

**Title of Session: Targeting Librarians! - Metacognition**

**Moderator: Lesley Farmer**

**Title of File: 20030521tl**

**Date: May 21, 2003**

Tappedin transcript 2003.05.21 17:55:34

Room: Hot Tub Conference Room

BJ joined the room.

BJ waves to Kathy.

KathyBu: Hi!

BJ: Lesley is running a little late...must be caught in traffic

KathyBu: How do I wave?

LesleyF joined the room.

BJ grins...hi, Lesley!

LesleyF: basking time!

BJ: Kathy, type a colon and the word waves :waves

KathyBu: Greetings, Lesley! I made it.

AldenCC joined the room.

LesleyF: Hi, Alden!

LesleyF: Here for the librarians' session? We're talking about metacognition.

LesleyF: Kathy, I

AldenCC: Hi Yes mostly learning how the process works

LesleyF: PProcess of Tapped In or of metacognition?

AldenCC: No the process of how TappedIn works.

LesleyF: Ooh, and you started in the fancy new space. Great!

AldenCC: I'd like to listen and see what I can learn.

LesleyF: Basically, in this session we'll be conversing about ways that students can think about how they learn. This session will be more talk than some. I'll share a couple of web pages that give a background on the topic.

BJ: Before you begin, Lesley...

BJ: a reminder to click on the ACTIONS drop down menu and scroll down to DETACH to make your text window larger

LesleyF: Alden, before we start, let me introduce myself. I coordinate the library media teacher program at Cal. State Univ. Long Beach, and am active in the field, especially in writing.

LesleyF: Kathy and Alden, want to introduce yourselves?

KathyBu: I'm a former public librarian, now a prep teacher in the school library for K-6 in Sacramento, CA.

AldenCC: Hi. I'm a middle school science teacher at Groton-Dunstable In Massachusetts

LesleyF: So we're bi-coastal.

AldenCC: Looks that way!

LesleyF: Alden, do you deal with metacognition in your classes -- having students reflect on their thinking and their processes? I would guess that it would be a by-product of science labs, if you do them.

AldenCC: Yes. It is a great way for students to interpret or relate what they learned.

LesleyF: So how do you approach it?

AldenCC: It depends on how much time we have. Mostly it's just a reflection of their ideas.

LesleyF: So they talk about what they learned -- what went well and where they got stuck?

AldenCC: Yes and they hopefully can see that in science your hypothesis doesn't have to be right. Their data, their results are based upon their own set of data and conclusion they draw should be based on that.

LesleyF: Do you do this as a class discussion or do you have students share with each other in pairs or small groups? And then report out.

AldenCC: I find students think their work is wrong if they had turned out in a different way than what they were expecting. We have individual ideas and then work them together with a partner/group. Eventually we generate a class discussion

LesleyF: Kathy, what about you? How are you able to address this issue?

KathyBu: We work with the research process as well and it is a challenge for them to realize that a wrong hypothesis is as valuable as a right one in terms of learning from it.

LesleyF: Yes, kids are looking for the right answers and the right way to respond to a teacher...

AldenCC: It is amazing at the speed that you reply back. Typing is not my thing.

ABSOLUTELY I agree with Kathy

LesleyF: Interesting when you think about it because it's the wrong answer, the unexpected results, that stick in your mind and really get you to think.

LesleyF: It's the larger type that helps, Alden...

KathyBu: I worked with a GATE class 4-6 on web site evaluation from a previous Tapped In session and they got very excited when they understood how different sites have different purposes. To inform or to advocate or persuade.

LesleyF: SO, getting back to the idea of metacognition, it's the concept of not just DOING stuff, but reflecting and thinking about each step, and learning from the PROCESS.

AldenCC: In science the ability to control our variables is extremely important. Yes

LesleyF: Right. So a web site isn't just good or bad. It depends on the goal and the context.

LesleyF: The idea of variables works extremely well in this point about web evaluation.

KathyBu: What seems challenging initially is to get the kids to question themselves initially as to how they process information.

LesleyF: All other factors being held equal, which web site would be more appropriate for a younger reader, for instance.

LesleyF: Yes, asking the right question can sometimes be more insightful than the answer (I know it's a cliché but it's true)

KathyBu: The GATE kids thought they knew about searching till I pointed out that not all web sites are equal in information.

LesleyF: And there are SECTIONS within a web site that might be good while the other parts are crummy or not useful.

KathyBu: Yes.

AldenCC: Yes

LesleyF: SO, let's start with the whole research/scientific process and see how metacognition works and can be done with kids.

KathyBu: Sounds good.

