

# **“Look for me in the whirlwind”: Teaching the 21st century learner**

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**Nanny of the Maroons**








**George William Gordon**



**Paul Bogle**



**Samuel Sharpe**

-  **Vision for the future**
-  **Leadership**
-  **Clever, creative strategy**
-  **Courage in adversity**
-  **Making voice be heard**



**“Our union must know no clime,  
boundary, or nationality... let us hold  
together under all climes and in every  
country...”**

Garvey, Marcus; Jacques-Garvey, Amy (ed.) (1986). *The philosophy and opinions of Marcus Garvey or Africa for the Africans*. Dover (Mass.): Majority Press. p. 163.



- Arise out of instabilities and turbulence
- Powerful and unstoppable
- Potential for enormous destruction
- Opportunities for enormous reform

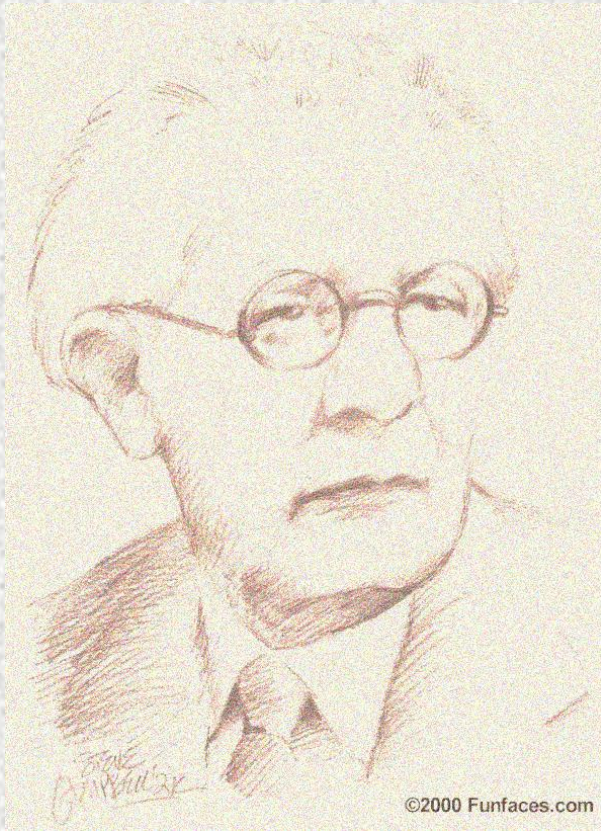
▶▶ School Libraries ◀◀

- Availability of information technology
- Access to vast quantities of information on the Internet
- Costly infrastructure; increasing cost of print material
- Cost of personnel
- Invisibility of connection to learning



- “Hardships there are, but the Land is green and the Sun shineth”
- The history of every country starts with the aspirations of its people (The Gleaner, 5<sup>th</sup> August, p. A4)
- **Vision for the future**
- **Libraries as pedagogical centers**
- **Inquiry as a central pedagogical framework**
- **Evidence base**





**The principal goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverers, who can be critical and verify, and not accept, everything they are offered.**

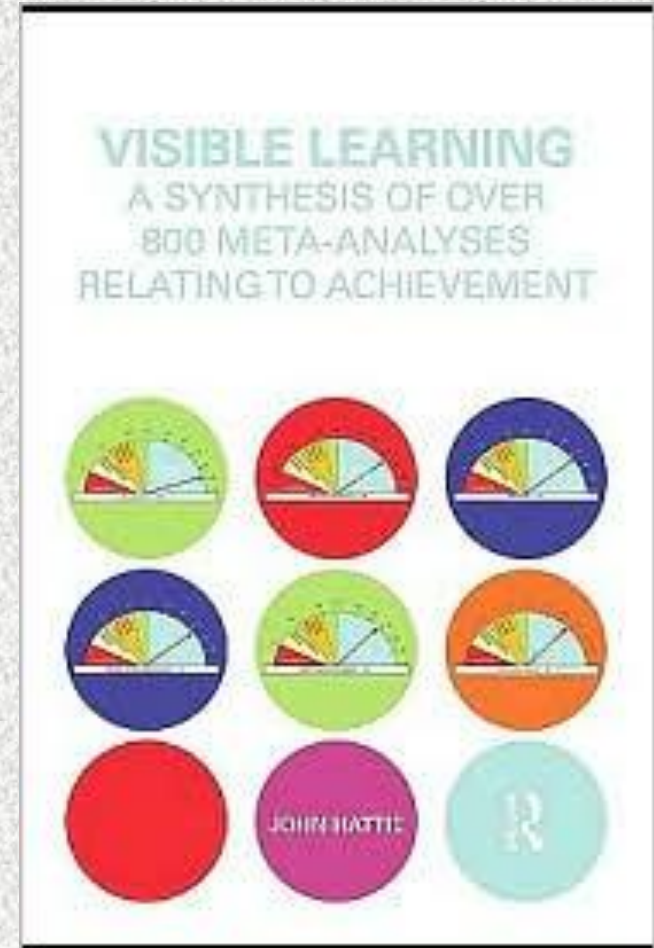
**Jean Piaget (1896–1980)**

[http://www.accessola.com/school\\_lib/](http://www.accessola.com/school_lib/)

**Meta-analyses of educational research shows that the most significant impacts on student learning & achievement are:**

- **role of teacher and quality of instruction;**
- **developing a supportive learning environment;**
- **engaging students in discovery, inquiry, thinking, meta-cognition, and knowledge building**

(Visible learning: a synthesis of over 800 meta-analyses relating to achievement:  
[John Hattie. Routledge, 2009])





The school library is the school's physical and virtual learning commons where inquiry, thinking, imagination, discovery, creativity and innovation are central to students' information-to-knowledge journey, and to their personal, social and cultural growth.



- **Essential information ground for nurturing reading and literacy development in the community**
- **Common information grounds for supporting the creation and production of knowledge across the school through critical engagement with information**
- **Common place across the school for investigating and experimenting with information and IT, examining multiple perspectives and developing deep knowledge**
- **Opportunity for teams engaging in pedagogical experimentation to access and use information and web tools to empower learning through creativity, discovery, inquiry, cooperation, and collaboration**

- **Zone of intervention and socialization: global, digital and ethical citizenship: safety, equity, social justice**
- **24/7 environment: support knowledge building processes out of school – central portal for knowledge development: tools, techniques, processes, help**
- **School librarians as information-learning specialists**

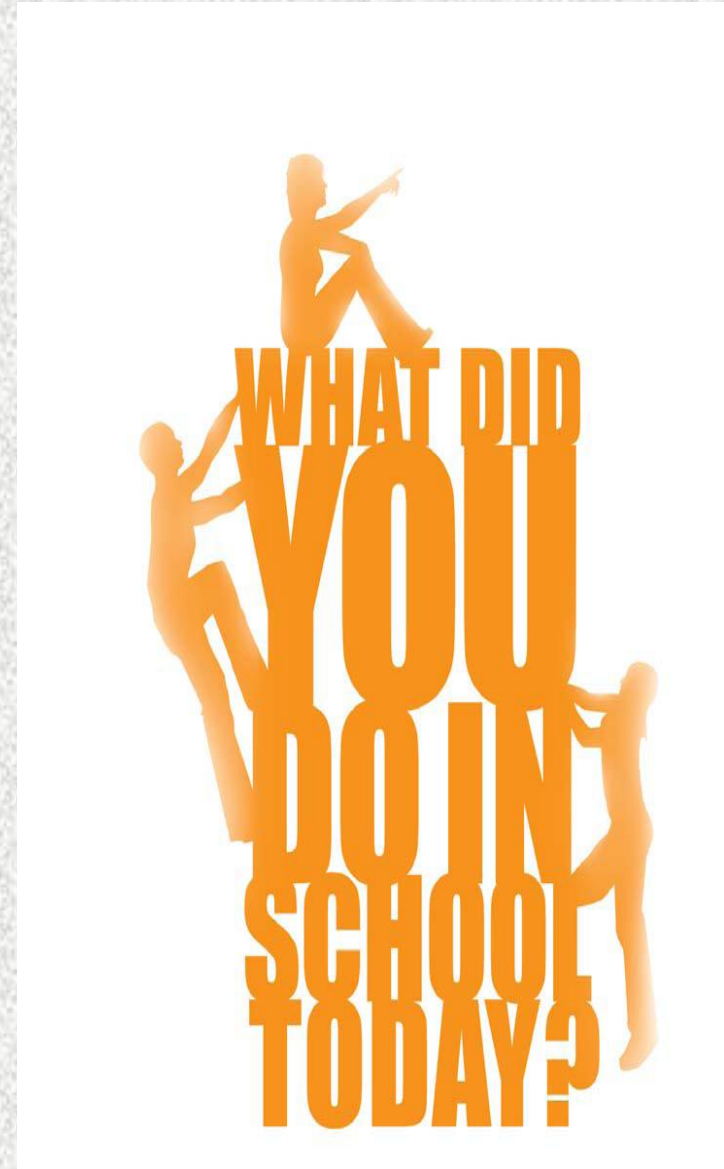


## STUDENTS

- Primary focus is on *building capacity for critical and creative engagement*—thinking creatively, critically and reflectively with information in the process of building knowledge and understanding, and producing / sharing knowledge.

## FACULTY & COMMUNITY

- *Centre of learning innovation* where teachers, SLs are involved in creatively designing learning experiences by way of testing, trialling, and experimenting with information and tools to bring about the best knowledge outcomes for students.



- **The whirlwind of literacies**
- **The whirlwind of instruction**
- **The whirlwind of data**



## Information literacy

Alphabetic literacy

Functional literacy

Social literacy

Digital information literacy

Tool literacy

Resource literacy

Social-structural literacy

Emerging technology literacy

Critical literacy

Cyber literacy

ICT literacy

Research literacy

Health literacy

Visual literacy

Media literacy

Visual literacy

ICT literacy

Publishing literacy

Health literacy

Multiliteracy

Multiple Literacies

Information  
Experience

Information  
Enactment

Information  
Practice

Information  
Activity

“Literacy is fueled by information and hence all literacy is information literacy”

**METALITERACY**



**SKILLS – Educational Context**



information literacy

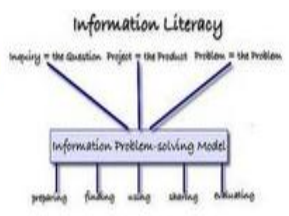
Search

SafeSearch moderate

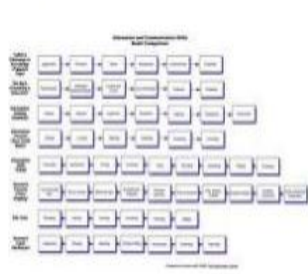
About 1,920,000 results (0.09 seconds)

Advanced search

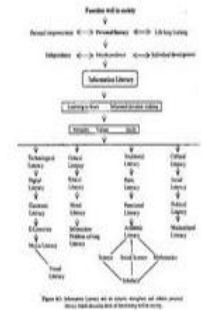
- Everything
- Images
- Videos
- News
- Shopping
- Discussions
- Blogs
- Books
- More



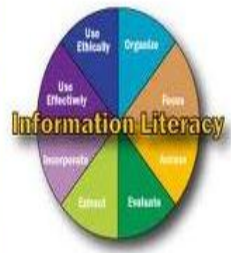
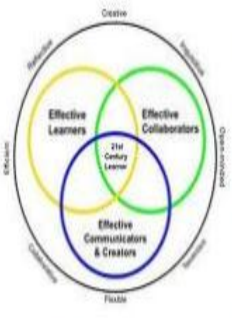
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Framework for Application of Information Literacy and Evidence-Based Practice to Nursing Process					
Curriculum Pattern	Level 1	Level 2	Level 3	Level 4	Level 5
Information Literacy	Identify information needed	Find needed information	Appraise information	Implement information into practice	Evaluate outcomes of info use
Nursing Process	Assessment	Planning	Intervention	Implementation	Evaluation
Evidence-Based Practice	Develop researchable Question	Search for Evidence	Appraise Evidence	Implement findings into practice	Evaluate outcomes & process



- Sort by relevance
- Sort by subject
- Any size
- Large
- Medium
- Icon
- Larger than...
- Exactly...
- Any color
- Full color
- Black and white



- Terminological confusion & battleground for intellectual possession
- Multiple models of information literacy: competing / conflicting
- Many models either not built on research nor tested and validated as authoritative models across diverse contexts and population
- Little exploration of pedagogy for information literacy instruction / interventions
- Limited substantive articulation of the impacts / benefits of information literacy agendas, beyond mastery of a range of information literacy skills





- Information Skills Process
- Information Fluency
- Big 6
- The Seven Pillars Model
- The 8 Ws: (Watching, Wondering Webbing, Wiggling, Weaving, Wrapping Waving, Wishing)
- 10 step Research process
- Action Learning Model
- SAUCE model (Set scene, Acquire, Use, Communicate, Evaluate)
- PLUS Model (Purpose, Location, Use, Self-evaluation)



The logo for Transliteracy.com is displayed in white on a black background. The word "Transliteracy" is written in a stylized, multi-font typeface. "Trans" is in a classic serif font, "literate" is in a modern sans-serif font, and "acy" is in a bold, blocky sans-serif font. The letter "Y" is enclosed within a rounded square frame. The ".com" is in a simple sans-serif font to the right.

