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ON THE COVER: Hubble's panoramic portrait of the region called 30 Doradus Nebula, a vast, sculpted landscape of gas and dust where thousand of stars are being born. Photo: NASA; N. Walborn and J. Malz-Apellániz (Space Telescope Science Institute, Baltimore, MD); R. Barbá (La Plata Observatory, La Plata, Argentina).

The Pitts/Stripling
MODEL OF
INFORMATION LITERACY

by Linda Veltze

This examination of the Pitts/Stripling model attempts to describe its key aspects and to show the relationship between the model and Stripling's vision of the library media center for the twenty-first century.

Stripling (1995) says that the model integrates content and process elements and provides a structure for learning. In the same article she states that in the content strand, there are four essential steps: (1) Need to Know/Concept and Essential Questions; (2) Information; (3) New Understanding; and (4) Assessment Product. In addition, there is the simultaneous occurrence of the information processes that includes: (1) Inquiry; (2) Synthesis/Decision Making; and (3) Expression (165). A visual representation of this model can be found online (http://www.soe.ecu.edu/LTDI/project/graphic.htm).

Stripling (1995) describes this model as being based on the research findings of Pitts and others, namely that "mental models affect learning throughout the process" (165). She credits Pitts's research for making it clear that students need support from teachers for all the strands through "teaching, coaching, scaffolding, modeling, or other techniques" (165). The model then can lead to unique applications on the part of teachers and library media specialists.

An integral part of this is "ongoing assessment involving both reflection and feedback" (165). In addition, there are opportunities to learn that come when the learner is confronted with a contradiction or a new idea (sometimes offered by peers, teachers, or experts) that doesn't fit into the old model.

Teachers and library media specialists can work to provide an overview to a topic for a student, being careful that their overview indeed does confront some of the students' prior mental models. Teachers also can model the type of thinking that a student needs to go through by "thinking out loud, investigating options, identifying questions, and making decisions" (167) so that they can see exactly how a personal focus comes about.

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Stripling believes that it is important to identify the student's existing mental models by determining what the student understands about the content and what prior knowledge is affecting this understanding. Identifying the student's mental knowledge allows the teacher and library media specialist to challenge these models and plan for "future understandings" that the students can gain. This initially may take the form of questions to start them thinking, but later teachers and students can decide what "questions must be answered in order to reach conclusions..." (166). A teaching team of teacher and library media specialist can help students identify what they already know about a subject, find a personal connection, and then narrow it to a specific focus.

An important part of this research model is "making sense out of information," which is very helpful to those suffering from information overload. For this reason, Stripling urges students to keep a learning log. By keeping track of their own reactions, students will be led to form their own synethesis, and thus their own conclusions.

Toward this end, Stripling urges that students be taught "decision-making strategies," some examples of which are lists of pros and cons, decision-making charts, a rating scale or report card, visual sorting of information, and webbing.

Real learning occurs, she argues, when students assess the difference between their original mental model on the subject and see how their new learning has changed that model. Stripling reminds us that Pitts's research showed how students who focus so much on the production of a product also can come out with little or no learning, whereas the support and confrontation she advocates helps the product to "not become an end in itself, but a way to express new understanding" (168).

With the emphasis that this model puts on reflection, Stripling is definitely an advocate of "authentic assessment" that is ongoing throughout the entire process of learning. She prefers an assessment that is put in a real-life context, with the assessment becoming a learning process in itself. Stripling provides a table (169) that addresses not only what authentic assessment is, but

also its content, its types, and the environment necessary for authentic assessment.

With the firm belief that learning is continuous, Stripling urges both teacher and library media specialist to involve students in their own assessment, and even when the product is completed, to continue the learning cycle by answering the following questions: "If I could change my final product, what would I do? What new questions can be generated from my assessment product? Where should my learning go from here?" (169).

Her vision of the library media center is one where teachers, library media specialists, and students collaborate, and also function as learners (1995, 170). In a later article she proposes that the library media specialist be a "leader in connecting through collaboration" (1996, 644).

