Teaching InfoLit to school age Children

By Mr. Jude Gorospe
For PASLI workshop January 27, 2012
Activity 1

Think of a question about any information

**ANSWER 1**
Include name and position of respondent

**ANSWER 2**
Include name and position of respondent

**ANSWER 3**
Include name and position of respondent

**ANSWER 4**
Include name and position of respondent
The Information Environment
Information in various materials and forms
Information Environment: Challenges

- Information Overload
- Overwhelming Quantity/Underwhelming Quality of Information
- Half-life of Knowledge
Information Overload

When a person finds it hard to understand, make sense of, organize immense number of info... on a given topic.
There are 23,800,000 pages related to the term ‘information overload’.
And at the top of the search result is a page from Wikipedia.
Quantity vs. Quality Info

(Powis-Dow, 2006)

Overwhelming Quantity

Underwhelming Quality
Quantity vs. Quality Info

- SPAM
- Advertising
- Wikis

Triangle of Life
The time span from when knowledge is gained to the time when it becomes obsolete is shortening.

Knowledge is expanding and exploding.
Shrinking Half-life of Knowledge

Pluto as a dwarf planet (2006)

Plasma as a state of matter (2001?)

Kepler 22b: earth-like planets (2011)

Changes in States of Matter

- **Gas**
  - ionization
  - deionization
- **Plasma**
  - condensation
  - vaporization
- **Solid**
  - deposition
  - sublimation
- **Liquid**
  - freezing
  - melting
Shrinking Half-life of Knowledge

Bloom’s Taxonomy revised

(1956) vs. (1994)

Higher Order Thinking Skills
- Evaluation
- Synthesis
- Analysis
- Application
- Comprehension
- Knowledge

Lower Order Thinking Skills

(1956)

Higher Order Thinking Skills
- Creating
- Evaluating
- Analysing
- Applying
- Understanding
- Remembering

Lower Order Thinking Skills

(1994)
Schools’ Management of Challenges in Information Environment

- Textbook/Teacher as source of content?
- Discourage web use?
- Provide less number of technology?
- Pre-select resources?
- Filter web content?
- Information Literacy Instruction
Why teach information literacy?

• To enable the kids to
  – effectively handle information overload and organize data into a coherent form or research.
  – evaluate authenticity of information materials and use those information relevant to the need at hand
Our School Children and Teens
21st Century Learners

Google Gen
- Kids google everything in their information search

e-Text Readers
- Kids use the F pattern when reading web content.

Mobile Learners
- Kids have access to information anywhere 24/7

Digital Creators
- Kids can present information in multimedia format.
21st Century Learners
(Grassian, E.S. & Kaplowitz, J.R., 2009)

Lost in the vast array of information

Information

Literacy Divide

Knows where to go and what to do with information
Our school library/ info users

(Loertscher, D. V., 2001)

**Beginner:**
Lost, can’t find info, needs help constantly, distracted, uninterested

**Intermediate:**
Self-starting, needs support, has moments of insight, will take advice, interested

**Advanced:**
Independent learner, knows where to go and how to get there, asks advice to monitor progress

(Loertscher, D. V., 2001)
# Information Styles

(Steinerova, J., 2010)

<table>
<thead>
<tr>
<th></th>
<th>Pragmatic Information Style</th>
<th>Analytic Information Style</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Searching style</strong></td>
<td>Horizontal or surface search</td>
<td>Vertical or explorative search</td>
</tr>
<tr>
<td><strong>Value in Information</strong></td>
<td>Quantity and time spent in info gathering</td>
<td>Quality and relevance of info gathered</td>
</tr>
<tr>
<td><strong>Motivation in info search</strong></td>
<td>To come up with fast solution</td>
<td>To understand contexts of info</td>
</tr>
<tr>
<td><strong>Reading Behavior</strong></td>
<td>Not extensive</td>
<td>Extensive</td>
</tr>
</tbody>
</table>
Why teach information literacy?

