FOR-PD's Reading Strategy of the Month

(Developed by Smith, L. & Zygouris-Coe, V., 2006)

"The principle goal of education in the schools should be creating men and women who are capable of doing new things, not simply repeating what other generations have done; men and women who are creative, inventive and discoverers, who can be critical and verify, and not accept, everything they are offered." -Jean Piaget, 1988

Rationale:

We are extremely fortunate to live in a world that allows us to obtain information from multiple sources. In mere seconds, and with just the touch of a few buttons, we can acquire data and news via our computer and the World Wide Web. Books, journals, and magazines are available on so many topics, and from so many different points of view. Using multiple sources of information allows us to find answers to questions, compare points of view, and gain better understanding than the use of only one text (Blachowicz & Ogle, 2001). Yet, there is always the consideration about what makes a piece of text valid and what makes it erroneous. How do we teach our students to understand the difference?

As teachers of reading, one of our primary goals is to instruct our learners on how to think critically and thoughtfully about the material they read. Although locating quality information is part of the learning process, it is also vital for us to make sure that our students have the ability to analyze, evaluate, and think divergently (Heilman, Blaire, & Rupley, 1998). Without these abilities, students will not be able to attain a deeper understanding about the topic at hand.

Critical thinking skills can and should be taught. While some students may learn these skills quickly, others may require more intense instruction. Teaching strategies to differentiate between facts and opinions, verify the validity of texts, understand their own possible biases toward the topic, and develop a criteria for judging an author's competency is extremely important in our information age (Heilman, Blaire, & Rupley, 1998).

One way to help students gain understanding of critical reading skills and strategies is through the use of Inquiry Charts (I-Charts). The I-Chart was developed by Hoffman (1992) as an instructional procedure that nurtures critical thinking and reading. Based upon work done by Ogle with K-W-L and McKenzie with data charts, this graphic tool helps students use more than one piece of text or source of information (Randall, 1996). It is extremely useful when the different sources do not agree because it allows students the opportunity to recognize those differences and reconcile them through critical thinking (Blachowicz & Ogle, 2001).

Within this strategy, learners will identify a topic, document what they already know, and gather information from a variety of sources. Once gathered, the students can summarize and compare their findings from the multiple sources. Although the teacher will be in primary control of the process in the beginning, the goal is to gradually release responsibility to the learners (Hoffman, 1992). Over time, working within this basic framework, students will increase their critical thinking skills and have greater independence in their own learning.

How to Use the Strategy:

The Inquiry Chart procedure is organized into three phases including a Planning Phase, Interacting Phase, and Integrating/Evaluating phase. Each phase includes activities that will engage students in critically evaluating the topic. The figure below outlines the steps of the I-Chart process.

I-Chart Process (Hoffman, 1992)

Planning Phase

- Topic Identification
- Question Formation
- I-Chart Construction
- Materials Collection

Interacting Phase

- Exploration of Prior Knowledge and Beliefs
- Sharing of Interesting Facts and New Questions
- Reading and Rereading

Intergrating and Evaluation Phase

- Summarizing
- Comparing
- Researching
- Reporting

Planning Phase

This initial step to the Planning Phase is to choose a topic. The topic can be chosen by the teacher, a question from a text, or from student interest. The topic can range from the concept of a broad topic like computers or Florida to something a little more specific, such as computer chips or the history of St. Augustine (Hoffman, 1992).

After your students have identified the topic, the second step is to form questions about that topic. Hoffman suggests that for teachers beginning to use the I-Chart, it might be helpful to use the core text to determine two-to-four questions about that topic. (1992). Having the entire class work on the same topic during the initial instruction is often necessary. As the questions are being designed, it is important that the questions be open-ended and researchable (Randall, 1996).

The third step for the Planning Phase is to create the physical I-Chart that is large enough for the entire class to see. This is especially important for those who are beginning the instruction of this strategy. Hoffman proposes the use of a long sheet of butcher paper displayed on a wall of the classroom (1992). As students become more familiar with the strategy, personal I-Charts can be supplied for independent use. On the I-Chart, the teacher will write in the topic, title, and guiding questions.

The final step for the first phase is the one of materials collection. Materials can include trade books, textbooks, journal articles, regalia, encyclopedia entries, Internet searches, and even real people who have knowledge about the topic. In a typical I-Chart the bibliographic information can be added to the row under the heading "sources".

Interacting Phase

Upon completion of the Planning Phase, students should begin the first step of the Interacting Phase known as the exploration of prior knowledge and beliefs. It is during this step that the teacher will probe students on what they already know about the topic and the guiding questions. Observations and thoughts should be recorded into the I-Chart even if they seem inaccurate or miscalculated

In step two of the Interacting Phase, the teacher and students should address any new questions or interesting facts/figures they have thought about since the creation of the initial guiding questions. In the Interesting Facts and Figures column, the teacher should record information that is in the prior knowledge of the class, but not related to any of the specific guiding questions. The New Questions column is a place for questions that were not addressed by the teacher or thought of by the students during the Planning Phase. (Hoffman, 1992)

The third step, Reading and Recording, provides students the opportunity to read through the gathered materials and discuss the information found. Hoffman states that this can extend over several days or weeks (1992). Any information that is found to answer the guided questions listed on the chart should be recorded. The teacher should strive to be accurate and may make direct quotes from the text.