She sees library media specialists as catalysts for change in the school with "the library at the center of inquiry" (647). She advocates a shift in thinking about school library media centers as centers of information, to centers of learning where new ideas and personal points of view are developed by the users of the library media center.

Stripling does not see the school library media center as limited solely to the boundaries of its building, but sees library media specialists as developing learning communities that establish partnerships with other libraries and community agencies, and which "invite the community into the school to share in the learning experiences" (649).

In *Learning and Libraries in an Information Age: Principles and Practice* (1999), Stripling admits that the idea of library media centers as learning centers is not just her idea, but one supported by all the authors contained in this volume, and states that the achievement of these learning centers is in itself an evolutionary process.

The above mentioned work is a testimonial to an evolutionary process that her own beliefs underwent. In an earlier article, she wrote eloquently about the frustrations of practitioners to university academicians' proposals of the instructional design role of the library media specialist (1984). She felt that the library media specialist was not given the time to perform instructional design, and so had to let other work go in order to assume this responsibility. Yet almost fifteen years later (1999), she writes about the importance of the library media specialist as an instructional leader. What probably convinced her the most was the research on learning that Pitts and others provided. This she documents in almost all of her later articles.

She authored *Libraries for the National Education Goals* (1992) and further described the role of libraries in their fulfillment of national education goals. She spoke of school library media centers that offer programs for at-risk youth and library research—projects that offered opportunity for students to study, think, and find information, where they made evaluative decisions about the information they found.

Even then, she reminded readers that there were models for teaching research and information literacy that showed information problem-solving to be a pro-

cess. She discussed the importance of the faculty modeling thoughtful behavior, the importance of library media specialists working in curriculum development, and the need for student evaluation of Internet resources in terms of accuracy and bias. She focused on the importance of literacy, defining it as "being able to understand new ideas well enough to use them when needed. Literacy means knowing how to learn" (1992, 87).

In her chapter on "Designing Library Media Programs for Student Learning" (1999), Stripling describes a library media center where students are put in charge of their own learning and become teachers themselves. She urges us to make "the joy of discovery central to any library media program" and calls it a "culture of learning"(263).

Having stated the characteristics of her model of information literacy, we can see how it would best take place in a school library media center whose main focus is learning. Her kind of media center would have "full integration of the library media program into the curriculum; collaborative planning and teaching; use of multiple resources to support learning in all content areas, a change from didactic instruction to facilitation of learning; emphasis on authentic learning and assessment experiences" (1999, 264-265).

In the age of growing demands for school accountability, she wrote an article for principals and superintendents which spoke to this issue, saying that the standardized test assessment "is not a sufficient measurement of student information literacy or reference skills, because such assessments rarely measure a student's ability to do" (1999, 67).

She also shows the relationship between the national guidelines in *Information Power, Building Partnerships for Learning* to what she has proposed, and provides us with a twenty-one page rubric to evaluate how well those guidelines have been achieved (1999). She cautions us to use it as an evaluation tool and not as an evaluation instrument, and to use it on the library program and not on the library media specialist. Because she understands and respects the unique cultures of schools, she admonishes us to find the "right match between national guidelines and local culture..." (266). In the column of the rubric that shows exemplary fulfillment of the guidelines, we can see the underpinnings of her model and how closely it is related to the leading educational philosophies of school reform (275-296).

In summary, Stripling's body of work is one which reflects the respect and understanding she has for Pitts's research which led to the Pitts/Stripling Model of the "Thoughtful Learning Cycle." The Pitts/Stripling Model promotes caring, student-centered, holistic, humanistic, and realistic library practices that are respectful of the developmental ages of students. It reflects Stripling's own love of critical thinking, learning, and her desire for this love to be shared by school communities through the collaboration of the library media specialist, the teacher, and the student. It is a model that can be used from first grade up in schools of the twenty-first century.

Pitts/Stripling...

Suggested Readings: Pitts/Stripling Contributions to Information Literacy

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