**The Transliteracy Research Group at De  
Montfort University, Leicester, UK**

**“the ability to read, write and interact across a range of platforms, tools and media from signing and orality through handwriting, print, TV, radio and film, to digital social networks”**

- **Pedagogical conundrum: typically treat information literacy as a separate skills-based discipline**
- **Libraries: emphasis on the “found”: we celebrate the found, rather than the understood.**
- **Little attention to “use”: enabling people to something with the “found stuff”**

**“information”: *inform.ere informo, informare, informavi, informatus* = inward forming**

**THE CREATION AND PRODUCTION OF  
KNOWLEDGE**

- **765 participants completed the survey, (30% NJ school libraries)**
- **Data were collected from all New Jersey counties**
- **53% from elementary schools; 18.5% from middle schools; 24.5% from high schools**
- **The average enrollment of participating schools was 733 students: 490 for elementary schools; 695 for middle schools, and 1,278 for high schools**
- **Total number of students enrolled at the participating schools was approximately 560,740 students**
- **96.9% of schools participating schools were public schools**

# Center for International Scholarship in School Libraries

[Home](#) [Research Themes](#) [People](#) [Mission](#) [Services](#) [Gifts](#) [News](#)

## School Libraries, Now More than Ever - CISSL Position Paper NJASL Phase 1 Report - One Common Goal: Student Learning



### Research Themes

- Guided Inquiry
- Impact Studies
- Reading and Literacy
- Everyday Life Information Seeking
- Knowledge Construction
- Evidence-Based Practice and School Improvement

