

Model Comparison: Dervin and Kuhlthau

This semester we have read very little that is not user centered. However, even among the studies and models of Chatman, Pettigrew, Belkin, and Taylor, both Dervin's and Kuhlthau's models stand out as the most focused on the information-seeker as a human, complete with emotions, rather than as a purely cognitive information creature. The two models are similar in that they focus on the way in which people deal, both cognitively and affectively, with problems that stem from lack of information; in fact, Kuhlthau references Dervin several times in elaborating the theoretical basis for her studies and model. The difference between the models is that whereas Kuhlthau's model is only applicable in certain ideal situations, Dervin's model is useful in many contexts, both in and outside the field of information science.

In her own words, Kuhlthau's model "describes the information search process (ISP) from the user's perspective as revealed in a series of studies" (p. 361). She situates her research in close relation to that of Dervin and other scholars who emphasize the importance of understanding "the personal meaning that the user seeks from the information" (p. 361) in order to provide effective systems and mediation. However, unlike Dervin's all-purpose model, Kuhlthau's is an attempt at a strict definition of users' emotions at all stages in the information-seeking process. Kuhlthau bases her model on five user studies, four of which were conducted with students, primarily high school students, who were attempting to complete school research assignments. To that extent, Dervin's research subjects were in a fairly contrived situation; they had a proxy need which had been assigned for the purpose of challenging the students to learn, not because the teacher had an information need. In addition, the information-seeking was part of a

large project which involved many sub-searches. Kuhlthau's model may be relevant for this specific group of users, but it is less than a perfect match for other user groups.

Kuhlthau's ISP is based on models by Kelly, Taylor and Belkin and consists of six stages: initiation, selection, exploration, formulation, collection, and presentation (p. 367). For Kuhlthau, these stages signify not only changes in the tasks performed during each of them but in the emotions, thoughts, expression and mood of the user. She is not interested only in what they do but why they do it and how that affects them, always with the aim of improving user service through the information system. She maps each stage of the ISP to common feelings, thoughts, actions, and tasks. Her model is fairly accurate for a school setting where high school or undergraduate students attempt to satisfy an imposed information need; however, even there it has inconsistencies. For example, Kuhlthau assigns uncertainty, confusion, frustration, and doubt to early stages of the ISP; however, she also says that case study participants had "an understanding of the search process and a tolerance for the ambiguity and uncertainty of the earlier stages" (p. 368). If they have a tolerance for the uncertainty, why would they then be anxious about it? The assignment of emotions to various stages is somewhat arbitrary and, if the model is to be taken literally, ignores users' individuality of feeling. On the other hand, it loses meaning if taken too generally, because in that case users might be feeling anything.

The students in Kuhlthau's model arguably followed her pattern of stages because they had been taught that strategy in school; a student without that conditioning might follow an altogether different pattern. Kuhlthau's bias is also shown by a comment about "experienced and inexperienced information users" (p. 368), implying experience in an academic or library setting and according to traditionally-defined measures of experience

and proficiency. Along the same lines, Kuhlthau defines high- and low-achieving students by their standardized test scores, which are an independent factor and probably have little to do either with their intelligence or with their information-seeking abilities (p. 365). The fact that most of the low-achievers did not complete the study is a weakness in the study, since it is precisely those users who do not follow academically pre-defined strategies of information searching, who are not having their information needs met, and whose needs we as information professionals should be trying the hardest to discover. A further weakness is the fact that Kuhlthau seems to some extent to have artificially imposed structure on a process whose steps most users describe as gathering or completing or both. Finally, in spite of her desire to develop a model which applies to all or most user groups, she studies non-academic users only in her fifth and last study, at which point she knows what she is looking for and, naturally, finds it.

Dervin's model, on the other hand, is not specific to any information setting. Sense-making is not only a model of information behavior but a method of interviewing users about information behavior. In fact, there is some evidence that the sense-making method of interviewing helps respondents to make sense of their own experiences; in Dervin's words, "results suggest that there is, when sense-making interviews are at their best, a consciousness-raising and therapeutic value in the process for respondents" (p. 73). The theory of sense-making defines the information-seeker not as an individual but as an individual acting a particular point in time and space. It accommodates not only variation between users but variation within one user who may not act consistently. Instead of pinning users to a structural sequence of actions and emotions, she allows them individuality.

How, then, does Dervin find a method in human madness? Rather than delving for specifics, she allows the user to define how his or her experience fits into her model. Obviously this is a rather self-fulfilling model, but the fact that putting their experience into the context of this model helps users to make sense of that experience, speaks to the accuracy of the model in describing the way that people make sense of their world.

The model itself is fairly simple, consisting of a situation, a gap, and a goal (or use or help, as Dervin terms it). A person may be in some situation where he is prevented by putting some information to use by the fact that he does not have it. Dervin terms this triad of elements “circling the experience,” but there is no sequence of situation, gap, and use; all three coexist simultaneously. The process of sense-making is the action which the user takes to acquire the missing information and to apply it to the blocked situation.

When writing about her sense-making model, Dervin complicates what is essentially a very simple model with a full elaboration of all the assumptions which are inherent to the sense-making model. This is yet another difference between Dervin’s model and Kuhlthau’s, as Kuhlthau leaves many of the assumptions of her own model unchallenged.

Dervin takes care to describe the diverse situations in which the sense-making model can be applied, such as in studies of information needs, of satisfactions with an institution, or of images of an institution. She also includes numerous exemplar studies which not only demonstrate the applicability of her model to many situations and purposes but also do much to clarify the explanation of the sense-making theory. In contrast, due to its limitations, Kuhlthau’s model is only applicable in a very specific, idealized situation. She does draw some concrete conclusions and suggestions for

information systems from the results of her studies; but they are either vague or common sense. For example, she says that the reference interview “might be adapted to identify unique information needs at each point in the search process,” but she fails to make clear how her model would change a librarian’s normal sensitivity towards a user’s individual needs. Her suggestion that “the model of the ISP may be incorporated into user education programs, to enable people to become aware of their own evolving process and understand feelings which affect their information use,” makes one wonder whether she envisions group therapy sessions at the library. Her closing statement that “by neglecting to address affective aspects, information specialists are overlooking one of the main elements driving information use,” is unconvincing, given that the emotions documented in her studies appear to accompany rather than determine information use (p. 370).

Dervin, B. (1992). From the mind’s eye of the user: The Sense-Making qualitative-quantitative methodology. In J.D. Glazier & R.R. Powell (Eds). *Qualitative research in information management*. Englewood, CO, Libraries Unlimited. Pp.61-84.

Kuhlthau, C. (1991). Inside the search process: Information seeking from the users perspective. *Journal of the American Society for Information Science*. 42.5, 361-71.