Rising to the Challenge: Preparing Students for College-Level Research

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HeLIOS: Hemingway Library Information Online Skills Tutorial

HeLIOS Graphic Novel Tutorial

Welcome to HeLIOS

This tutorial is designed to help you learn the essential library and research skills that will assist you in finding information for papers and projects. After completing all of the lessons, you should have learned the necessary skills to conduct a successful search for information.

Click on the image to be taken to our informative graphic novel.

Stewart Library
Presenters and Roles

• JaNae Kinikin
  – Project director
  – Grant writer

• Joanne Christensen
  – School librarian

• Ludwig Possie
  – Computer programmer and designer
Pre-Assessment
Who are you?

• Go to www.polleverywhere.com/jkinikinin
Purpose of HeLIOS

This tutorial is designed to help you learn essential library and research skills that will assist you in finding information for papers and projects. After completing ALL of the lessons, you should have the necessary skills to conduct a successful search for information.
Literature Review

• Most students lack the information literacy skills required for college level courses

• An article in the *Chronicle of Higher Education* states that most college faculty members believe that “…students are ill prepared for the demands of higher education” (Sanoff 2006)

• Ideas to correct this deficiency
  – train the trainers (Martorana 2001, Gresham and Van Tassel 2000).
  – partnerships involving college librarians, college faculty, K-12 teaching faculty, and K-12 media specialists (Ercegovac 2003)
Literature Review

• Online tutorials not a new idea (Reece 2007, Yang 2008, Su and Kuo 2010)
• Most designed for college students, not high school students (TIP, Go for the Gold, TILT)
• Tutorials should “engage” students (Su and Kuo 2010)
Timeline

HeLIOS Timeline

- Initial Survey 2005
- Spring 2007 First Grant Funded
- Spring 2009 First tutorial beta-tested
- Spring 2010 Second Grant Funded
- Summer 2012 Revised tutorial
- Spring 2014 Narration completed
Project Need

• Insufficient support from administration

• Minimal interaction between school librarian and teachers

• Limited library staffing—only one full-time licensed School Library Teacher is recommended in state guidelines regardless of school size [local high schools have only library aides]

• Information literacy tends to be informal

• Few library research assignments required (Common Core has changed this)
Why are School Libraries Not Being Used?

- Time constraints
- Technology
  - Not enough computers
  - Computers don’t work
- Atypical classroom environment
- Set curricula
Why are School Libraries Not Being Used?

- Inadequate library collections
  [Utah $6.25/student on library resources, national average $8.22 (2005)]
- Requires advance planning
- Insufficient infrastructure
- Additional work that is required of teachers when research is assigned
Assisting School Librarians to Prepare High School Students for College

• **Online information literacy tutorial**
  - Specifically for high school students (most tutorials are for college students)

• **Hemingway grant from WSU**
  - Surveyed university faculty on skills incoming students need
  - Reviewed information literacy exam to determine required skills
  - Outlined learning objectives
Funding: Hemingway Research, Scholarship, & Professional Growth Grants

• 1\textsuperscript{st} Grant
  – School librarians’ stipends
  – Faculty release time
  – Instructional designer

• 2\textsuperscript{nd} Grant
  – Graphic designer
  – Software/images
  – Marketing campaign
School Librarian Recruitment

• 1\textsuperscript{st} round:
  – Recruited two high school librarians in local school district

• 2\textsuperscript{nd} round:
  – Sent request to state library media list- serve
  – Four additional high school librarians recruited
Original Format

- Flashy automated PowerPoint
- Clip art, basic navigation buttons and HeLIOS banner

Boolean Logic

- Boolean logic is named after mathematician George Boole.

- Boolean operators are often used when searching article databases and library catalogs. The operators show a relationship between keywords in a search.

Demo
Original HeLIOS

Module 1
- Plagiarism
- Research Question
- Library/Web Search Tools and Information
- Giving Credit
- Primary/Secondary Sources
- Library Catalog
- Call Numbers

Module 2
- Boolean Operators
- Identifying Keywords
- Quoting, Paraphrasing, Summarizing
- Reference Books
- Evaluation
- Information Ethics

Module 3
- Advanced Search Techniques
- Article Databases
- Subject Headings
- Scholarly vs. Popular Information
- Types of Information
- MLA Format

Credits
Evaluation of HeLIOS in the Original Format

• Informally tested in two high schools in Davis School District.

• Teachers liked the PowerPoints and thought they had important information.

• Students thought the PowerPoints were boring.
Graphic Novel Format
Student Input
Forrest Allen

• High school student was recruited
• Wrote scripts for lessons
• “I had a lot of fun working on the HeLIOS project.”
Graphic Version-Example

With every piece of information that you find, whether primary or secondary, try to answer these five questions, and you might learn more about the quality of the source.

**Reading Sources**
- Who wrote this?
- What does it say?
- When was it written?
- Where was it written?
- Why was it written?

So, tell me what you learned about primary & secondary sources?

Primary sources are original sources of information.

Secondary sources summarize, analyze, or critique primary sources.

But, you need to critically evaluate both of them.

Very good, you guys should fly through this now!

http://www.youtube.com/watch?v=n-o7UNDSqQA&safe=active
Self Evaluation

- End of lesson quizzes
- Feedback provided for both right/wrong answers
- Opportunity to review lesson and re-take quiz
PowerPoint Version in addition to Graphic Version

• To be used for classroom instruction
• Can be edited to meet the needs of individual teachers/librarians
Use in Classes

• Mrs. Holly Leake, AP Language teacher, chose to have the students go through the entire tutorial at their own pace after the pre-assessment.

• A short PPT version of some of the most difficult topics were presented at critical points in the research process.
Informal Pre-assessment

• Subjects were Advance Placement Language and Composition Students (11th grade).

• Google Forms
  – Easy to construct and use.
  – Difficult to easily compile meaningful data.
Informal Pre-assessment

• Examples of knowledge gaps (over 50% of students)

• Students did not know:
  – It is not necessary to cite “common knowledge”
  – The meaning of “collusion”
  – The Dewey Decimal numbers group books together by topic
  – Boolean operator OR expands a search
Summative Assessment

- Average scores after completing the three modules: Assessed AP students using UTIPs, an online testing service for teachers in the state of Utah.
  - Module I: 91%
  - Module 2: 88%
  - Module 3: 83%

- Average scores after completing one lesson (with history, English, health classes) using Survey Monkey:
  - Advanced Search Techniques: 92%
  - Article Databases: 90%
You Explore!

- [http://helios.weber.edu](http://helios.weber.edu)
- Spend 5-10 minutes to review the HeLIOS tutorial
Think/Pair/Share

• Discuss your lesson with the person next to you
  – overall view of tutorial
  – same lesson
  – different lessons

• Complete a Google form with your answers:

http://tinyurl.com/LOEX-HeLIOS
Comments

- View responses HeLIOS Tutorial

- Other comments from the audience.
Questions???

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More HeLIOS Information

http://tinyurl.com/HeLIOS-LOEXinfo
References


References


Images

Google Forms: www.docstoc.com
HeLIOS: helios.weber.edu
Knowledge Gap: www.horsesaysinternet.com
Librarian Avitar: en.wikipedia.org
Recruitment: www.123rf.com
UTIPS: http://www.myutips.org/

More Information About HeLIOS
http://tinyurl.com/HeLIOS-Tutorial