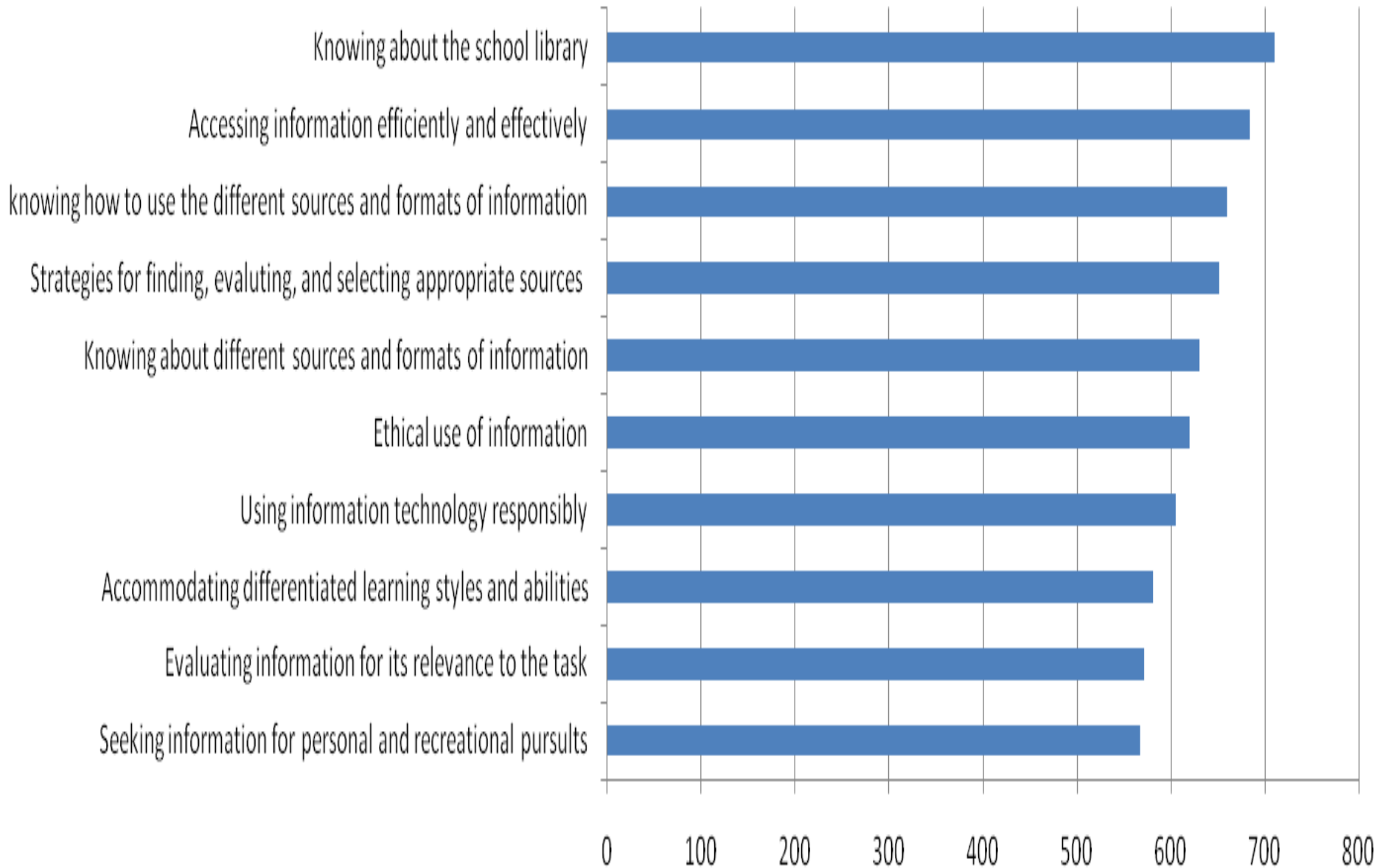
### CISSL Presentations

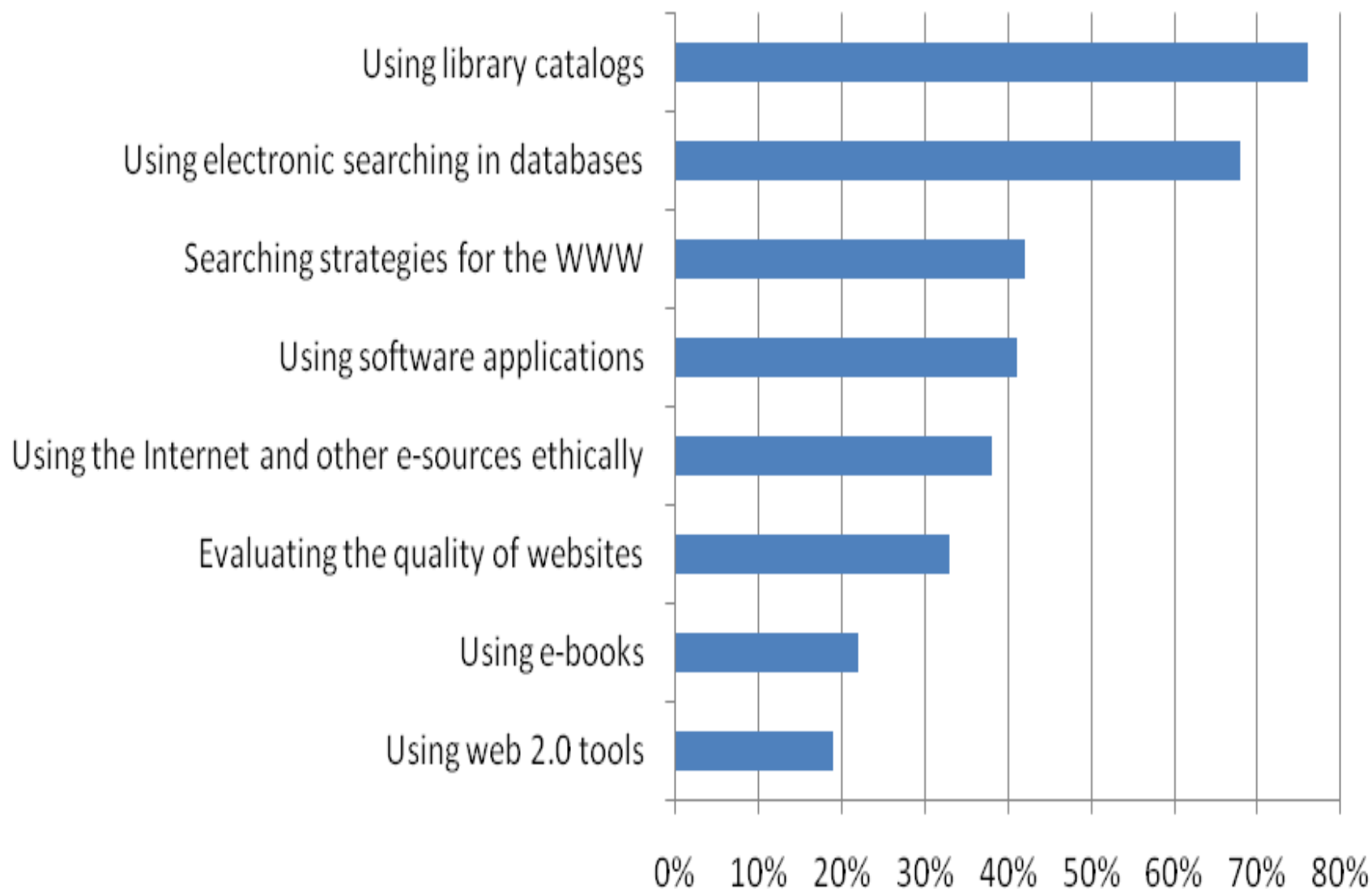
[Click here to view CISSL Presentations](#)