• To bridge the information literacy divide among our information users.
• To enable the kids to become life-long learners in this age.
<table>
<thead>
<tr>
<th>Intervention level</th>
<th>Area of Students’ Need</th>
<th>Librarian’s Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>No Assistance</td>
<td>Organizer</td>
</tr>
<tr>
<td>Level 2</td>
<td>Introduction to the library; reference assistance</td>
<td>Lecturer</td>
</tr>
<tr>
<td>Level 3</td>
<td>Locating and using relevant resources</td>
<td>Instructor</td>
</tr>
<tr>
<td>Level 4</td>
<td>Identification and use of relevant resources in a sequence</td>
<td>Tutor</td>
</tr>
<tr>
<td>Level 5</td>
<td>Understanding the process, in the development of search strategies, in the formulation of a focus and determining relevance of retrieved items</td>
<td>Counselor</td>
</tr>
</tbody>
</table>
Activity 2

• In small groups, enumerate ways you can evolve yourselves from simply organizers and managers of information to information counselors/specialists. List at least 5 on the Manila paper provided.
About Information Literacy
Brief History of ILI

Personal Assistance
- Promoted by Melvil Dewey
- Individual instruction & ‘Just in time’ delivery

Bibliographic Instruction
- Begun to do group instruction
- Focus: Locating resources

Library/Media Instruction
- Included AV resources
- Focus: Use of Library/AV resources
Brief History of ILI

Information Literacy Instruction
- Covers info resources beyond the library
- Focus: Building Skills in identifying, locating, evaluating, using information

Information Fluency?
- Focus: Extends Info skills applications to any personal or academic learning situation—B. Stripling

What do we call it now?
- This is a question of coverage/content defined further by global issues, trends in the profession and your vision for students
Information Literacy is about…

- What information am I looking for?
- How good is the information?
- How will I ethically use the information?
- Where will I find the information?
- How will I get there?
- Inquiry & Critical Thinking
  - Inquires, thinks critically, and gains knowledge
  - Pursues personal and aesthetic growth

- Synthesis and Making Decisions
  - Draws conclusions, makes informed decisions, creates new knowledge
  - Shares knowledge ethically and productively in the society

- Personal Growth & Creativity
  - Shares knowledge ethically and productively in the society
  - Pursues personal and aesthetic growth

- Democratic and Ethical Behavior
  - Shares knowledge ethically and productively in the society
  - Pursues personal and aesthetic growth

(AASL, 2007)
A good Information Literacy Program combines the learning of the three skills.
The 4 R’s of Library Literacy

- Use references, other books, journals, newspapers, AV, digital files, etc.
- Use the card catalog, indexes, OPAC and search engines to locate materials
- Identify and recognize the librarian and his/her roles
- Observe proper research skills
Learn to use digital media to:

- communicate and work collaboratively with others;
- Gather, evaluate, and use information;
- Conduct research, solve problems and make informed decisions.
Present Practices by School LMCs

- No InfoLit or Library Instruction Program
  ---Library as a warehouse of materials

- InfoLit as a stand-alone subject
  --Independent from other subject areas

- InfoLit as integrated into other subject areas.
All students receive the same instruction.
Instruction is systematic.

Disconnected to what students need
Students bored; waste of time

Students learn quickly when skill is used right after it is taught.
Students get help from two adult experts.

Students are not at the same skill level.
Librarian has to be more flexible.
Instructional Designs of IL

Content driven
- Stand alone ILI tends to be like this
  - Teacher-centered
  - Knowledge based
  - Passive learning

Example:
Lecturing on the cataloging system of books

Process driven
- Integrated ILI tends to be like this
  - Student-centered
  - Skill based
  - Active learning

Example:
Students identifying info sources for I.P.
Effectivity Diagram of InfoLit Instruction

(Loertscher, 2003)

**InfoLit CONTENT**

**InfoLit PROCESSING**

<table>
<thead>
<tr>
<th>Good</th>
<th>Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students know how to learn but are shallow in their subject content.</td>
<td>Students are in trouble.</td>
</tr>
<tr>
<td>Students are in the best position to learn.</td>
<td>Students have mastered content but they lack investigative skills.</td>
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Poor Good

(Loertscher, 2003)
Effectivity Diagram of InfoLit Instruction

(Loertscher, 2003)

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<tr>
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<th>InfoLit CONTENT</th>
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<tr>
<td>Good</td>
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</tr>
<tr>
<td></td>
<td>Poor</td>
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<td>Poor</td>
<td>Good</td>
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Students know how to learn but are shallow in their subject content.

