Information Search Process

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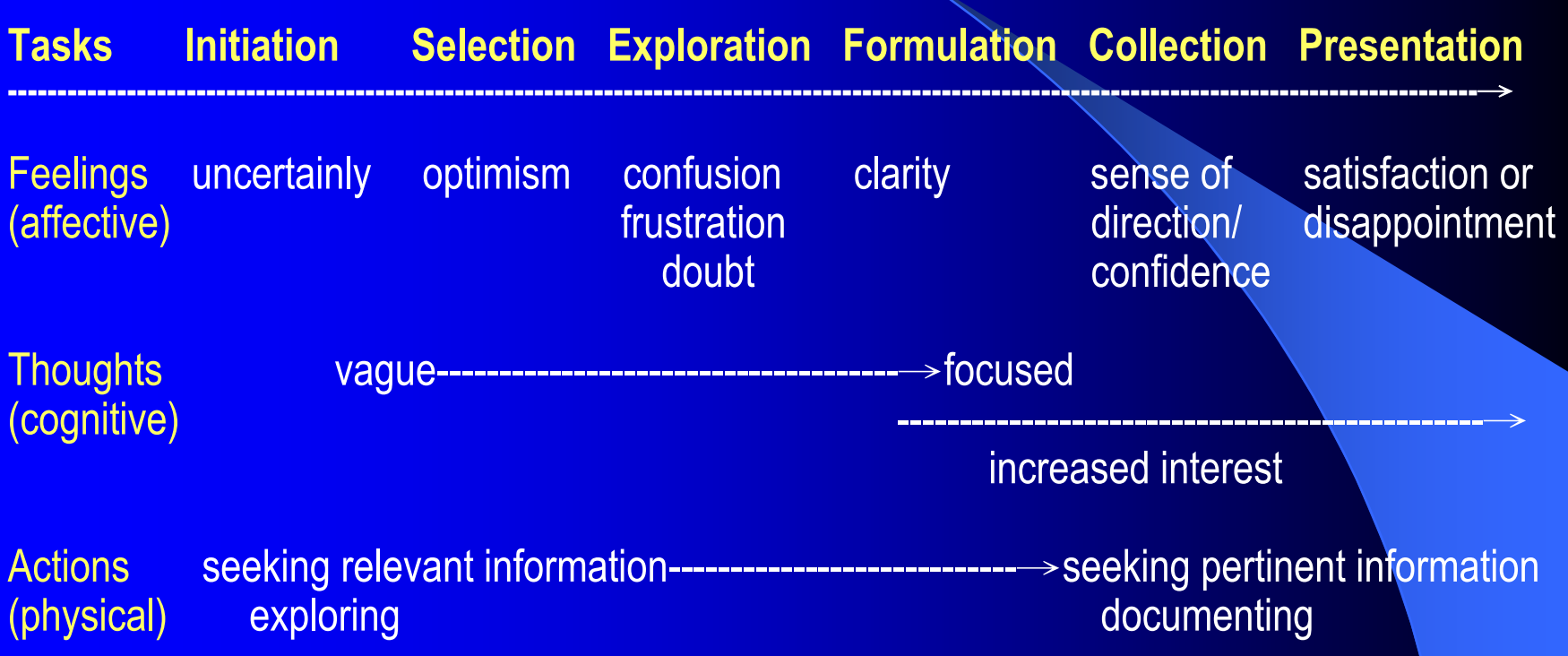
Model of the Information Search Process



Uncertainty Principle

Uncertainty is a cognitive state which commonly causes affective symptoms of anxiety and lack of confidence. Uncertainty and anxiety can be expected in the early stages of the information search process.

Uncertainty Principle

The affective symptoms of uncertainty, confusion, and frustration are associated with vague, unclear thoughts about a topic or question. As knowledge states shift to more clearly focused thoughts, a parallel shift occurs in feelings of increased confidence. Uncertainty due to a lack of understanding, a gap in meaning, or a limited construction initiates the process of information seeking.

