boundaries of space and time, we are ultimately trading our cultural and societal anchors for an age of glorious freedom, technological innovation—and darkness. As our attentional skills are squandered, we are plunging into a culture of mistrust, skimming, and a dehumanizing merger between man and machine. As we cultivate lives of distraction, we are losing our capacity to create and preserve wisdom and slipping toward a time of ignorance that is paradoxically born amid an abundance of information and connectivity. Our tools transport us, our inventions are impressive, but our sense of perspective and shared vision shrivel” (Jackson, 2008, pp. 15-16).
ZOMBIES
A little warning goes a long way.
NINJAS
They're everywhere.
The Ninja Problem(s)

Sven Birkerts (1994) *The Gutenberg Elegies*

Problems with the “electronic era”:

1. Language erosion (silence)
   - Neil Postman: complex discourse patterns flattened by their need to be communicable over distance

2. Flattening of historical perspectives (hidden)
   - “The more we grow rooted in the consciousness of the now, the more it will seem utterly extraordinary that things were ever any different”

3. The waning of the private self (death of the individual)
Julie Thompson Klein (1990) notes that “borrowing” is quite common in academia; one discipline routinely borrows from another that is more established or well-known.

There are, however, problems with borrowing. Here are just three of them (p. 88):

- Distortion and misunderstanding of borrowed material
- Use of data, methods, theories, and concepts out of context
- Use of borrowings out of favor in their original context
"Yes, it is a nice ship but it cost me an arm and a leg."
Part III

HOW DO WE SHARE IT?
Information Ecology

• What we’re dealing with, then, is a complex system of knowledge and relationships.
• Davenport & Prusak (1997) use the metaphor of ecology to study and understand informational systems in business. Ecology is the science of understanding and managing whole environments.
• Four key attributes of information ecology:
  1. Integration of diverse types of information
  2. Recognition of evolutionary change
  3. Emphasis on observation and discussion
  4. Focus on people and information behavior
Pirates, Ninjas, and Zombies

• How do we define expertise in an interdisciplinary context?

• How do we share expertise with our students and the general public?

• How do we educate with expertise as an ultimate goal for learners?
Thank You!


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