Students are in trouble.

Students have mastered content but they lack investigative skills.

Students are in the best position to learn.
IL Instruction as Stand-Alone
FINDING INFORMATION

Library
- Library Catalog
- Card Catalog
- Books & other materials owned

Internet
- Search Engines
- Electronic Databases
- Print Indexes

Indexes/Abstracts
- Articles in journals, newspaper, magazines

OPAC
- Evaluate, select and use info

Webpages

(Loertscher, 2003)
FINDING INFORMATION

Library
- Library Catalog
- OPAC
- Books & other materials owned

Internet
- Indexes/Abstracts
- Search Engines
- Electronic Databases
- Articles in journals, newspaper, magazines
- Webpages

Evaluate, select and use info
Stand-Alone IL Instruction
Content-Process Combination

SAMPLE 1:

Teacher orients the students regarding sources they can find in the library.

Students will indicate the library collection on the floor plan as they explore around.
Teacher describes the books found in the reference section.

Students will extract the info about birds found in the following reference books: dictionary, encyclopedia, thesaurus.
Integrated Information Literacy
How do we integrate LIP to other subjects?

Teacher

LIBRARY USE

Subject Content

Infolit Instruction

Librarian
InfoLit Instruction Models

- REACTS Model (Stripling & Patt, 1988)
- Information Search Process (Kuhlthau, 2003)
- Pathways to Knowledge (Pappas & Tepe, 1997)
- I-Search Process (Joyce & Tallman, 1997)
- Loertscher’s IL Model (2000)
- Big6/Super3 (Eisenberg & Berkowitz, 1988)
**IL Process: Super3 Model**

*(Information Literacy Model by Eisenberg & Berkowitz, 1988)*

| **Plan**          | • What am I supposed to do?  
                   | • What will it look like if I do a really good job?  
                   | • What do I need to find out to do the job? |
|-------------------|---------------------------------------------------------------------|
| **Do**            | • Students take notes, read, draw a picture, write a report, perform tasks to deliver learning output |
| **Review**        | • Did I do what I was supposed to do?  
                   | • Do I feel ok about this?  
                   | • Should I do something else before I turn it in? |
Exercise: Understanding the Super3

1. Views a video on whales
2. Looks over a worksheet to make sure it’s all done
3. Chooses a topic for a project
4. Listens to a story

(Reisenberg & Berkowitz, 2011)
Exercise: Understanding the Super3

(Eisenberg & Berkowitz, 2011)

5. Realizes that one’s not sure what to do

6. Decides that one needs a book about bees

7. Goes to the library to use a computer

8. Uses the MS Paint program to create an image
IL Process: Big6 Model

Information Literacy Instruction Model by Eisenberg & Berkowitz (1988)

S1: Task Definition
S2: Info-seeking strategies
S3: Location and Access
S4: Use of Information
S5: Synthesis
S6: Evaluation
IL Process: Big6 Model

Information Literacy Instruction Model by Eisenberg & Berkowitz (1988)

S1: Task Definition
- Define the task;
- Identify the information requirement of the problem;

S2: Info-seeking strategies
- Determine the range of possible sources;
- Evaluate the possible sources to determine priorities;

S3: Location and Access
- Locate sources;
- Find information within sources;
S2: Determine the range of possible sources

- Which is the better source of information for the topic on World War II?

Book or Newspaper
## InfoLit Activities

<table>
<thead>
<tr>
<th>Super3 Skills</th>
<th>Big6 Skills</th>
<th>Learning Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan</td>
<td>S1: Task definition</td>
<td>Brainstorm; create concept – map; webbing of questions;</td>
</tr>
<tr>
<td></td>
<td>S2: Info-seeking strategies</td>
<td>List down possible sources of information; Distribute tasks among groupmates;</td>
</tr>
<tr>
<td></td>
<td>S3: Locate and access</td>
<td>Search through catalogs, indexes, OPAC, internet, databases; Collate all relevant materials and make a list of them noting their bibliographic information.</td>
</tr>
</tbody>
</table>
IL Process: Big6 Model
Information Literacy Instruction Model by Eisenberg & Berkowitz (1988)