### Thank you!

Thank you, Barham Family

- **High number of collaborations with classroom teachers to develop reading and literacy capabilities to meet curriculum standards. 3,916 instructional collaborations were reported during the 2008-2009 school year.**
- **Average: 27 Cooperations; 15 Coordinations, 5 Collaborations**
- **Instructional collaborations typically take place in Language Arts Literacy, Social Studies and Science CCCS**
- **Participants asked to identify focus of literacy instruction**
- **Rich descriptions of contribution of SLs to intellectual life of school**







- Investigated the relationships between conceptions & practice of IL in academic libraries
- Argyris & Schön (1974): professional practice investigated through Espoused Theories and Theories-in-Use
- Conceptions / understandings of IL as expressed in library mission / policy documents, and formal vision / mission statements
- Analyze how IL instruction is delivered through a range of online tutorials
- 11 academic libraries (USA); approximately 150 online tutorials, structured interviews with information literacy leaders at each of these libraries

- **No single consistent conceptualization of information literacy either espoused or in practice**
- **Considerable incongruity between widely accepted beliefs and its actual implementation and practice in libraries**
- **Espoused theory: capabilities of knowledge discovery and generation, critical thinking, problem solving and lifelong learning in a globalized and connected world**
- **Theories-in-use: engagement with information sources, limited reference to knowledge-based competencies of engaging with found information to build knowledge (Kerr, 2010, 300-301).**

"Libraries are the verbs in the content standards. Wherever verbs such as read, research, analyze, explore, examine, compare, contrast, understand, interpret, investigate, and find appear in the standards, Teacher Librarians and library resources are involved."

(Oxnard Union High School District)

<http://www.ouhsd.k12.ca.us/lmc/ohs/stronglib/StrongSLMP.ppt>

A word cloud of verbs related to library activities and content standards. The words are arranged in a roughly rectangular shape, with varying sizes and colors (ranging from dark red to yellow). The most prominent words are 'synthesize', 'create', 'innovate', 'research', 'analyze', 'understand', 'investigate', 'compare', 'contrast', 'discover', 'explore', 'read', 'inquire', 'examine', 'interpret', 'find', 'search', 'imagine', 'inform', and 'research'.

examine  
imagine  
understand analyze inform  
interpret find research  
synthesize read inquire  
search investigate compare  
discover contrast  
explore create innovate

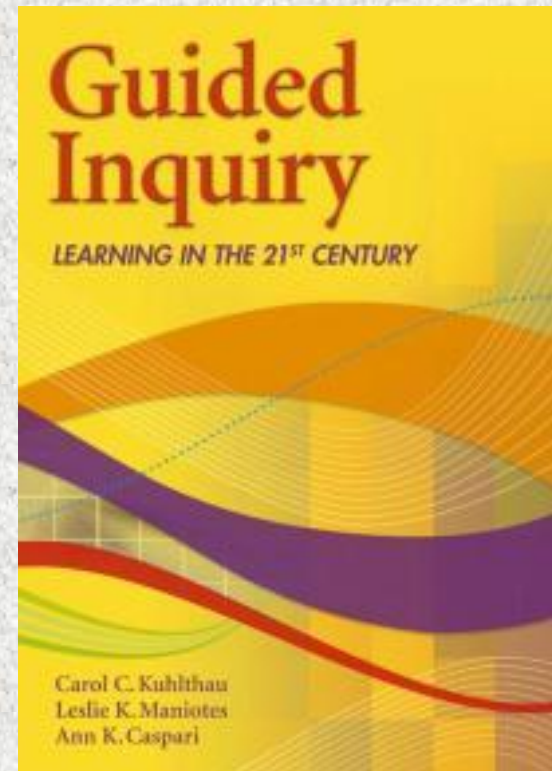


1. Qualitative exploration of search process of high school seniors (1983)
2. Qualitative study of original sample after 4 years of college (1988)
3. Longitudinal study (1988) E,M,H
4. Qualitative and quantitative study of high, middle and low achieving high school seniors (1989)
5. Validation Study: 385 academic, public, and school library users in 21 sites (1989) E, M, H, U

