Learning Style Theory and Learning Transfer Principles During Reference Interview Instruction

RANDALL HENSLEY

ABSTRACT

LEARNING STYLE THEORY, as it is understood by theorists in educational psychology, can be applied to the reference desk interview process by knowledgeable staff in order to facilitate more effective interactions. Learning styles are key elements to consider when matching staff responses to the instructional content of user assistance. This article will examine the applicable issues of learning styles and learning transfer for the reference interview.

Just like adolescents separating from their parents, bibliographic instruction (BI) grew up in the reference desk household but "left home" to develop its own perspectives. A major influence on the development of BI has been educational psychology. Conceptual frameworks (Reichel, 1981) and question analysis (Oberman, 1983) exemplify this influence. Learning style theories and learning transfer principles are some of the recent issues to impact the instructional programs of libraries (Bodi, 1990).

The impact of new information technologies upon libraries has caused renewed interest in teaching and learning for reference services. The reference desk staff has become acutely aware of instructional issues as they cope with users of online catalogs, CD-ROM systems, and locally mounted databases. This situation has driven the return of BI issues to traditional reference services.

Learning style and learning transfer theories offer insight to the reference interview process that can enhance staff abilities to provide quality instruction at the reference desk. They can contribute to the development of a library user's information-seeking skills.

Carl Jung (1923) identified four basic human functions: (1) the thinking function of organizing and analyzing in a logical fashion; (2) the feeling function of personal and emotional reactions to experience; (3) the sensation function of perceiving and reacting to immediate sensory information; and (4) the intuition function of imagination and abstract thought. Subsequent learning style models have focused on perception and communication as key indicators of style. A learning style is a pattern of these indicators. Individuals have the capacity to operate in all styles but prefer a particular style as being more natural or easier to manifest. The less preferred styles require more effort. The preferred style is most in evidence when interacting with other people and is the optimum form in which to communicate. Researchers (Mok, 1975) have also identified the phenomenon of preferred styles shifting under stressful or unfavorable conditions.

A variety of models have been developed that include inventories for identifying and understanding an individual's learning style configuration. David A. Kolb (1976), Paul P. Mok (1975), and Isabel Briggs Myers (1962) created perhaps the most widely known inventories. Labels have been developed for particular styles, typically four. Strong correlation is present between the inventories. For the purposes of this article the Mok labels will be used.

There are characteristics associated with learning styles. The "thinker" style is deliberative, objective, rational, analytical, unemotional, and serious. The "feeler" style is personalizing, emotional, empathetic, spontaneous, subjective, and impulsive. The "sensor" style is pragmatic, action oriented, competitive, focused on the tangible, efficient, and directive. The "intuitor" style is imaginative, idealistic, broad-gauged, conceptual, scattered, and probing. A style is in evidence when these and analogous characteristics constitute a regular pattern of perception and communication.

While no reference librarian will be able to administer a learning styles inventory at the beginning of each reference desk interaction, there are nonverbal and verbal cues that are indicative of an individual's style (Gregorc, 1979). Sources of nonverbal cues are eyes, gestures, body placement and stance, and facial expression. Each of these sources can vary according to quality and quantity of action or movement. Verbal cues consist of quantity of words used during

the interaction, vocal tone, verbal responsiveness, and types of words used. This last cue has four categories: authority words, action words, affect words, and conceptual words.

When applied to the previous learning style labels, certain characteristics can be identified as common attributes. For the thinker style, the nonverbal attributes are stiffness and formality, and the verbal attributes are articulateness, definiteness, succinctness, and an emphatic quality. Individuals with this preferred style present their information need in a logical, relatively unemotional manner. They accept a large amount of responsibility for the outcome of their work in the library. They expect the librarian to be authoritative and knowledgeable, and they appreciate ranked alternatives from which they, the user, can choose. They avoid a personal or informal interaction, and place an emphasis on the details of any action to be taken or resource to be used. Printed instructions are likely to be consulted comprehensively.

For the feeler style, the nonverbal attributes are expressiveness with connecting, informal gestures, and body stance. The verbal attributes are noted for an emphasis on affect and personalizing. Individuals with this preferred style present their information needs in a personable manner, obviously enjoying the opportunity to interact with another person. They often express anxiety, pleasure, or ignorance willingly as a means of enhancing the personal aspects of the process.