Integrating and Evaluating Phase

The final phase of the I-Chart strategy begins with summarizing. Students should be able to generate a short summary for each of the questions by combining the information found during the Interacting Phase. Hoffman believes "this step requires that students move beyond the literal level to synthesize information" (Hoffman, 1992). The summaries for each initial question, new questions, and interesting facts and figures should be transcribed onto the chart.

During the comparing step, the teacher will guide students toward comparing the information each resource provided in the I-Chart. The summaries are also compared to the prior knowledge listed by the student for each question. In doing this, the teacher will offer feedback and clarification on the information that was found.

Once again research will become a step during the Integrating and Evaluating Phase as students return to their New Questions column and identify any questions that are still unanswered. These questions then become part of individual or small group research to learn more about the original topic.

The last step in this phase is geared toward students reporting on what they have learned. Students should be responsible for a culminating activity where findings of the research are presented. In some instances the teacher may require a final research paper or a visual display (Randall, 1996). This is an important part of strategy as students will need to apply critical thinking strategies to differentiate the facts among all that was learned. They must also consider their resources and discuss any irrelevancies they may have encountered.

(Downloadable version of Hoffman's I-Chart)

Assessment:

When students are working independently or within a small group, the I-Chart itself could be assessed with specific attention toward completion and research findings. A rubric, as seen in the figure below, could provide an observable scale in which to judge the work.

Element	Full Credit - 5 Points	Partial Credit - 2 Points	No Credit - O Points
Topic	Topic is chosen.	---	Topic is not chosen.
Guiding Questions	Three to four guiding questions are developed .	One to two guiding questions are developed.	No guiding questions are developed.
Prior Knowledge	Prior knowledge is listed in detail.	Prior knowledge is listed, but only partially.	No prior knowledge is listed.
Resources	Three to five resources are found.	One to two resources are found.	No resources are found.
New & Interesting Facts/Figures	New and other interesting facts and figures are recorded.	---	No new intersting facts are recorded.
New Questions	New questions are recorded.	---	No new questions are recorded.
Reading and Recording	Resources are investigated and questions are fully answered.	Resources are investigated, but questions are answered partially.	No evidence of resources investigated or questions attempted.
Summary	Summary for each question is recorded.	Summaries for half of the questions are recorded.	No summaries for the questions are recorded.
Points Earned			
Total Possible Points	40 points		

Upon completion of an I-Chart, the culminating activity, such as an oral or written report, could also be assessed and the I-Chart considered within that assessment.

(FOR-PD I-Chart used in Lesson 13)

(FOR-PD I-Chart Elementary Example)

(FOR-PD I-Chart Secondary Example)

Resources

I-Charts Inspire Writing
Doug Buehl, a Madison East High School teacher in Wisconsin, provides a detailed description of how he uses I-Charts to help his students become more motivated and interested in the topics he covers in class. http://www.weac.org/News/1998-99/sept98/read.htm

Inquiry Chart
The authors of this site offer a description of an I-Chart, explains how it is used, and includes a downloadable version to be printed. http://www.teach.virginia.edu/go/readquest/strat/icha rt.html

Viking Voyagers: Navigating Online Content Area Reading
The author of this lesson focuses on student investigation of the Viking culture. Provided within are ideas for using an I-Chart on the Viking topics of religion, warfare, daily life, leaders, and sagas. http://www.readwritethink.org/lessons/lesson_view. asp?id=919

Keeping an "I" Out for the Answers
The author of this lesson provides teachers with a way to help students learn to work together with the use of an I-Chart. http://www.beaconlearningcenter.com/Lessons/ 5296.htm

References

Blachowicz, C., & Ogle, D. (2001). Reading comprehension: Strategies for independent learners. New York, NY: The Guilford Press.

Heilman, A. W., Blair, T. R., & Rupley, W. H. (1998). *Principles and practices of teaching reading* (9 th ed.). Prentice-Hall, Inc. Upper Saddle River: NJ.

Hoffman, J. (1992). Critical reading/thinking across the curriculum: Using I-charts to support learning. *Language Arts*, *69*(2), 121-127.

Piaget, J. (l988). Education for Democracy. In K. Jervis & A. Tobier (Eds.), Education for democracy: Proceedings from the Cambridge School

conference on progressive education. Weston, MA: The Cambridge School.

Randall, S.N. (1996). Information charts: A strategy for organizing student research. Journal of Adolescent & Adult Literacy, (39)2, 536-542.

Go to Strategy of the Month Archive.

◄◯◯ ARCHIVE / STRATEGIES ◯◯►

Go to Adobe PDF instruction page.

Last Updated May 25, 2005
forpd@mail.ucf.edu | (866) 227-7261 (FL only)

FOR-PD is a project of the ITRC @ UCF College of Education and administered
under a grant from the Florida Department of Education and Just Read, Florida!