## Critical Thinking Skills: The Role of the School Library

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### Cognitive Theory and School Library Instruciton

For several years a trend in school library bibliographic instruction has been the emphasis on helping students develop critical thinking skills. This trend continues but is being studied in more depth and being elaborated on based on research in cognitive development. Current trends include the focus on process rather than content, an example of which is the free inquiry method of learning, and the focus on library users, their development levels and the skills they bring with them to the library.

For some time a trend in education has focused on the development of critical thinking skills in students. Lately, new approaches to the teaching of critical skills have been based on cognitive learning theory. Many of these theories have existed for awhile but are being focused on anew. For example, Piaget described how cognitive abilities develop in a sequence of stages beginning with sensorimotor skills up to the formal operations stage which usually occurs sometime in sixth grade or after. Schema theory describes how learners must be able to accommodate information in terms of what they already know and apply it in real situations.1

The new focus on theories such as these has led to a new emphasis on library users and the skills, attitudes, and development levels they bring with them to the library. Critical thinking activities should be designed to match the cognitive levels of library users.2 For example, in the elementary grades students are not really ready to move beyond locating and using sources. In junior high they should, with lots of guidance, be gaining practice in evaluating and synthesizing sources and information, while senior students should be given the opportunity to carry out these activities independently. In lower grades students need practice brainstorming in groups and attacking assignments. As they grow older they begin to analyze sources for qualities such as currency and they begin to think in terms of key words and descriptors. Finally, in senior high they are ready to design search strategies.

When the theory of levels of cognitive development is applied to senior high school libraries, the implication should be that students are ready for fairly sophisticated thinking and evaluation of sources. At their age level they are capable of such activities but it may not always be safe to assume they have practiced these

activities or have even received the background they need to move into these activities without some lower level learning as an introduction. As Kuhlthau emphasizes, there is a need to analyze users and determine their skill levels and attitudes when they begin an assignment.<sup>3</sup>

#### **Process Over Content**

Another current focus related to cognitive theories is the emphasis on teaching students processes rather than sources. The process approach focuses on the evaluation of sources and their information and promotes more flexible problem solving skills. Therefore, students are able to proceed to a higher level of cognitive development than they can with approaches that emphasize locating sources.

One type of process approach is the free inquiry method.<sup>4</sup> In this approach, students are encouraged to form questions and use the library as a laboratory to find answers and raise still more questions. The library is more suited to accommodating this more flexible type of learning than the classroom. In the library, students can work at their own pace and pursue their own interests with a variety of types of materials.

Free inquiry exercises are also related to another theory which has been in existence for a while. Taylor describes four levels of information including the visceral or unfocused need, the conscious but unexpressed need, the formalized need, and the compromised need expressed in tems believed to be suitable to the library tools. As Kuhlthau states, the library should be more accommodating to students' information needs on all levels, not just the last. In the free inquiry approach, students are given the time and flexibility to work through their levels of need and

recognize when they change.<sup>5</sup> They can use librarians, teachers, and fellow students as resource persons.

#### School Librarians' Roles

The role of the school librarian is a significant one in the development of these trends. The role can no longer be reactive or even proactive but instead must be interactive. This means school librarians can no longer be willing just to gather materials and be supportive to teachers' efforts. Because the library is uniquely suited to the development of critical thinking skills, librarians must accept responsibility for a leadrship role in their promotion.

Librarians need to encourage teachers to include assignments which develop critical thinking skills in their courses. Librarians can play a more active role in the development, teaching and evaluation of lessons that develop critical skills. It has been suggested, for instance, that librarians grade assignments for process comprehension while teachers grade assignments for content comprehension.<sup>7</sup>

Beyond this level of involvement, however, librarians should play a unique role in the development of curriculum. Because they work with students doing assignments in many subject areas, they are the professionals who can see how critical thinking skills apply across the entire curriculum. Librarians can work to see that entire information comprehension units are included in the planning for courses. Carolyn Markuson has even recommended that librarians challenge publishers to include more thinking activities in textbooks.

The emphasis on critical thinking has also changed the role school librarians play with students. The primary goal is not necessarily to find answers for students but to help

students ask more and better questions. The question librarians ask themselves when dealing with a student may not be, "What source can I present to this student in order to complete a desired end product?" but instead, "What guidance and reassurance will this student need and what skill development needs to take place?"

#### Conclusion

School librarians have long desired to be considred on the same level as teachers. With the emphasis on critical thinking skills and more in depth understanding of how to develop these skills, librarians should begin acting as teachers. The library is the logical laboratory for learning information comprehension and evaluation skills, and the librarian is the logical coordinator, instructor, and advocate of these skills.

#### Notes

<sup>1</sup>Carol Kuhlthau, An Emerging theory of Library Instruction," *School Library Media Quarterly*, 16:1 (Fall 1987), pp. 23-28. <sup>2</sup>Kuhlthau, p. 25.

3Kuhlthau, pp. 25-26.

<sup>4</sup>Daniel Callison, "School Library Media Programs and Free Inquiry Learning," School Library Media Quarterly, 32:6 (February 1986), pp. 20-24.

5Kuhlthau, pp. 25-26.

<sup>6</sup>Daniel Callison, "Evaluator and Educator: The School Media Specialist," *Tech Trends*, 32:5 (October 1987), pp. 224-229.

<sup>7</sup>Carolyn Markuson, "Making it Happen: Taking Charge of the Information Curriculum," *School Library Media Quarterly*, 15:1 (Fall 1986), pp. 37-40.

<sup>8</sup>Jacqueline Mancall, Shirley Aaron, and Sue Walker, "Educating Students to Think: The Role of the School Library Media Program," *School Library Media Quarterly*, 15:1 (Fall 1986), pp. 18-27.

<sup>9</sup>Markuson, p. 38.