S4: Use of Information
- Engage with the information in the source/s;
- Extract information from the sources;

S5: Synthesis
- Organize the information from multiple sources;
- Present information;

S6: Evaluation
- Judge the product (effectiveness);
- Judge the information search process.
## InfoLit Activities

<table>
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<th>Learning Activities</th>
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<tbody>
<tr>
<td><strong>DO</strong></td>
<td>S4: Use of info</td>
<td>Gather all info resources; browse or sift through them;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Read, view, listen to information from chosen resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Scavenger hunting; note-taking;</td>
</tr>
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## InfoLit Activities

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<tr>
<td>REVIEW</td>
<td>S5: Synthesis</td>
<td>Organize notes taken through outlining, webbing of ideas, essay writing, drafting the report/research</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Make and present the final output: research paper, video, poster, photo-essay, creative exhibit, song, persuasive speech, investigatory project, oral defense, etc.</td>
</tr>
<tr>
<td></td>
<td>S6: Evaluation</td>
<td>Self-evaluation; peer-evaluation; critiquing of work by others (using rubrics)</td>
</tr>
</tbody>
</table>
1. Ask relevant questions to narrow the topic for research.
2. Instruct them on how to read and use the card catalog.
3. Give them the list of keywords to use for a more effective info search in the OPAC.
4. Clarify concepts surrounding the problem or issue.
5. Teach them how to design an effective PowerPoint presentation of their report.
6. Help students identify which are authoritative sources from the non-authoritative sites in the web.
7. Show the difference between information from popular magazine articles and from scholarly journal articles.

8. Demonstrate how to keep track of resources found online.

9. Instruct them on note-taking.

10. Assist student in citing sources using the APA citation style.

11. Lead students to DDC class number of books related to their topic for research.

12. Instruct students on the advantage of using Google docs for collaborating on the making of the final output.
Levels of Integration

(Marcoux, 2009)

**Consumption**
Students consume library resources for photocopying, reading assignments, printing, etc.

**Connection**
Librarian knows a class reservation in the library but has no input into the design and timing of it.

**Cooperation**
Librarian knows lesson objectives & required output. Minimal consultation on types of resources available. Students consult the librarian re use of resources and how to do their research.

**Coordination**
Librarian is informed about lesson objectives, required output, deadlines, and evaluation criteria. Librarian facilitates the use of resources, and teaches how to develop their research.

**Collaboration**
Librarian and subject teacher jointly plans, executes, and assesses the library session.
Collaboration

(Loertscher, 2003)

Planning Phase:
Plan goals for the topic;
Complete preparations for the topic;

Implementation Phase:
Jointly facilitate the learning activities
-utilizing technology and LMC resources

Assessment Phase:
Assess student learning and the learning process
<table>
<thead>
<tr>
<th><strong>Collaboration Table</strong></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Subject Teacher</th>
<th>Librarian</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Lesson Objectives</td>
<td>• Library/Media resources</td>
</tr>
<tr>
<td>• Lesson Content</td>
<td>• Lib/Info Skills objectives</td>
</tr>
<tr>
<td>• Learning Output</td>
<td>• Lib/IL Activity</td>
</tr>
</tbody>
</table>
Library Interaction Planning Form

Date: ______________________
Name of Teacher: __________________ Subject & Year Level: ______________

Check the information skill objective/s: (Adapted from the Big6 Skills)

S1: Define the task/problem
S2: identify the information needed
S3: Determine the range of possible sources and evaluate them
S4: Locate Sources
S5: Read, listen or view the information in the sources
S6: Extract relevant info from the sources
S7: Organize the information
S8: Present the information
S9: Judge the product and the research process

Information needed: _____________________________ (leave blank if not required)
Activity Output: _____________________________ Deadline: ______________

Student tasks: ____________________________________________________________
Teacher tasks: ____________________________________________________________ B D A
Librarian tasks: ____________________________________________________________ B D A

Note: Please attach inclusive dates and time periods for the library use and instruction.
Library Interaction Planning Form

Inclusive Dates & time of LMC Use: January 18, 2011

Name of Teacher: Ms. Rose Manigan
Subject & Grade Level: Reading (Grade 2)

Check the information skill objective/s: (Adapted from the Big6 Skills)

