

Inquiring Minds Want to Know

“The whole art of teaching is only the art of awakening the natural curiosity of young minds for the purpose of satisfying it afterwards” (France, 1932).

Children are innately curious, and this curiosity naturally leads to inquisitiveness. Some educators hear the term inquiry and automatically think science. However, inquiry is what naturally creates the need to know. In all subject areas, this natural inquisitiveness needs to be recognized and nurtured. Yet, “...being questioned about anything often leaves some of us feeling uncomfortable. We are threatened by questions, fearing loss of control of the decision-making process or over the entire situation (Barell, 2003, p. 7). Often teachers mistakenly think that “good teachers” know all the answers. However, many times a “good teacher” is one who guides students as they find answers to their questions. It is also important for educators to understand they can be creative and inquisitive without allowing for creative inquiry from their students. For example, a teacher can come in dressed like Ben Franklin to give a lesson on electricity, or the teacher could create a song about voyages to the New World for a history lesson, which would make them, not their students, creative. An educator may also be very good about asking students questions as they present a lesson, yet this is not the same thing as allowing the students, themselves, to be inquisitive. The goal must be to “give students experiences with inquiry-based instruction, in which they raise questions, solve problems, analyze data, and draw conclusions. Such processes provide the scaffolding that can lead to genuine creative inquiry” (Starko, 2013, pp. 54-56)

Providing all students with the opportunity to ask questions is essential. Keep track of the number of times a question is raised in your class throughout the day. If possible, keep track of who asks questions throughout the day. Videotaping your classes or even just tape-recording your classes over an extended period of time can provide you with a great starting point for increasing inquiry in your class. One must get a realistic gauge of the level of inquiry in one’s classroom before she can begin to measure the change. Once enough information has been collected to determine the present level of inquiry in the classroom, set a goal for change. If only an average of five questions were posed during a day, aim for an average of seven or eight per day. If the same three students ask the majority of the questions, make it your intention to increase the number of students asking questions. If the majority of the questions were asked by male students in the class, make it your goal to have an equal number of questions raised by the boys and the girls.

One of the best ways to get students to develop creative inquiry skills is to present a situation in which a problem must be solved. At Perry Hughes Upper Elementary, the principal, Mrs. Cooke, desires to foster inquiry within the school and is requesting that teachers work together to ensure inquiry is more prominent in grades 3- 5. During a team meeting several teachers began to discuss issues that students could help them solve during the inquiry process. All the fish in the school pond have died. Why did this happen? The school choir has been selected to attend a national competition, but cannot attend due to financial constraints. How can the choir raise funds? The school lunch menu has been changed to meet healthier guidelines, and now the percentage of students buying school lunches has decreased by 20%. Is there a better solution that would still allow for a healthier lunch? The teachers discuss employing methods like KWL to encourage questioning.

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What I Already K now:	What I W ant to Know:	What I have L earned:

Mr. Melvin, a third grade teacher, has his students work to figure out fundraising for the choir trip. Ms. Wilson, the fourth grade teacher and avid gardener, is excited to have her class work on the lunch menu. Miss Lozano's fifth grade class will incorporate revitalizing the pond into their overall science curriculum. The teachers have their students fill out the first two columns before each of the learning activities and then complete the last column when the activity is over.

The K-W-L graphic organizer provides an excellent opportunity to find out not only what students know, which gives you a better idea of your starting point, but it also allows you to hear about what your students are interested. With this knowledge, you are empowered with the ability to extend your lesson into areas that are interest to your students. Also, it is beneficial to provide inquiry options that allow for overt and covert questioning. Some students will be too hesitant to ask a question aloud but would be more willing to submit a written question. Students could place questions in a question box or tack them up to a designated area on the bulletin board. You could set aside time one day a week to address these questions. Creating a set time to talk about student generated questions is a way to show you value their inquisitiveness, and in the process you will increase the chances of generating enthusiasm and inquiry throughout the class.

Providing an opportunity for a question to be posed is only a part of the recipe for success. The most important ingredient comes next...how a teacher chooses to respond to an inquiry. The attitude and tone used by a teacher when responding can either foster or squelch an atmosphere of inquiry within the classroom. Many adults can vividly remember a time in which a teacher's chosen response shut down further inquiry from the individual asking the question and many times from others as well.

Barell outlined the kinds of teacher responses that invite thoughtfulness (as cited in Barell, 2003, p.53):

- "Please tell us more. We're interested in your thoughts." (Elaborating on your thinking)
- "Can you explain or expand on your thinking?" (Clarifying, explaining)
- "How can you relate this to what Jennifer said?" (Seeking relationships)
- "Can you relate this to other concepts/ideas we have been studying?" (Seeking relationships)
- "How did/does this make you feel?" (Sharing feelings)

We might also communicate our interest in students' reasoning:

- "How do you know? What led you to that conclusion?"(Seeking reasons for conclusions)
- "Can you tell us how you figured that out?" (Encouraging students to develop metacognitive awareness of thought processes)

The manner in which these responses are delivered will contribute greatly to the atmosphere of inquiry in the classroom. Teachers need to communicate to students that we are interested in and value the way they think and how they feel.

Many times the development of creative inquiry within a classroom has been hindered by the immense emphasis placed on student testing achievements. However, it is possible for students to gain a deeper understanding of content through inquiry and problem-based learning.

References

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