Reframing Information Literacy for First-Year Engineering Students

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ACRL STS info lit chat
March 21, 2019
Outline

• Design Thinking and Communication (DTC) intro
  – what is DTC?
  – what does library support look like?

• reframing information literacy
  – new guide
  – library skills videos (two parts)
  – research practices survey

• incorporating the Framework
Introduction to Design Thinking and Communication (DTC)

• what is DTC?

• class goal: product design for client

• library support structure for DTC courses

Created by Gregor Cresnar from Noun Project
Library Support History

- collaboration began in Fall 2015

- classes we’ve met with
  - Fall 2015: 1  Win 2016: 2  Spr 2016: 6
  - Fall 2016: 4  Win 2017: 2  Spr 2017: 8
  - Fall 2017: 3  Win 2018: 5  Spr 2018: 10*
  - Fall 2018: 6  Win 2019: 3**  Spr 2019: ???

*2 were out-of-class visits
**3 cancelled due to extreme cold
Reframing Information Literacy

- guide updates (Fall 2018)

http://libguides.northwestern.edu/dtc
Reframing Information Literacy

• Videos Part 1: Library Skills (Fall 2018)
  – equitable access to info

1. Familiarize yourself with the resources of the NU library. Good starting points include:
   ◦ The DTC Library Guide
   ◦ Finding a Book at the Library (video)
   ◦ Using Interlibrary Loan (video)
   ◦ Choosing Keywords (video)
   ◦ Searching with Keywords (video)
   ◦ Citation Basics (video)
Reframing Information Literacy

• Videos Part 2: Patents and Standards (Winter 2019)

Design Thinking & Communication (DTC): Patents, Standards, and Safety

Getting Started  Find Articles  Patents, Standards, and Safety  Cite Sources

Search for Patents
When an inventor has an idea for a product, they will often patent it to make sure no one else develops the same thing and takes credit for it. Are you wondering which one you want to make? You can see if the idea has been patented by searching in InnovationQ Plus, Derwent, or the US patent database.

• InnovationQ Plus
  Comprehensive patent search tool.
• Derwent Innovations Index (U.S. and World Patents Index)
  Patent search tool.
• United States Full Patent Database
  Patent search tool (slightly harder to use than the others).

Search for Standards
When someone makes a new product, they have to make sure it follows the standards for that type of product. Are you wondering what published standards there are and what regulations exist by searching in the IEEE database or on the ASTM website.

• IEEE Published Standards (select "Standards" from the dropdown menu next to the search bar)
• ASTM Standards - click on the appropriate standards category, search for the standard number, or search by keyword.
  You can request an ASTM standard by filling out a form on the library website.

http://libguides.northwestern.edu/dtc/pss

Reframing Information Literacy

• research practices survey (Fall 2018 – Spring 2019)

The following citation is for what source?


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<tr>
<td>Scholarly journal article</td>
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Incorporating the Framework

Step 1: Identify desired results

Enduring understandings:
1. Information creation as a process – students will be able to transfer knowledge of capabilities and constraints to new types of information products
2. Research as inquiry – students will be able to synthesize ideas gathered from multiple sources

Essential questions:
1. What is a patent? Where can I find them?
2. What different types of information sources are there? Where can I find them?

Knowledge, skills, and values:
1. Students will be able to define “patent” and identify relevant databases to find them.
2. Students will recognize that information from multiple sources can help them answer their research questions and identify relevant databases to find them.
Incorporating the Framework

Step 2: Assessment and acceptable evidence

• pay attention to demo (formative)

• participation in group work activity (formative)

• incorporate three or more types of sources into final report (summative)
Incorporating the Framework

Step 3: Plan learning activity

ICP:
- ask students to define patent
- demo how to use Innovation Q Plus

RI:
- pre-class assignment: ask students to list as many information sources as they can
- show that different information sources can be found in different places – show how to limit to books, peer-review etc. in NUsearch and Engineering Village
Discussion Questions

• Does your institution have an instruction program similar to the one we have for DTC? If not, is there the potential to develop one?

• Have you developed research guides that are targeted to first-year students?

• Have you developed videos targeted at a specific class?

• In what ways would you incorporate the Framework into this class?
For More Information

• McCormick DTC page
• DTC Library Blog Post
• STELLA (!) Lightboard Handout
• Teaching with the Libraries