50+ studies 1990-2010

NJ Study 2003-5 574 students  
(CISSL)

## Kuhlthau: Information Search Process



## Information Search Process Carol Kuhlthau

Tasks	Initiation	Selection	Exploration	Formulation	Collection	Presentation	Evaluation
<b>Feelings (affective)</b>	uncertainly	optimism	confusion frustration doubt	clarity		sense of direction/ confidence	satisfaction or disappointment
<b>Thoughts (cognitive)</b>	vague			→ focused		→ increased interest	
<b>Actions (physical)</b>	seeking relevant information exploring			→ seeking pertinent information documenting			

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**Zone of Intervention: the critical point / need for instruction**

**PEDAGOGICAL MODEL: GUIDED INQUIRY**

## Students learn to:

- pose insightful and purposeful questions (Formulation)
- apply logic and strategies to uncover meaning and make reasoned judgments (Collection)
- think beyond the immediate situation to consider the ‘big picture’ before focusing on the detail (Exploration)
- suspend judgment about a situation to consider alternative pathways (Exploration)
- reflect on thinking, actions and processes (all stages, Assessment)
- generate and develop ideas and possibilities (Collection)
- analyze information logically and make reasoned judgments (Collection)
- evaluate ideas and create solutions and draw conclusions (Collection)
- assess the feasibility, possible risks and benefits in the implementation of their ideas (Collection, Assessment)
- transfer their knowledge to new situations

- **Resource-based capabilities:** These are abilities and dispositions related to seeking, accessing and evaluating resources in a variety of formats, including people and cultural artifacts as sources. They also include using information technology tools to seek out, access and evaluate these sources, and the development of digital and print-based literacies.
- **Thinking-based capabilities:** These are abilities and dispositions that focus on substantive engagement with data and information, the processes of higher order thinking and critical analysis that lead to the creation of representations/products that demonstrate deep knowledge and deep understanding.
- **Knowledge-based capabilities:** These are the abilities and dispositions that focus on the creation, construction and sharing the products of knowledge that demonstrate deep knowledge and understanding; demonstrate innovation and creativity.



- **Reading / writing to learn capabilities:** These are the abilities and dispositions related to the transformation, communication and dissemination of text in its multiple forms and modes to enable the development of meaning and understanding.
- **Personal and interpersonal capabilities:** These are the abilities and dispositions related to the social, personal and ethical aspects of leaning
- **Learning management capabilities:** These are the abilities and dispositions that enable students to prepare for, plan and successfully undertake a curriculum-based inquiry
- **Developed from Ohio, Delaware and Australia studies (25,000 students)**



**Whirlwind of data**



[House Standing Committee on Education and Training](#)

[Committee activities \(inquiries and reports\)](#)

**Inquiry into school libraries and teacher librarians in Australian schools**

On Wednesday 10 March 2010 the Minister for Education, Hon Julia Gillard MP, asked the Committee to inquire into and report on *school libraries and teacher librarians in Australian schools*.

The Committee invites interested persons and organisations to make submissions addressing the terms of reference by **Friday 16 April 2010**. Please refer to our brochure [at a submission](#) for more information.

In order to facilitate electronic publishing of submissions, the Committee would prefer them to be emailed to [ee.reps@aph.gov.au](mailto:ee.reps@aph.gov.au) or sent on disk or CD-ROM to the [Committee](#) in Microsoft Word® or Portable Document Format (PDF).

