2016

Cultivating Motivation: The importance of autonomy, competence & relatedness for instruction involving digital archives and objects

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Cultivating motivation

The importance of autonomy, competence & relatedness for instruction involving digital archives and objects

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IFLA IL Section Satellite Preconference | August 12, 2016
Learning outcomes

- Experience a brief instructional design process.
- Draft an instructional plan for your collection that incorporates motivational theory.
- Develop a better understanding (and increased appreciation) for student motivation.
Outline

- Context
- Self-Determination Theory (SDT)
- Assessment
- Case Study
Context
Active learning & digital archives

- IMPACT
- Information literacy
- SDT
Financial Support:
Provost's Office, President's Office.

Support Staff Contribution:
CIE, Libraries, and ITaP.

Program Assessment:
CIE, DLRC, and OIRAE

Scholarship of Teaching and Learning:
DLRC, CIE, Libraries, and ITaP.
Informed Learning

- “using information, creatively and reflectively in order to learn.”
  Bruce, p. vii.

- simultaneously concerned with “information use and learning.”
  Bruce and Hughes, p. A2.
Self-Determination Theory

Student perceptions of three psychological needs can strongly influence learning
• autonomy
• competence
• relatedness

IMPACT Courses by College

- College of Agriculture
- College of Education
- College of Engineering
- College of Health & Human Sci
- College of Liberal Arts
- College of Science
- College of Technology
- Krannert School of Management
- The Graduate School
Activity #1 - Think-Pair

- Identify your digital archive object or collection & its instruction opportunities
  - Share with a partner
Self-Determination Theory
Self-Determination Theory

- Supporting basic psychological needs in a learning environment fosters student engagement, motivation, and ultimately, learning.
Basic Psychological Needs

- Autonomy
- Relatedness
- Competence
Learning Environment Choices

**FOSTER:**
- Constructive positive feedback
- Choices, options
- Provision of a rationale

**HINDER:**
- Conditional regard
- Rewards
- Punishments
- Competition
Case study - Carly Dearborn
PERSONAL DIGITAL ARCHIVING

Save your files and your sanity!

Carly Dearborn – Digital Archivist – cdearbor@purdue.edu
EXERCISE 1

Take 3 minutes and locate records you would classify as “personal” within exercise1 in your download packet.
<table>
<thead>
<tr>
<th>Name</th>
<th>Date modified</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 years</td>
<td>1/12/2016 4:07 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>committees-2016</td>
<td>1/12/2016 4:43 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>current projects</td>
<td>1/12/2016 4:35 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>docProps</td>
<td>1/13/2016 11:52 AM</td>
<td>File folder</td>
</tr>
<tr>
<td>EAST</td>
<td>1/12/2016 4:05 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>example1</td>
<td>1/13/2016 11:53 AM</td>
<td>File folder</td>
</tr>
<tr>
<td>exhibit - marilynmonroe</td>
<td>1/12/2016 4:26 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>Luke</td>
<td>1/12/2016 4:54 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>New folder</td>
<td>1/12/2016 4:46 PM</td>
<td>File folder</td>
</tr>
<tr>
<td>newPhoto Mar 08, 11 30 26 AM</td>
<td>1/13/2016 11:53 AM</td>
<td>File folder</td>
</tr>
<tr>
<td>ppt</td>
<td>1/13/2016 11:52 AM</td>
<td>File folder</td>
</tr>
<tr>
<td>[Content_Types].xml</td>
<td>2/22/2016 12:31 AM</td>
<td>XML Doc</td>
</tr>
<tr>
<td>EAST minutes 20050216.doc</td>
<td>2/22/2016 12:31 AM</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>example.zip</td>
<td>1/13/2016 11:55 AM</td>
<td>Compressed</td>
</tr>
<tr>
<td>Jumpin Essay.dcx</td>
<td>4/26/2013 4:43 PM</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>jumpin.docx</td>
<td>4/22/2013 5:00 PM</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>jumpin2.docx</td>
<td>4/23/2013 10:20 AM</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>LBO exhibit labels.docx</td>
<td>7/31/2014 9:35 AM</td>
<td>Microsoft Word</td>
</tr>
<tr>
<td>pbs remixed.msg</td>
<td>1/13/2016 12:43 PM</td>
<td>Outlook</td>
</tr>
<tr>
<td>Photo Mar 08, 11 30 26 AM.jpg</td>
<td>2/15/2013 4:04 PM</td>
<td>JPEG image</td>
</tr>
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<td>policy survey.xlsx</td>
<td>5/16/2013 2:39 PM</td>
<td>Microsoft Word</td>
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<td>untitled.wpd</td>
<td>9/4/2015 4:42 PM</td>
<td>OpenOffice</td>
</tr>
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</table>

**Email:**

To: Dearborn, Carly C

From: Schmitz, Stephanie

Fri 1/8/2016 1:19 PM

[pbs remixed](https://www.youtube.com/watch?v=YLQ7tCd6VrA)

The mister rogers one is pretty good too.
Case Study

- Autonomy
- Competence
- Relatedness
Activity #2 - Learning Activity

Work with your partner to design a learning activity that addresses:

- Autonomy
- Relatedness
- Competence
Assessment

How do you know it’s working?
Assessing effectiveness

- What constitutes success?
Assessment Measures

- **Performance**
  - Grade
  - Pre/post knowledge assessment
  - Competencies

- **Perceptions**
  - Learning Gains
  - Basic Psychological Needs
  - Perceived Knowledge Transfer