S1: Define the task
S4: Locate Sources
S7: Organize the info from multiple sources

S2: identify the information requirements
S5: Read, listen or view the information in the sources
S8: Present information

S3: Determine the range of possible sources and evaluate them
S6: Extract relevant info from the sources
S9: Judge the product and the research process

(Leave blank if not required)
Theme of Info needed: __________________________________________

Activity Output: ______________________________________________
Deadline: __________

Student tasks________
________________________________________________________________
________________________________________________________________

Teacher tasks: (B) ____________________________________________________________________ Venue: __________
(D) _________________________________________________________________________________ Venue: __________
______________________________________________________________________________ Venue: __________

Librarian tasks: (D) ____________________________________________________________________ Venue: __________
((D) ______________________________________________________________________________ Venue: __________
Library Interaction Planning Form

Inclusive Date & time of LMC Use: August 15-19, 2011/ various time periods

Name of Teacher: Ms. Tina Oli           Subject & Year Level: T.H.E. 2

Check the information skill objective/s: (Adopted the Big6 Skills)

- S1: Define the task  
- S2: Identify the information requirements  
- S3: Determine the range of possible sources and evaluate them  
- S4: Locate Sources  
- S5: Read, listen or view the information in the sources  
- S6: Extract relevant info from the sources  
- S7: Organize the info from multiple sources  
- S8: Present information  
- S9: Judge the product and the research process

Theme of Info needed: Mediterranean Cuisine ____________ (Leave blank if not required)


Student task:

Teacher tasks:

Librarian tasks:
Library Interaction Planning Form

Inclusive Dates & time of LMC Use: __July__ 12-16, 2011

Name of Teacher: Ms. April Toledo    Subject & Grade Level: P.E.-3rd Year

Check the information skill objective/s: *(Adopted the Big6 Skills)*

- S1: Define the task
- S2: Identify the information requirements
- S3: Determine the range of possible sources and evaluate them
- S4: Locate Sources
- S5: Read, listen or view the information in the sources
- S6: Extract relevant info from the source
- S7: Organize the info from multiple sources
- S8: Present information
- S9: Judge the product and the research process

*(Leave blank if not required)*

Theme of Info needed: Health

Activity Output: Estimate their calorie intake online.    Deadline: at the end of the period

Student tasks: Read about Calories and healthy living

Teacher tasks: (B) Orient students about the objectives and required output from the activity.
    (D) Instruct students on accessing the Health links.

Librarian tasks: (B) Organize links to recommended sites on the school website.
    (D) Instruct students where they can check the Health books as well as on accessing the Health links online.
Library Interaction Planning Form

Inclusive Dates & time of LMC Use: __January 21-25, 2011____

Name of Teacher: Mr. Anton Overio Subject & Grade Level: Biology -2nd Year

Check the information skill objective/s: (Adopted the Big6 Skills)

<table>
<thead>
<tr>
<th>S1: Define the task</th>
<th>S4: Locate Sources</th>
<th>S7: Organize the info from multiple sources</th>
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<tbody>
<tr>
<td>S2: identify the information requirements</td>
<td>S5: Read, listen or view the information in the sources</td>
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<td>S6: Extract relevant info from the sources</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Theme of Info needed: Designing an effective PowerPoint Presentation (Leave blank if not required)


Student tasks: Listen and take note of important tips in designing an effective PowerPoint presentation

Teacher tasks: (B) Introduce the librarian to the class and the intention of the activity.– Classroom (D) Maintain discipline inside the classroom.

Librarian tasks: (D) Share tips on Proper PowerPoint design and use– Classroom.
Taxonomy of IL Instruction

(Thomas, 2004)

Organizer
- Develops & manages collections
- Creates policies for a self-service facility
- Central work is managerial and clerical

Lecturer
- Provides an overview of library resources services and policies.
- Gives orientation and group tours

Instructor
- Provides lessons on reference sources and types of resources related to needs arising from classroom activities

Tutor
- Presents info resources in ways that show the relationships among different kinds of resources and recommends a sequence for their use. Librarian plans the lesson and actively teaches.

Counselor
- Actively participates in the students’ information search and research activities providing cognitive, behavioral and emotional support to them.
References

http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/AASL_LearningStandards.pdf


