

Enhancing Teaching and Learning

Notes

Chapter 11

- Students must have the skills to:
 - Access, evaluate, and use information with efficiency and sophistication.
- It is a time of rapid change with many different formats.
- Research models:
 - Many different models
 - **All include:** posing an information question, locating potential sources of information, examining & selecting relevant information, synthesizing, and communicating results.
 - Information processing is NOT a linear task, but **recursive in nature**
 - As students research their topic, their research question may change
 - As they come across information gaps, they return to looking for more information
- Adoption of an information process model serves to:
 - Break down the research process so that educators can design lessons to teach that process
 - Provide a common lexicon for communication among library media specialists, teachers, and students
 - Guide students in the research process
 - Help educators monitor what is taught and determine how well students are learning
- Kuhlthau's Stages of the Information Search Process
 - Emphasizes that research is a moving back and forth process as the results of one part of the process requires the student to clarify or expand on a previous task

Kuhlthau's Stages of the Information Search Process

Intellectual Tasks	Feelings
<i>Initiation</i> <ul style="list-style-type: none"> • Recognize the need for information 	<i>Anxiety</i> <i>Uncertainty</i>
<i>Selection</i> <ul style="list-style-type: none"> • Decide on a topic for study 	<i>Optimism</i>
<i>Exploration</i> <ul style="list-style-type: none"> • Search for information to become familiar with the topic 	<i>Confusion, Frustration, Doubt</i>
<i>Formulation</i> <ul style="list-style-type: none"> • Focus the perspective on the topic 	<i>Clarity, Interest</i>
<i>Collection</i> <ul style="list-style-type: none"> • Gather information 	<i>Confidence</i>
<i>Presentation</i> <ul style="list-style-type: none"> • Organize information • Communicate results 	<i>Satisfaction, Relief, Disappointment</i>

- Tasks of the school librarian in implementing an effective information skills curriculum:
 - Identify the strategies to be taught
 - Consult with teachers to determine how to relate the teaching of these information strategies to classroom curriculum
 - Plan with teachers for the development of these skills
 - Teach lessons and mini-lessons on specific strategies in the context of students' assignments; provide aids such as pathfinders, Web bookmarks, annotated bibliographies, or models of bibliographic format
- Students need to gain a background in a topic before they can form a research question
- **KWL Strategy**
 - What I KNOW, What I WANT to find out, and What I LEARNED
 - This strategy should be encouraged by librarians
 - Students NEED background reading of a subject first
 - Let students browse to find a topic that is of interest to them
 - You're wanting students to form an **authentic question** that is of interest to them to research
 - Students must gain new insights and understanding and not simply regurgitate information
- Questions a student can ask to generate a research query:
 - *Encyclopedia questions*: yields information and answers "what?" but rarely insight

- *Meaning-oriented*: requires students to construct meaning of a concept or phenomenon, often within a given context of time or place or events. Ex: What factors led to the start of WWI?
- *Relational*: What is the relationship between these two things?
- *Value-oriented*: Interpret events in the context of a value structure
- *Solution-oriented*: Examine a problem and offer a solution
- Encourage teachers to have students research answers to authentic questions
- **Formulation stage** is when there is a focused perspective on the topic
- Students need research strategies:
 - How to choose keywords
 - Using Boolean operators
 - Skimming and scanning in print and digital formats
 - Using a database, thesaurus, and controlled vocabulary
 - Downloading information
 - Note taking
 - Organize findings
- It is important to provide opportunities for students to discuss their findings and remaining questions.
- Suggest formats for presentation at the beginning of the research process so students know what information to gather for the final product
- It is best to teach students mini-lessons on information literacy skills throughout their school years instead of only once.
- Must take into consideration the attitudes students bring to the research process
- How the librarian can encourage students to take a productive attitude:
 - *Be open-minded* to different perspectives.
 - *Cultivate curiosity* via having many different forms of media and subjects.
 - *Teach how to self-assess*.
 - *Strategically* help students realize that their research is for an authentic inquiry and not just for the final grade.
 - *Cue investigations* by helping narrow questions to specifics.
 - *Teach reasoning* so students' can challenge their own assumptions.
 - *Find evidence* so students can use to back their beliefs.
- Responsibilities of the 21st century learner:
 - Respect copyright and intellectual property
 - Seek divergent perspectives
 - Contribute to the exchange of ideas in a community
 - Use information technology responsibly
 - Use valid information and reasoned conclusions

- **Lifelong learning** is the ultimate goal of information literacy.
- Questions to develop self-monitoring habits:
 - Do I have enough information to meet my needs?
 - Are my information sources authoritative?
 - What other points of views should I consider?
 - Have I critiqued findings to differentiate between fact and opinion and to examine evidence and conclusions for faulty reasoning?
 - Have I accurately represented facts in my expression of my findings?
- To evaluate information critically:
 - *Relevance*
 - *Suitability*: Does this make sense? Can I paraphrase it?
 - *Currency*
 - *Authority*
 - *Reliability*
- Information tools:
 - *Information management*: tools to keep track of information gathered.
 - *Concept mapping*
 - *Collaboration*
 - *Citation*
 - *Communication* online tools
- **Information literacy means being able to use information technologies for all stages of the information process.**
- The library's website should provide tools to help students in the information research process.
- In assignments, students should:
 - Look for information that seeks to answer a bigger question than "what or why"
 - Give students a choice in how to answer the question
 - Be allowed to gain a personal interest in the topic so they'll enjoy seeking information and assembling it to share.
 - Have open-ended questions to interpret in the way that suits their interest best.
- A **mental model** is an intellectual framework created by integrating what one knows or has experienced within a given concept or activity.
 - **Learning** is the process of putting new information into an existing mental model so that a new model emerges.
- Why students have difficulties using libraries:
 - Have incomplete understanding of the subject so they don't know what they need to find out in the first place.
 - Searches are too general.

- Have no idea how information can be accessed or is organized in the library.
- Don't know how to use anything other than OPAC.
- They don't know what other resources might be of help to them.
- Adults don't realize that students don't have all the information skills that they do.
- Strategies to guide students during research:
 - *Encapsulation*: students record their understanding of information gathered as they go along.
 - *Research log*: maintain a research log recording what they have learned each day, what new questions they have, and what they need to do next.
 - *Conferencing*: teachers and librarians confer with students to discuss what they've learned so far.
 - *Reflection*: pose questions for students to ask themselves about how they're doing and what they're learning.
 - *Rubrics*: a guide so students know what to do at each stage and what the best projects will include.
- **You must collaborate with teachers!**
- Information literacy standards for college students:
 - Determine the extent of information needed.
 - Access the needed information effectively and efficiently.
 - Evaluate information and its sources critically.
 - Incorporate selected information into one's knowledge base.
 - Use information effectively to accomplish a specific purpose.
 - Understand the legal, economic, and social issues surrounding the use of information.
 - Access and use information ethically and legally.
- An **insight** is a clear and deep understanding of a complicated problem, phenomenon, or situation.
 - **Deep thinking** is when students are able to use information and apply it in creative new ways to meet their needs.
- The five attributes of the information literacy program:
 - Student-directed inquiry
 - Concept-oriented assignments
 - Integration of the research process (and end product) into the instruction
 - An authentic audience
 - Collaborative assessment to increase the meaningfulness of the research