AldenCC: Ready

LesleyF: An oft forgotten first step is identifying the task. It's often a problem -- or a desired outcome.

LesleyF: How often do kids get to do that task, really? Is that sometimes the prevue of the teacher?

AldenCC: To be honest no where near enough to help them become good thinkers.

PaulH joined the room.

AldenCC: To be honest no where near enough to help them become good thinkers.

LesleyF: I remember a clever approach that my favorite science teacher did: he would show a fascinating phenomenon, and then we would have to ask him questions about it (like 20 question format) that would lead to hypotheses.

LesleyF: hi, Paul!

PaulH: greeting all!

KathyBu: Hi!

LesleyF: Here for the librarians' discussion?

PaulH: Sure!

LesleyF: We're talking about metacognition and information literacy.

PaulH: Love the topic...

LesleyF: We started by looking at defining a task.

PaulH: ok.....

LesleyF: If nothing else, kids can self-identify what they know already, and what they need to know in order to do the task.

LesleyF: Shall I give an example?

PaulH: YES!

KathyBu: Could we have an example k-3 and one 7-8?

LesleyF: OK, let's start simple: middle school.

AldenCC: Some times we do include writing down anything that comes to mind about a subject. Then we may make a diagram of similarities and differences about something and try to apply it.

LesleyF: Students might see that their local creek seems dirty. They would find out why it's dirty, and then figure out how it could be cleaned up. This might even work as an elementary task depending on how it's approached.

LesleyF: That's a good approach, Alden.

LesleyF: That works if you're trying to compare two different situations -- in my example, you might examine a clean creek and a dirty one, and define what makes one clean and one dirty: particularly for K-3 kids.

LesleyF: Then that same strategy could be used to list a variety of possible factors that distinguishes the two kinds of creeks, and compare the properties of those factors.

AldenCC: Yes I was just going to say comparing and contrasting is very important

PaulH: Venn diagram.....

LesleyF: SO some of the factors to tell that one is clean and the other is dirty could be: appearance of the water, smell, density?, kind/number of organisms in the creek -- and

alongside it. Would speed of the creek be a factor? In this way, you can determine whether a variable is important or not.

AldenCC: Try to isolate your variables and test each one and only one at a time to get measurable data.

LesleyF: Paul's Venn diagram is good.

AldenCC: yes its visual

KathyBu: How do we encourage reflection on each step of this?

LesleyF: You can also do Concept maps and T charts.

AldenCC: Concepts maps would be great!!! What are T charts?

LesleyF: 2 columns: likes and differences/one per column

LesleyF: You can add a 3rd column for "interesting"

LesleyF: It's called a T chart because it looks like a giant T.

AldenCC: I'd encourage reflection on each step by having some type of written response after each variable tested.

AldenCC: Ok thank you

LesleyF: Yes, written or a drawing

KathyBu: Yes, visual representations seem to speak to the struggling student.

LesleyF: I also encourage students to do these kinds of starting activities alone, then in pairs, and then in 4s to see if there are common areas of understanding or puzzlement.

LesleyF: I agree, Kathy.

LesleyF: The other thing that can be done at this point, especially if the task or outcome is teacher-driven, is to ask clarifying questions -- the students doing the questioning.

LesleyF: And the teacher should strive for deep questions, not just font size or deadlines.

LesleyF: So they might be questions of "what would a good solution look like?"

KathyBu: Talk more about how we move them into the deeper questions?

LesleyF: What are the critical features of a good solution?

LesleyF: At this point, I'd really like to show you a Web site that has a streaming video and script on just this subject. With the new Tapped In, I'm not exactly sure about the process...

LesleyF: What I want you to do when we get to the spot is to click on Step 1. And then click on the streaming video. I'll give you about 8 minutes to see it.

LesleyF: <http://www.csulb.edu/~lfarmer/infolitwebstyle.htm>

LesleyF: If you don't get sound, then read the transcript beside the video line.

KathyBu: Okay, I read it because can't do the streaming video on this computer.

PaulH: I am dl ing it now.....

PaulH: Time will be approx.12 min

LesleyF: In case we don't get to them now, let me give you a couple more URLs:

PaulH: I minimized the dl and came back to you all....

LesleyF:

<http://www.mdk12.org/instruction/success%5Fmispap/general/projectbetter/information%5Fliteracy/il-3-4.html>

LesleyF: In any case, if you look at the text, you can see how kids can think about what they're doing at each point.

LesleyF: Let's do some generalizing at this point.

LesleyF: We saw that kids can use graphic organizers (concept maps, T charts, Venn, etc.) to help them organize their ideas and come up with new ones.

