

Moodle Discussion**Developing Critical Thinkers**by [Rebecca Brink](#) - Tuesday, 4 February 2014, 8:52 PM

In the text *Developing Critical Thinkers* by Stephen Brookfield, it was suggested that we model critical thinking. It is stated that "Good modelers exhibit the following characteristics: clarity, consistency, openness, communicativeness, specificity, and accessibility." Of these characteristics, which do you feel makes the for the best modeler? What experiences have shaped your viewpoint?

**Re: Developing Critical Thinkers**by [Christopher Wolke](#) - Wednesday, 5 February 2014, 5:19 PM

Rebecca,

I believe that clarity for a good modeler is key. This is because when others are seeing something done for possibly the first time or discovering something on their own, then the clarity of how it was modeled is very important to their ability to replicate, amke sense of, and learn the task that was being modeled.

My experiences as a science teacher, who does between 51 and 57 labs depending on the level is that if the lab process isn't modeled and explained carefully, then the students will not always be able to complete or develop the higher order thinking which the lab intended.

Chris @ Crystal Lake

**Re: Developing Critical Thinkers**by [Rebecca Brink](#) - Wednesday, 5 February 2014, 6:58 PM

I agree without clarity direction is lost and students are not able to obtain higher order thinking. Do students understand the importance of clarity by us just modeling it, or do they need to learn why clarity is important through some other technique?

**Re: Developing Critical Thinkers**by [Christopher Wolke](#) - Thursday, 6 February 2014, 8:43 AM

Rebecca,

I help promote clarity with students when I have them present problems or explain something to the class. I am always asking them "WHY?" until they have provided the explanation at a sufficient depth. Then I ask another student in the classroom to paraphrase what was just explained. This keeps other students involved, and keeps them thinking. Once a few students have presented over the course of the class, then I no longer have to ask "WHY?", they explain the "WHY" on their own, and sometimes even share little annictdotes on how they can remember what was said.

Chris @ Crystal Lake

**Re: Developing Critical Thinkers**by [Rebecca Brink](#) - Thursday, 6 February 2014, 4:50 PM

Your questioning technique reminds me of my five year old son. He is very curious and always asking why. When I respond he always seems to find something in my explanation to question. (Yes at times I think it is to elicit more attention, but most of the time he is genuinely wanting to know.) I think it is important to take it back to that level and inspire that same curiosity at other levels.



Re: Developing Critical Thinkers

by [Christopher Wolke](#) - Friday, 7 February 2014, 8:33 AM

My goal is to get my students back to that inquisitive nature that they were born with before school took the creativity out of them. I want them to ask why and question everything. This is a big change for many of them because they are used to just being told something and being asked to regurgitate it later.



Re: Developing Critical Thinkers

by [Elizabeth Hecht](#) - Wednesday, 5 February 2014, 7:30 PM

I think openness and communication are most crucial to modeling critical thinking. This may be because these areas are strengths for me compared to other characteristics like specificity! But, openly communicating your own process seems to be the the most logical way to model critical thinking. I think my opinion on the subject was at least partially formed by participating in STEM training sessions for several years. We spent a lot of time explaining our approach to complex math problems and listening to others explain. Of course the idea was to implement this process in our classrooms. In many ways I have found this process to be a very effective form of assessment because I understand very specifically what a student knows and more importantly what their next step is. I think our class reading also support openness and communication, Brookfield in his book *Developing Critical Thinkers* also supports the importance of openness and communication in Chapter 5 where he describes listening to and affirming students in the critical thinking process.



Re: Developing Critical Thinkers

by [Rebecca Brink](#) - Thursday, 6 February 2014, 5:47 PM

I agree that communication is important. No matter what career our students seek out communication, both written and verbal, are of utmost importance. Thinking of the CCSS Math Practice Standards, the one that comes to mind is "construct viable arguments and critique the reasoning of others." How is it that we could create this in an online environment?



Re: Developing Critical Thinkers

by [Elizabeth Hecht](#) - Thursday, 6 February 2014, 7:02 PM

That is where I start to feel again the need for applications like Skype that allows for more interactive interaction. Actually, anything that included a visual aspect would be workable for constructing and critiquing arguments. It would be fun to even do something like those Facebook movies everyone has now. What concerns me about that is spending too much time on products and getting away from the heart of the learning, so then I am back to Skype.



Re: Developing Critical Thinkers

by [Lisa Jones](#) - Friday, 7 February 2014, 1:21 AM

Elizabeth,

I agree that communication is very important and I think that clarity goes hand in hand with that. Without communication (two-way street), the student can't gain the clarity they need in order to do any critical thinking on a project. The communication from the teacher has to be there in order to make sure the student understands and is able to continue building on their knowledge and retaining it.

Thanks.

Lisa



Re: Developing Critical Thinkers

by [Elizabeth Hecht](#) - Saturday, 8 February 2014, 9:01 PM

I agree about clarity, in fact I feel that all of the characteristics in this scenario blend together. Good communication is by nature clear, clarity requires communication.



Re: Developing Critical Thinkers

by [Lisa Jones](#) - Sunday, 9 February 2014, 3:00 PM

Elizabeth, That's a really good way to put it. To me it's like a circle that can turn either way and all things are connected. The communication has to flow back and forth from the facilitator and student to keep clarity constant and consistent. Thanks! Lisa



Re: Developing Critical Thinkers

by [Lisa Jones](#) - Friday, 7 February 2014, 1:16 AM

Rebecca,
I would have to say that clarity is the most important. Critical thinking and analytical thinking are basically the same thing, and it is hard for anyone to do this unless they have clarity. I am a why, how, when, where type of learner and when I see the picture, I learn and retain more.
Thanks.
Lisa



Re: Developing Critical Thinkers

by [Rebecca Brink](#) - Friday, 7 February 2014, 3:23 PM

Lisa,
What are some examples of what clarity look like? Or maybe it would be easier to address situations in which clarity was lacking and the difficulties it created.
~Rebecca



Re: Developing Critical Thinkers

by [Lisa Jones](#) - Sunday, 9 February 2014, 3:13 PM

Hi Rebecca, That is really a good question. It's like a Catch-22 situation to me. I think you always have to try to make sure the students are receiving clear and concise messages and understanding of material, but you also have to assess this to know if the clarity is there. I think that yes, you will only find out in some instances if clarity exists when the student shows clear signs of difficulties. I believe the self-assessments are very helpful for each student, who also has a responsibility to speak up if they don't understand, to keep them on track and at the same time can show the teacher that their means of communication are clear and effective and that clarity exists when the students are showing evidence of understanding the material - through testing, discussions, and other activities. I guess a simple example that would show clarity to me, would be the outcome of a test. If the student performs well, then I believe this would be a good example of what clarity looks like. Whatever we can try to do to head off the difficulties/challenges ahead of time, I think will come easier to us as we start working with the diversity among students and get more experience. Unforeseen difficulties will also pop up and it's how we address them that become important. Thanks. Lisa