## THE PEDAGOGY OF INFORMATION LITERACY: USING I-LEARN TO TEACH

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# UNDERLYING RESEARCH

- Studies with elementary and middle-school students in three public schools in Philadelphia
- Several presentations at past ECIL conferences
- Chapters in ECIL Proceedings



# I-LEARN (NEUMAN, 2011)

- I: Identify a researchable question/topic
- L: Locate information that might address it
- E: Evaluate the information
- A: Apply the info. to answer/address it
- R: Reflect on the process and product
- kNow: Instantiate the knowledge to use in the future



# FULL SPECTRUM OF INFORMATION LITERACY

- Begins in information seeking:
  - Identify, locate, and evaluate information
- Culminates in learning:
  - Apply the information to answer a question, reflect on what's been learned, use the new knowledge to generate new ideas



# TEACHERS' STRATEGIES AND METHODS

- Project-based learning
  - Independent work with strong teacher guidance
  - Worksheets, handouts, modeling, etc.
  - Students create (and often present) final projects to show what they've learned



## **IDENTIFY**

• In general, individual projects within teacher-generated questions/topics: what makes a city special, why is a house made of brick/mud/straw, what problem exists in my neighborhood and what can I do



## LOCATE

- Information seeking from a variety of sources—books, people, Internet
- Classroom collections (not libraries)
- Field trips, guest speakers, interviews with parents
- General websites, sites for children when guided



## **EVALUATE**

- Teacher questioning, probing
- "Short-hand" criteria (e.g., Google isn't reliable; *Wikpedia* isn't as good as a "real" encyclopedia; .org is more credible than .com)
- Commercial checklists



## APPLY

- Brochures, drawings, maps, posters, etc.
- Role of technology: Little Bird Tales, Weebly, PowerPoint, StoryKit
- Presentations to fellow students and others



#### REFLECT

• Teachers' exit interviews with students

• [Are there other things teachers did? Since this is about \*their\* strategies, I don't think we can include \*our\* interviews.]



#### KNOW

• Teacher questioning, probing, assessment of students' projects

• One teacher had students create a task force with a mission statement, suggesting ongoing application of knowledge



## WHAT WE'VE LEARNED: RESEARCH-BASED INSIGHTS

- Each stage must be addressed directly
- Students need guidance throughout their use of I-LEARN—and so do teachers
- The researchers' next task should be to develop teacher materials: instructional guides, suggested activities, etc.



## **IDENTIFY**

- Students' environments strongly influence the questions they ask
- Older students are skilled in targeting important issues
- All students need teachers' guidance in formulating researchable questions



## LOCATE

- Students need guidance in locating credible, reliable sources—and so do teachers
- Librarians can provide this guidance, BUT
- What happens when a school doesn't have a librarian or a teacher decides to do a project solely within the classroom?

## **EVALUATE**

- Students need guidance in how to evaluate sources and information—and so do teachers
- Many tools are available to help, BUT
- The best tool is someone who understands how information is organized, presented, etc.



#### APPLY

- Teachers are skilled at helping students envision products that demonstrate their learning BUT
- Teachers as well as students need guidance to use digital technology to create solid, high-quality products



#### REFLECT

- An underused stage, probably because of constraints on time, AND
- Both teachers and students need guidance in understanding the importance of reflection and in developing and applying strategies for doing it



## KNOW

- Students are generally adept at expressing their views, BUT
- It is difficult to tell whether those views are acquired through information-seeking
- Teachers need guidance in assessing information-based knowledge



#### SO ...

• We are working to identify credible indicators of knowledge based on following the model's first five steps



## CANDIDATES

- Asking a new question that s/he couldn't ask without learning the information
- Proposing a solution based on the information
- Consistently advancing ideas based on the information
- Suggestions welcome!



#### **THANK YOU!**

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