LesleyF: We saw that kids can draw their reflections or note their processes.

LesleyF: Have you heard of Cornell notes?

KathyBu: I've heard of them. Done at a local Junior hi.

KathyBu: Not sure of what they are though.

LesleyF: There are a couple of ways to do this: using 2 columns where the left side includes the facts/readings and the right side has the students' comments/questions/I wonder/agreements or disagreements.

LesleyF: It can also be done by top and bottom, like an iceberg, where the top contains the notes/facts and the bottom (the dark/deep side) contains the students' own ideas/emotions.

LesleyF: Indeed, part of metacognition should include the affective domain: what kids are feeling at the time.

LesleyF: We find that kids have mixed emotions when they start a new task or project.

LesleyF: They either get emotionally hooked and become eager, or they DON't get engaged, and tend to lose it -- those are the hard ones to get going.

KathyBu: Have you heard of IIM: Independent Investigation Method: a 7-Step Method for Student Success in the Research Process? Not to distract from what you're saying about feelings.

LesleyF: Even the excited ones reach a point where they hit the wall.

LesleyF: Tell me more about the IIM. I haven't run across that term.

KathyBu: So many of my Title I kids are struggling with feelings before they ever get an assignment.

KathyBu: It's by Cindy Nottage and Virginia Morse.

KathyBu: isbn 1-57652-008-0. I feel it improves on the Big 6 and has lots of handouts which promote critical thinking.

LesleyF: I just checked out the site...

LesleyF: There are several models out there...

LesleyF: I think it's good to have a repertoire of tools to promote metacognition.

KathyBu: I've used this with second graders and gotten them to think more clearly.

LesleyF: Even asking what went well -- and why. And what DIDN't go well -- and why. And what you might do about overcoming the obstacles. That's where the teacher/librarian and student peers can help.

LesleyF: Another MAJOR point that usually falls within the responsibility of adults, but should be handled by kids more, is deciding the best way to share findings/results.

KathyBu: Yesterday, while I gave out RIF books, I let 6th graders look through the World Almanac (they'd used before) and at the end asked them what they found there that they didn't expect to find. Good responses.

LesleyF: As kids think about whether a picture is the best way to explain a cycle, for instance (and it usually is), or deciding if a video is the best approach -- or an oral talk, it gets them to think about how information is conveyed.

LesleyF: I like your approach on the almanacs -- easy and insightful!

KathyBu: Let me clarify, while individual students selected their RIF books.

KathyBu: I see students relate so much more strongly with the visual than the written. I want to speak through that more to reach them and then teach them the rest.

LesleyF: One thing I'm noticing: too often we set kids in a receptive mode -- absorbing information. We don't spend enough time on having them EXPRESS and GENERATE information.

LesleyF: Metacognition helps kids see that they play an ACTIVE role at each point.

KathyBu: Yes! Like having them assemble some of what they know in a form to share with others.

LesleyF: So as they assemble, they need to think about how they're assembling their findings. Peer review is good for that.

KathyBu: You are helping me grasp a better way to present some of the tasks to students so they would care about them.

LesleyF: WHY did you choose this picture to represent poverty, for instance.

LesleyF: The use of analogies and metaphors is also another way to get at metacognition.

KathyBu: I find music videos really touch kids in a deep way and can start them reflecting.

KathyBu: Of course you have to be careful in what is used.

LesleyF: If the U.S. and Iraq were to be represented by pieces of music, what kind of music would it be, for instance?

LesleyF: John Philip Sousa? finger cymbals?

KathyBu: And wouldn't there be more than one for each country because not everyone agrees!

LesleyF: Minor key? Cacophony?

LesleyF: Yes, indeed, Kathy.

LesleyF: So no one answer. But each answer would need to be justified. Which gets at metacognition.

KathyBu: And who would you be, create a profile after you have picked the music and act it out for us as if you were that person.

LesleyF: See how it wraps around? You'll have fun following the tacit thread in the transcript.

LesleyF: Yes, good questions...

LesleyF: Good activities...

LesleyF: And they are doing at multiple grades....

LesleyF: Just the level of detail/depth of abstraction/generalization differs.

LesleyF: So do you have some good tools to use/try out?

KathyBu: It's easy to communicate excitement about this, because I get in a real creative space. This discussion has clarified more about how to proceed. Thanks!

BJ: Great! Thanks, Lesley, Kathy and Paul. Really interesting and stimulating discussion

LesleyF: As always. Thanks for hanging in.

KathyBu: Good to have more jewels, Lesley. Thanks!

LesleyF: Now time to dive into the hot tub...

LesleyF: Thanks, BJ.