Uncertainty Principle

Uncertainty initiates the process of information seeking

Corollary	*Definition*
Process	Constructing meaning
Formulation	Forming a focused perspective
Redundancy	Encountering the expected and unexpected
Mood	Assuming a stance or attitude
Prediction	Making choices based on expectations
Interest	Increasing intellectual engagement

Evidence of Process in Work Tasks

Task Type	*Routine Tasks*	*Complex Tasks*
Uncertainty	low	high
Construction	low	high
Stages in the ISP	low	high

Criteria for Choices in the Information Search Process

Criteria	*Question*
Task	What am I trying to accomplish?
Time	How much time do I have?
Interest	What do I find personally interesting?
Availability	What information is available to me?

Levels of Mediation

Level	*Description*
1. Organizer	No intervention self service search in an organized collection
2. Locator	Ready Reference Intervention single fact or source search; query / answer
3. Identifier	Standard Reference Intervention subject search: group of sources in no particular order; problem / interview / sources

Levels of Mediation

Level	*Description*
4. Advisor	**Pattern Intervention** **subject search: group of sources in recommended order;** **problem / negotiation / sequence**
5. Counselor	**Process Intervention** **constructive search: holistic experience;** **problem / dialogue / strategy / sources / sequence / redefinition**

Levels of Education

	Level	*Description*
1	Organizer	No Instruction Self service search in an organized collection
2	Lecturer	Orienting Instruction Single session: overview of services, policies and location of facilities and collection; no specific problem
3	Instructor	Single-Source Instruction Variety of independent sessions: Instructions on one type of source to address specific problem

Levels of Education

	Level	*Description*
4	**Tutor**	**Strategy Instruction** **Variety of independent sessions:** **Instructions on a variety of sources to address specific problem**
5	**Counselor**	**Process Instruction** **Holistic interaction over time:** **Instructions on identifying and interpreting information to address evolving problem**

Zone of Intervention

That area in which an information user can do with advice and assistance what he or she cannot do alone or can do only with great difficulty.

Zone of Intervention

Z1 **Problem self-diagnosed**
Search self-conducted

Z2-Z5 **Problem diagnosed through interview**
a. Problem statement of request
b. Background – task, interest, time, availability
c. Diagnosis using theory base: Source or Process

	Source		Process	
Z2	Right source	Z5	a. Dialogue	b. Explanation
Z3	Relevant sources		c. Formulation	d. Construction
Z4	Sequence of sources		e. Learning	f. Application

Intervention Diagnostic Chart

Zone of Intervention	*Levels of Mediation*	*Levels of Education*	*Intervention*
Z1	Organizer	Organizer	Self service
Z2	Locator	Lecturer	Single Source
Z3	Identifier	Instructor	Group of Sources
Z4	Advisor	Tutor	Sequence of Sources
Z5	Counselor	Counselor	Process Intervention

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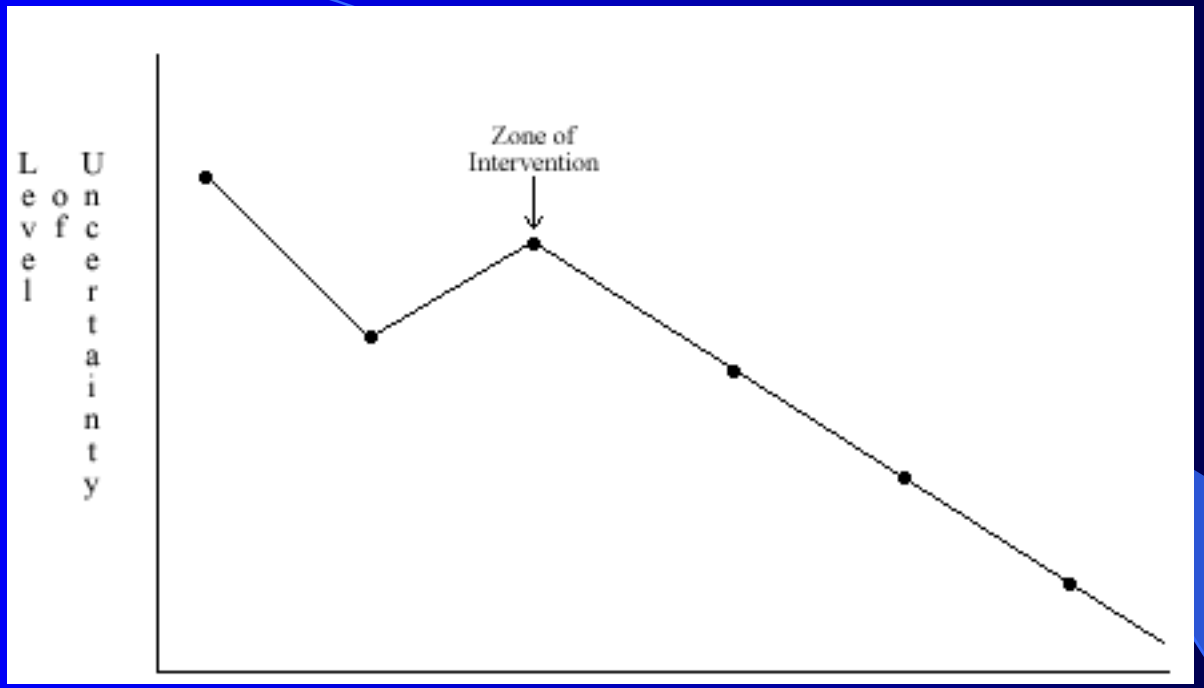


