When I teach, my students have an opportunity to explore how humans use information. “Let’s help the humans,” we cry. If we know more about how people interact with the words and images we create, the odds are better that we can develop products that people can use.

To help us understand humans, we explore how people respond visually, make connections, navigate space and act – how they make choices as they work to get their jobs done.

“How?” we wonder, “can we help people accomplish what they want to accomplish?” Attend to tasks, we decide – we can look for these mini-goals – looking specifically at questions formed in a user’s mind and what we expect as a visible result, an observable end.

But what if there is no “observable end?” What if a human’s knowledge is limited and he or she leans more toward browsing. Maybe, they would refer to their interest as “learning”?


Students and clients often tell me they go online because they “want information.”

“Click anywhere, there it is: information.” I respond. “We drown in information.” But as students of information structure, we begin to dig into what “wanting information” means. I often explain how our reading, especially workplace reading, focuses on “reading to do” or reading that specifies action. I contrast this with “reading to learn” or reading that specifies action. I contrast this with “reading to learn” or reading that centers on a topic – as in a classroom.

During a recent class, one of my students – a department manager – challenged the notion that her audiences were reading to do, telling me “our audiences read to learn.” “Sure they want to learn,” I responded. “But you can find a reason for this learning – they want to understand, comprehend and apply.”

I referred to an organizing structure on human cognition first introduced by Benjamin Bloom in 1956. His taxonomy explored how understanding (identifying what specifics or theories the person wants to know) leads to comprehension (organizing, comparing, translating) which leads to application (solving problems based on what you’ve learned), analysis (breaking information into parts to enable closer examination), synthesis (assembling ideas and reshaping them to meet needs) and evaluation (developing and presenting judgments).
Did I win her over and help her begin to emphasize doing? No.
The manager stared at me.
I began to question – or continue to question – my reliance on Bloom. Yes, it’s a great taxonomy for helping to understand what people do with information – but it may not be so useful for web development specialists crafting information to help people learn.

So I left class with my own homework assignment: learn more about phases we follow when we look at text “to learn.”

I found (in our information science literature) a six-stage process of information seeking, specifically directed at learning: Carol Kuhlthau’s information search process. Introduced in 1991, Kuhlthau identified six stages of learning: initiation/awareness, selection, exploration, formulation, collection and action.

How can we apply these stages in architecting usable structure and content? Fortunately, my exploration directed me to Jared Pomranky’s explanation on his site Net Profit Marketing (http://bit.ly/stages_learning). Pomranky states that “by understanding what people are looking for at each stage of their learning process, we can design websites that [effectively] guide them.” He identifies each step and applies them to our work in user experience:

- **Initiation (Awareness)** – Users becomes aware that they need information. Generally, it’s assumed that visitors to your website already have this awareness, but there are circumstances in which you can generate awareness as well.

- **Selection** – Users weigh topics against criteria such as personal interest, project requirements, available information and time – predicting the outcome of possible choices and choosing a topic with the potential for success.

- **Exploration** – Users see the available options to choose among. Quite often, especially online, “analysis paralysis” can set in and make learners quit at this stage because they can’t decide which of the options are worth further pursuit.

- **Formulation** – Users see they’re going to have to create further requirements before they’re able to make a final selection, and they make decisions to narrow the field. Confidence returns.

- **Collection** – Users have clearly articulated their precise needs and are able to evaluate potential options. They gather all available solutions and begin to weigh them based on relevant criteria.

- **Action** – Users make their final decisions and act on them based on their understanding.

So let’s help the humans. Start by exploring Carol Kuhlthau’s research. We have a lot to learn. At least I do.

---

Editor’s note: For further reading, please see the following two articles by Carol Kuhlthau that have appeared in the *Bulletin*:
