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Facilitating Student Curiosity: Strategies and Resources

By Guest Blogger on January 25, 2018 2:24 PM



Editor's Note: On a recent, **#Globaledchat** on Twitter, I asked the **Right Question Institute**'s Director of Strategy for their Education Program, Andrew P. Minigan, to facilitate a conversation on encouraging student curiosity in the classroom. Here are some ideas we discussed during the chat. Join us every Thursday on Twitter for #Globaledchat at 8pm Eastern time.

by guest blogger Andrew P. Minigan

Nobel-prize winning physicist Richard Feynman put it quite simply: "All learning must begin with the posing of a question."

Nowadays, educators around the world recognize just how powerful a student-formulated question can be for sparking new thinking and learning. Traditionally, the rate of children's question asking declines significantly as they enter formal school; yet, in recent years and with the emergence of 21st century skills, educators have begun integrating new strategies and approaches to teach students how to ask their own questions. During a recent Twitter chat on facilitating curiosity, 50 educators shared their collective wisdom and insight in response to the following questions, summarized below. You can peruse the entire chat here.

Why is curiosity important for teaching and learning? How does curiosity support student learning in your classroom?

Facilitating student curiosity can help to shift the onus of learning from the teacher to the students. Ellen Gammel, a high school English teacher formerly at Fitchburg High School in Massachusetts, uses strategies such as the **Question Formulation Technique** throughout her semester, providing opportunities for students to drive their own learning.

One of her ninth-grade students reflected at the end of the semester, "Curiosity is what drives children and teens to want to learn, even when they don't realize it. Knowing the answers are a roadblock while questions lead to unexpected adventures and a new way of thinking. Everything starts with a question, even if you don't realize it."

When educators cultivate a learning environment that actively promotes student curiosity and creates a space for students to formulate, work with, and explore *their own* questions, it can fundamentally change the way students view their role in the learning process.

Although a curious mindset is often considered a prerequisite for question asking, educators who teach students to formulate their own questions are observing something novel: by teaching students how to ask and work with questions, their students are becoming more curious, engaged learners in turn. Many chat participants noted how curiosity can be a *driving* force for student thinking, learning, and engagement. For example:

- Curiosity drives their learning! Asking questions and hearing others' questions pushes us into new ways of thinking. Knowing how to ask questions makes us grow. #globaledchat @MissParkSES
- Curiosity is foundation of learning. Connecting relevance to curiosity is important in the classroom so that each student is connected to their learning #globaledchat @mmoll74



Why is it important to honor students' questions as part of their learning process?

Starting a lesson or unit with students' questions rather than what students already know and are able to answer is a departure from the traditional classroom format. When educators pivot from ignorance as a weakness to ignorance as a strength and a starting point for new learning, it can level the playing field so *all students* feel comfortable inquiring.

To convey a message to students that their questions are important, heard, and can help to drive learning, educators can:

- · Equally acknowledge students' questions
- Avoid placing value statements on student questions (e.g., "that's a great question!")
- Make visible students' questions exactly as they state them.

A high school student from Hazard High School in Perry County, Kentucky, captured this sentiment well when they shared that having to ask their own questions: "challenged me to breaden my thinking as an active participant in my learning rather than simply sitting, listening to a http://blogs.edweek.org/edweek/global_learning/2018/01/facilitating_student_curiosity_strategies_and_resources.html?cmp=eml-enl-eu-news3&M=58...

their own questions. Challenged the to broaden my thinking as an active participant in my learning rather than simply sitting, listening to a lecture. The 'no judgment zone' made me feel at ease, so I was open to more opportunities of learning."

During the chat, educators touched on many themes of equity, student-centered learning, critical thinking, and engagement when considering why it is important to honor students' questions:

- Honoring all questions, honors all learners. The questions are what lead us to new learning and new discoveries #globaledchat
 @anichols32
- Honoring all questions gives students an opportunity to participate and be a part of the experience. It also creates a great safe space which may trigger more ideas/questions. #Globaledchat @Chemteach201

How do you incorporate students' questions into the learning process? How do student-generated questions differ from questions posed by teachers?

Students' questions can be used in all subject areas and across all grade levels. Whether it is the beginning, middle, or end of a unit or lesson, educators can build in time for students' questions for myriad purposes.

For example, student questions can be used to **design an experiment**, **analyze claims and statistics**, **read primary source texts or images**, and much more. Through thoughtful lesson design and backwards planning, educators can have students use their newly formulated questions to drive their authentic, student-centered inquiry.

• I've ended up learning new things alongside my students based on their questions. So much more fun than asking questions I already know the answers to and waiting for students to answer them #globaledchat @MissjenwaWalker

How can students' curiosity and ability to ask questions help them become more engaged global citizens?

A citizenry that is able to ask questions, rather than leap to assumptions and answers, can more effectively participate and contribute to a well-functioning democracy. Asking a question can be the first step in participating and engaging as a citizen on both the micro and the macro (global) levels.



Questions are essential for learning about our community and neighbors, our own country and its people, and the citizens of other countries. And by asking questions, people can grow to be more empathetic individuals who recognize different perspectives.

Ultimately, a question can be a catalyst for breaking down prejudices and biases. Educators as social change agents can help students equip themselves with the ability to be global citizens, think and act democratically, and become lifelong learners simply by teaching to formulate questions and follow their curiosity.

- Questioning develops critical thinking and exposes students to different perspectives. Teachers need to be purposeful in having these learning spaces. #globaledchat @edtechjoe
- By expanding their inquiry to the world, it becomes smaller and more relatable, thereby breaking down prejudices. #globaledchat @mrsmaliablake
- The little ones continually ask questions and we can connect those questions to our community, our island or the world. They want to know it all. #globaledchat @kthomas4808

What are strategies and resources you use to facilitate student curiosity and to teach students how to ask questions?

Educators shared many valuable strategies and resources that they use to facilitate student curiosity in their classrooms, including:

- The Question Formulation Technique is a simple yet powerful strategy developed by The Right Question Institute that educators around the world use to teach students how to formulate, work with, and use their own questions.
- **Project-Based Learning** (PBL) is an approach to learning that emphasizes student inquiry and student-driven learning. There are wonderful resources on PBL over at **TeachThought**, **P21**, and the **Buck Institute for Education**.
- **Primary source materials** from the **Library of Congress** and the **Inquiry Design Model** from C3 Teachers are great to use in concert to launch student driven learning.
- · Wonderopolis offers multi-disciplinary resources and content to support students' critical thinking and curiosity.
- Genius Hour provides plenty of materials and resources to facilitate a genius hour in your classroom.
- Visible Thinking is a research-based approach from Project Zero that promotes student thinking and curiosity

• Recap is an innovative digital platform that teachers can use to lacilitate a question-led conversation.

Connect with the Right Question Institute, Andrew, Heather, and the Center for Global Education on Twitter.

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