- **Motivation**
  - Self-Determination Index
  - Intrinsic/Extrinsic

- **Behavior**
  - Observations
  - Attendance/Completion rates
Basic Psychological Needs Scale

▶ Autonomy
  • “I feel like I can make a lot of inputs in deciding how my coursework gets done”

▶ Competence
  • “People in this course tell me I am good at what I do”

▶ Relatedness
  • “People in this course care about me”

Adapted for the learning environment by Levesque-Bristol et al., (2010)
Student Assessment of Learning Gains

“As a result of your work in this class, what GAINS did you make in the SKILL of......”
Perceived Knowledge Transfer Scale

“I feel confident in my ability to apply the course material in other classes that I have”

“I understand how I will use the information learned in this class in my professional life”

Developed by Levesque-Bristol, Richards, Zissimopoulos, Wang & Yu (under review)
Self-Determination Index

- **Intrinsic**
  - “Because I really enjoy it”

- **Integration**
  - “Because learning all I can about academic work is essential for me”

- **Identification**
  - “Because it allows me to develop skills that are important to me”

- **Introjection**
  - “Because I would feel bad if I didn’t”

- **Extrinsic**
  - “Because I feel I have to”

- **Amotivation**
  - “I don’t know. I wonder if I should continue”

Adapted from Guay, Vallerand, & Blanchard (2000)
Assessment example

- Activity: Digital Archiving project
- Possible assessments
  - Student performance - grades, rubric tied to learning outcomes
  - Perceptions - student feedback on project
  - Motivation - short pre- and post-survey
  - Behavior - instructor observations, group evaluations
Perceived Knowledge Transfer

Low Student Centered: 4.57
High Student Centered: 5.2
Student Assessment of Learning Gains

<table>
<thead>
<tr>
<th></th>
<th>Low Student Centered</th>
<th>High Student Centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment</td>
<td>3.38</td>
<td>3.68</td>
</tr>
</tbody>
</table>

Low Student Centered

High Student Centered
Course Grades

<table>
<thead>
<tr>
<th>Low Student Centered</th>
<th>High Student Centered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.96</td>
<td>3.2</td>
</tr>
</tbody>
</table>
Course Evaluations

- Course Rating
  - Low Student Centered: 3.45
  - High Student Centered: 3.9

- Instructor Rating
  - Low Student Centered: 3.65
  - High Student Centered: 4.24
Activity #3 - Assessment

Design an assessment for your activity

- What defines “success” for your activity?
- What measures might you use to assess your activity’s effectiveness?
Case Study - Esteban Garcia Bravo
2016 Mercedes-AMG GT S

- Engine: 4.0L biturbo V8
  - 503 hp @ 6,250 rpm
  - 479 lb-ft @ 1,750-4,750 rpm
- Transmission: 7-speed dual-clutch
- Top Speed: 193 mph
- 0-60 mph: 3.05
- 0-120 mph: 11.25 @ 127 mph
- Fuel Consumption: 16/24 mpg
- Fuel Capacity: 19.6 gal
- Grp: 0.36
- Crr: 1.05 g
- Storage Capacity: 12.3 cu. ft
- Turning Radius: 37.7 ft

http://www.amgusa.com/amg/gt/specsheet.pdf
http://www.sandersonmercedes.com/amg/gt/specsheet.pdf
The Project

- Individuals submit project for critique
- Small Group Critiques
  - from outside of home group
- Iterative
- Building a learning community

Design Review: Project 3

Reflection and Feedback Sheet

Name: __________________ Date: March 2

Student is able to: (Rank from 1 to 5) 1=Lowest, 5=Highest

<table>
<thead>
<tr>
<th>Task Description</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compose digital images that have an adequate format, color space and resolution</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Generate and communicate new ideas formulating them into effective visual concepts</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Combine typography, images, colors and other elements to create organized visual relationships</td>
<td>4</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Manipulate images and digital tools to create well crafted and realistic effects</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

Project strengths
- Good use of a lot of different images
- Good job getting positioning right

Project weaknesses
- Subjects don’t go well with background
- Scale of stone figures are too large
- Blot a little better

How would you improve this project?
- Scale down people or scale up background
- Blend people better with background
- Different background
Reflection & Self-assessment

Project 2

In this project, I was able to:

- Generate and communicate new ideas formulating them into effective visual concepts [9]
- Combine typography, images, colors and other elements to create organized visual relationships [4]
- Manipulate images and digital tools to create well crafted and realistic effects [4]

Project strengths
- tells story
- hair

Project weaknesses
- image relationships
- background
- shadows

What do you think was your biggest struggle in creating this project?
- making everything blend together & worry together

What strategies will I use to improve my design? (Be very specific)
- change background
- fix/add shadows
- change image sizes to look more realistic

Date of projected re-submission __________
Types of Assessment

- Grade performance data
  - Student formative assessment
  - Summative instructor assessment

- Instructor perception of motivation
  - You can do other things to measure motivation
Debrief

► Basic psychological needs in today’s session
  • Autonomy
  • Relatedness
  • Competence
Learning Outcomes Revisited

- Experience a brief instructional design process.
- Draft an instructional plan for your collection that incorporates motivational theory.
- Develop a better understanding (and increased appreciation) for student motivation.
Activity #4 - Challenges

What challenges might exist when incorporating basic psychological needs in your instruction?

• Share with your partner
• Bring questions to the group Q&A
Thank you.