Tasks	Initiation	Selection	Exploration	Formulation	Collection	Presentation
Feelings (affective)	uncertainly	optimism	confusion/ frustration/ doubt	clarity	sense of direction/ confidence	satisfaction or disappointment
Thoughts (cognitive)	vague →			focused →		increased interest →
Actions (physical)	seeking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

Four Basic Information Literacy Abilities

Strategy	*Definition*
Recall	Remembering ideas from what has been gathered
Summarize	Organizing ideas in capsulized form and placing in meaningful sequence
Paraphrase	Retelling in one's own words
Extend	Fitting ideas into what one already knows to form new understandings

Strategies for Intervening in the Information Search Process

Ability	*Definition*
Collaborating	Working jointly with others
Continuing	Proceeding at more than one point in time
Choosing	Selecting what is interesting and pertinent
Charting	Visualizing ideas, issues, questions and strategies
Conversing	Talking about ideas for clarity and further questions
Composing	Writing to identify what is formulated and what is missing

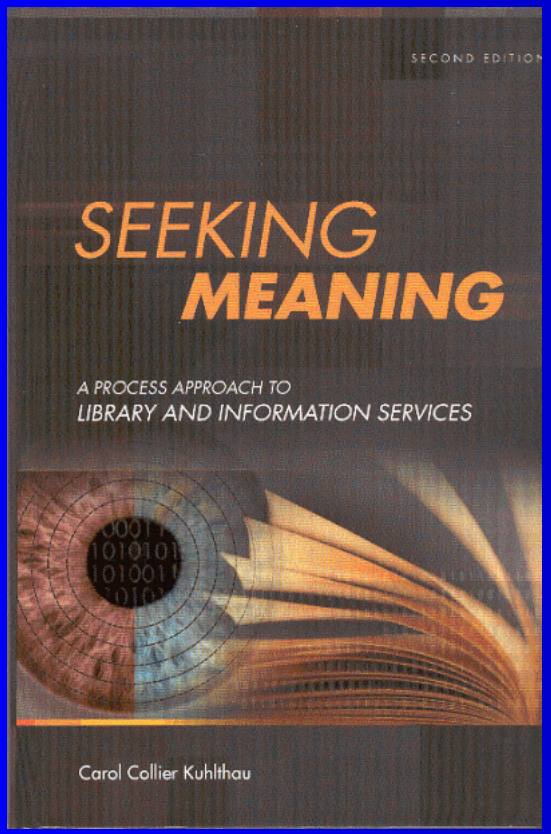
Primary Inhibitors

- Lack of time
- Confusion of roles
- Poorly designed assignments

Basic Enablers

- Constructivist view of learning
- Team approach to teaching
- Competence in designing process assignments
- Commitment to developing information literacy

Reference



Kuhlthau, C. C.

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