For the sensor style, the nonverbal attributes are impatience and movement with an emphasis on tactile responses such as tapping a pencil, grasping handouts, or other gestures that indicate a desire to move to a conclusion quickly. The verbal attributes are noted for an emphasis on action words with practical or simplistic explanations about what is desired.

For the intuitor styles, the nonverbal attributes are a distracted manner, often giving the impression that the individual is not paying attention or that the individual is engaged in an internal dialogue. The verbal attributes are noted for an emphasis on verboseness, an inability to focus the nature of the information need, and an ability to frame the need into broad categories. Often the connections between statements or questions are not clear.

The person with a dominant thinker style learns through detailed analysis and logical ordering. A cautious, deliberative, comprehensive assessment of a learning situation is the preferred approach.

Unlike the thinker style, the feeler style learns through personal interaction, placing emphasis on the acknowledgment of feeling, attitude, and involvement of the people engaged in the learning

process. The sensor style learns by doing; action is paramount to comprehension. Explanations or extended dialogue without concrete tasks or results often frustrate individuals with this dominant style.

The intuitor style learns through conceptualizing, creating categories of possibilities, ramifications, and alternative avenues. Often individuals with this dominant style engage in anticipatory problem solving and long-range planning. They may consider a variety of options and desire to engage in a great deal of brainstorming prior to taking action.

Smith and Renzulli (1984) have examined the learning style literature regarding the desirability of matching students to learning environments. It is the contention of this article that the job of the reference desk librarian is to match their responses to the learning style characteristics exhibited by the user. This matching process enhances clear communication, retention of information imparted, and ultimate transfer of learning to new situations.

Some general strategies for matching user learning style by the librarian are offered. First, focus on understanding the information/instructional need from the user's perspective. Concentrate on the words and physical behavior. Watch for the various cues previously identified.

Second, the librarian should sequence responses into segments that create the opportunity for further learning style cues, adjustments, and time for the user to engage in the instructional process. An increased emphasis should be placed on the technique of follow-up—initiating learning at a particular step of the sequence, then re-engaging interaction so as to better gauge the learning style operating in an altered situation.

Third, the librarian should be aware of possible shifts in learning style because of stressful or unfavorable conditions for learning by the user. Experiencing anxiety about using the library is perhaps more prevalent than librarians acknowledge (Mellon, 1986). By sequencing the reference desk instruction and engaging in follow-up, a manifested, stress-induced learning style can be unmasked for the dominant preferred style.

The fourth general strategy for matching librarian interaction with the user's learning style is providing alternative information sources. Classroom experiences support this approach (Guild, 1982). Signs, handouts, and other people at the desk and at different library locations can alleviate the difficulty in identifying a particular user's style and can assist in the sequencing of instruction previously discussed.

More specifically, for the thinker style, it is important for the librarian not to pressure the user; often pressure is misconstrued as

questioning the user's style, authority, and responsibility. It is useful for the librarian to verbalize the rationale behind the strategy being offered, to provide plentiful details, and to offer alternative approaches in a logical manner from which the user can choose.

For the feeler, the librarian should empathize, personalize, and encourage the user to return for further assistance. Users with this preferred learning style will regularly seek further interaction.

For the sensor it is important to take action as soon as possible, offering instruction in the process of using resources.

For the intuitor, a longer period of listening is required until central issues can be discerned or until some place from which to start can be identified.

For all learning style types it is important to listen, alter words used by the librarian, monitor body stance, be conscious of the mixture between action and talk, and become comfortable asking for intervention from a colleague or finding some other way to take a "time out" in order to clarify the components of the instructional interaction.

Telephone reference assistance is often problematical for reference desk staff. Pressures of time and the configuration for provision of telephone assistance can cause difficulties. An awareness of learning styles can provide avenues to more successful interactions. While nonverbal cues are not applicable, verbal cues are plentiful. Paying attention to the structure of the conversation is crucial. Is the conversation logical and organized or is it scattered? Is there an abundance of certain categories of words such as authority words or affect words? The matching strategy of the librarian is to structure the conversation in accordance with the perceived verbal style cues.

A preferred thinker style caller will respond to an acknowledgment of caller suggestions, to the citing of sources consulted, to requests for clarification and verification.