[Terms of reference](#)

[Submissions](#)

[Public hearings](#)

[Media releases](#)

[Report](#)

# 1

## Overview

...the school library is the school's physical and virtual learning commons where inquiry, thinking, imagination, discovery, and creativity are central to students' information-to-knowledge journey, and to their personal, social and cultural growth...<sup>1</sup>

'Who was one of the people who inspired my love of reading? - my librarian at school who kept feeding me books that I wanted to read.'<sup>2</sup>

# 3

## **Potential of school libraries and teacher librarians to contribute to improved educational and community outcomes**

Having access to electronic information can never replace the contributions to learning provided by teacher librarians. The role of school information services and teacher librarians are key factors in the improved delivery of curriculum outcomes,

students on how that lesson assisted them better find the resources they were searching for, ultimately being able to demonstrate that her lesson had improved the quality of their projects.<sup>24</sup>

- 3.22 ASLA referenced Ms Gillespie, a teacher librarian who worked to improve literacy levels across her whole school after receiving the school's first NAPLAN test results. She assisted teaching colleagues to provide resources that would support classroom activities.<sup>25</sup>

- 3.23 The Committee appreciates that evidence-based practice takes time on the part of teacher librarians but agrees that documenting and highlighting examples of teacher librarians' successes in improving educational and community outcomes is critical to illustrating the enormous potential of school libraries to help students achieve better results. The Committee will discuss further the need for teacher librarians' self-promotion and marketing later in this chapter.

- **12 Independent schools Grades 4 -12**
- **34 teachers, 18 teacher-librarians & 935 students**
- **Inquiry units structured on stages of ISP (Kuhlthau)**
- **Curriculum areas of History, English, Health, Science, Geography**
- **Involved an area of inquiry which allowed students freedom to develop their own topic choice, focus questions, and representing their new knowledge**
- **Involved planning of instructional interventions to progress the information-to-knowledge journey**
- **All focused on presence of teachers and teacher librarians at each stage of the process to guide and intervene, both in planned ways, and in unplanned ways**
- **Gathered data from students at three points of the Information Search Process - at Initiation, at Collection, and at Assessment**

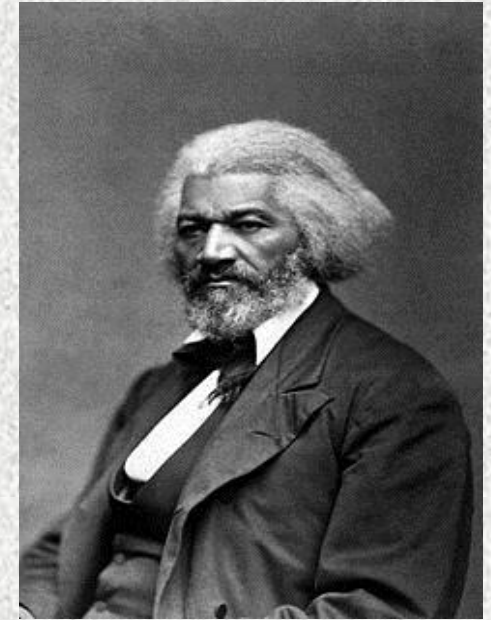
<p><b>Evidence FOR Practice</b></p>	<p><b>FOUNDATION INFORMATIONAL</b> Kuhlthau's Information Search Process</p>
<p><b>Evidence IN Practice Applications / Actions</b></p> <p>Formative &amp; Summative Assessments</p>	<p><b>INFORMATION-to-KNOWLEDGE PROCESS TRANSFORMATIONAL</b> Planning instructional interventions and processes for evidence <b>Resource-based capabilities</b> <b>Thinking-based capabilities</b> <b>Knowledge-based capabilities</b> <b>Reading to learn capabilities</b> <b>Personal and interpersonal capabilities</b> <b>Learning management capabilities</b></p>
<p><b>Evidence OF Practice Results – impacts &amp; outcomes</b></p>	<p><b>OUTCOMES FORMATIONAL</b> Claims of learning outcomes – local schools Aggregation of evidence Student Learning Through Inquiry Measure (<a href="http://cisssl.rutgers.edu">cisssl.rutgers.edu</a>)</p>



- **Ownership, motivation and interest in negotiating own questions and developing research plans**
- **Movement from descriptive knowledge to creating fresh meaningful representations of knowledge**
- **Critical, reflective approach to solving important world issues**
- **Higher levels of conceptual coherence in knowledge products**
- **Development of intellectual agency: reflective, comparative, positional**
- **Valuing opportunity to be creative, innovative**

**“It is not light that we need, but fire; it is not the gentle shower, but thunder. We need the storm, the whirlwind, and the earthquake”**

**Frederick Douglass**



**Unless we are part  
of the whirlwind,  
we will not be  
among the stars**