A feeler style caller responds well to moving through the information process in an interactive manner, relying on descriptions of what is being done and enthusiasm for the steps taken and the discoveries made.

For the sensor style caller, being put "on hold" is frustrating. A more useful strategy is to take the user's telephone number and provide an estimated time when the call will be returned. Minimal probing is a recommended strategy. Callers respond well to call backs.

For the intuitor style caller, the librarian will need to listen for awhile until connections become clear.

Responding to user learning styles involves practice as all reference instruction techniques do. Learning style techniques can be incorporated into the repertoire of skills that reference desk staff

develop. They are particularly useful with problematical interactions when evidence accumulates that indicates communication is breaking down or when the instruction is not achieving desired outcomes.

It is the issue of desired outcomes that links learning style theories with learning transfer principles. Once again, there is a substantial body of literature regarding learning transfer principles (Ripple & Drinkwater, 1982). A major desired outcome of a reference desk instruction interaction is the ability of the user to transfer what is learned from one interaction to a new situation.

Initial learning and retention of that learning is key to the learning transfer process. Learning style applications function to optimize the preferred patterns for learning and support the learning and retention process.

Three principles of learning transfer are crucial links to learning style theory (Selz & Ashley, 1978). First, what elements of the instructional interaction transfer to other situations must be identified intentionally. The timing for imparting the transferable components of instruction will vary between styles, but it must occur.

Second, arranging the components of the instruction according to similarities among them encourages transfer. Prior learning impacts subsequent learning. Arranging instruction into sequences has been mentioned earlier. Depending on the learning style, these sequences can be concepts, specific tasks, strategies, or a series of interactions.

Third, providing practice in the instructional process is vital. Learning styles awareness provides a mechanism for involving the user in the learning process by focusing on an approach that has the most meaning to that user. Providing guidance for learning transfer is enabled by creating effective communication through the use of learning styles characteristics.

Growing evidence exists that learning style theory and learning transfer principles are applicable to bibliographic instruction situations. The BI aspect of library services is destined to continue its development by adapting knowledge from other disciplines in addition to creating and modifying its own knowledge base. Librarians have long professed a belief that one-on-one instruction at the reference desk is indeed BI in a different mode. The new information technology is increasing the demand for this mode. Therefore it is important that provocative inquiry concerning instruction theories, principles, and practices as they apply to reference desk instruction accelerate. It is time to welcome home the knowledge gained from librarians in the classroom to the increasingly important reference desk arena.

REFERENCES

Bodi, S. (1990). Teaching effectiveness and bibliographic instruction: The relevance of learning styles. *College & Research Libraries, 51*(2), 113-119.

Gregorc, A. F. (1979). Learning/teaching styles: Their nature and effects. In *Student learning styles: Diagnosing and prescribing programs* (pp. 19-26). Reston, VA: National Association of Secondary School Principals.

Guild, P. (1982). Learning styles: Understanding before action. *Context & Conflict; Journal of the Washington State Association for Supervision and Curriculum Development, 10*, 4-6.

Jung, C. G. (1923). *Psychological types; or, the psychology of individuation.* New York: Harcourt, Brace.

Kobelski, P., & Reichel, M. (1981). Conceptual frameworks for bibliographic instruction. *The Journal of Academic Librarianship, 7*(2), 73-77.

Kolb, D. A. (1976). *The learning style inventory technical manual.* Boston, MA: McBer.

Mellon, C. A. (1986). Library anxiety: A grounded theory and its development. *College & Research Libraries, 47*(2), 160-165.

Mok, P. P. (1975). *Interpretation manual for communicating styles technology.* Richardson, TX: Training Associates Press.

Oberman, C. (1983). Question analysis and the learning cycle. *Research Strategies, 1*(1), 22-30.

Ripple, R. E., & Drinkwater, D. J. (1982). Transfer of learning. In H. E. Mitzel (Ed.), *Encyclopedia of educational research* (vol. 4, pp. 1947-55). New York: The Free Press.

Selz, N., & Ashley, W. L. (1978). *Teaching for transfer: A perspective.* Columbus, OH: Ohio State University. National Center for Research in Vocational Education.

Smith, L. H., & Renzulli, J. S. (1984). Learning style preferences: A practical approach for classroom teachers. *Theory into Practice, 23*(1), 44-50.