

In Conversation with Jennifer Watt

Inquiry-Based Learning in Secondary

SUMMARY KEYWORDS

inquiry, students, learning, questions, inquiry-based learning, curiosity

SPEAKERS

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RESOURCES

[Natural Curiosity Published by The Laboratory School at Dr. Eric Jackman Institute of Child Study \(OISE/UofT\)](#)

How to Assess Higher-Order Thinking Skills in Your Classroom by Susan M.

[Geniushour.com](#)

Shayle Graham

Hello colleagues and welcome to TDSB Human Library: Conversations Around Equitable, Anti-Racist and Anti-Oppressive Practice. We are your hosts Shayle Graham and Dr. Stephanie Fearon from the Equity, Anti-Racism and Anti-Oppression team. We have an insightful conversation in store for you today. Are you ready to talk courageously? Let's get into it.

Shayle Graham

Hello colleague community and welcome to the TDSB Human Library Podcast Series. In this episode, we are going to discuss inquiry-based learning in secondary with educator, bestselling author, curriculum leader and Program Coordinator TDSB's very own, Jennifer Watt. Hey, Jennifer.

Jennifer Watt

Hey, Shayle, thanks so much for having me.

Shayle Graham

So, Jennifer, for those of us that are new to inquiry, can you take a moment just to share with us, you know, what inquiry means to you. And in addition to that, what sparked your interest in this approach to learning?

Jennifer Watt

Thanks for the question. For me, personally, inquiry has three meanings. First, I see inquiry as making sense of the world. And all the joy and the struggle that comes with that. Inquiry is about asking questions and being curious about people, phenomena, and ideas. I think about inquiry as being rooted in curiosity, that natural curiosity seems to deplete with age. And many people, I included, feel that this could be due to our education system, since that depletion of curiosity and wonder is not really a natural thing that's supposed to be happening. The second way I think of inquiry is as a pedagogy or a teaching method. I think of inquiry as a way to activate learning and to provoke wonder. And it's a pedagogy that believes fundamentally that knowledge isn't fixed. It's not just handed to you in a book or by somebody telling you that it is true. In inquiry learning, you actually have to build knowledge. And we build knowledge together. And this is really an impactful and liberating way to view learning and to view teaching.

Jennifer Watt

Inquiry is a pedagogical process, where we kind of make room for the unexpected. And it's a place where we value the struggle of sense making. And we create new ideas, and we grapple with problems that are really important in our community. I also think of inquiry as a set of skills, and inquiry as a disposition that can be developed. Inquiry learning has a long history in education and is based on the notion that there are really effective processes that we can use to solve problems and create new knowledge. So, this type of learning can really be explicitly taught to our students.

Jennifer Watt

And thinking about what sparked my interest in inquiry learning. I guess when I think about myself as a child, and my memories of what learning was like for me, I remember that I really enjoyed learning from my elders, my grandparents and parents. And I really loved learning about things in the natural world. I was, I was really curious. I love to observe plants and animals and natural phenomenon, like the weather. And looking back, learning was natural and propelled by my own curiosities. And also looking back at my own schooling and my teachers, the ones that encouraged my curiosity and, and honoured my choices and modelled their own sense making were the most profound and impactful teachers to me.

Jennifer Watt

I was also a really voracious reader. So, I found a lot of pleasure interacting with the ideas of others. And I felt that the authors that I were reading were like friends to me. And they opened up a world of people and opportunities and questions, and explanations and ideas I'd never really considered. And it was through reading those critical and creative ideas of others in books, I think my mind was opened to the idea that the world was in transformation. And it was not to be accepted as it is. So, I continue to be a very curious person. And I've always I'm that person who likes to ask the question, why and how. And I like to make sense of things and understand concepts in different ways, and how they apply to what I'm see happening in the world. So, when I became a teacher, I began to pursue my interest in the ways that people learned.

Jennifer Watt

I guess it wasn't my education, my teacher education program, that I began to feel those tensions that exist, between what I saw as inquiry-based learning, and those more traditional approaches. So

reading and discussing theorists such as John Dewey, and Paulo Freire, Maxine Greene, bell hooks highlighted tension to me, and it seemed that in the world of Secondary Education, where there are these specific disciplines, such as Math, English science and the Arts, that's reflected in how we're trained as teachers in traditional learning models where the emphasis is on the recall of facts that are important to each of those disciplines. And the teacher is the provider of that factual material. Students tend to be treated as objects of assistance and they're passive recipients instead of capable and developing critical thinkers. So that idea that students learn how to learn, as opposed to what to learn was not the most common viewpoint, especially in secondary education.

Shayle Graham

So, Jennifer, I'm just going to thank you for making that distinction between learning what to learn and learning how to learn. That distinction is extremely important when we are discussing inquiry-based learning in its entirety and authenticity. And you talk more about this in the two books that you've written. I realize that you are a bestselling author. I've been working alongside of you, and I didn't know that, that you have written two books. The first is "IQ: A Practical Guide to Inquiry-Based Learning" and the second is "THINQ 4-6: Inquiry-based learning in the junior classroom (THINQ)". Typically, when I hear about inquiry-based learning, it's in relation to young children. But what's so fascinating about your work is that you really highlight the use of inquiry in secondary schools. I'm like boom, bam, like, it's, it's brilliant. So let me ask you this. Why do you think it's important for secondary students to be engaged in inquiry-based learning, especially in the 2021 classroom?

Jennifer Watt

Right, Shayle, inquiry learning is, you know, not just for younger children. In fact, it is really important for our secondary students, and really, for adult learners too. So, when I think of secondary students, I'm really thinking about how students today are total consumers and creative producers of information through social media in ways that they never were before. For students living now in this information age, teachers and textbooks are no longer the expert sources of knowledge. When they're excited by learning, students can access all the sources of information they want to satisfy their curiosity. But of course, what's important is students still need to hone their analytical skills, when faced with so much information from so many sources.

Jennifer Watt

Some secondary students still believe that cutting and pasting from the internet is research. So direct teaching of the skills of like organizing notes properly citing sources will benefit them in their academic and professional futures. But what's even more important is that teachers should model and facilitate the analytical thinking that is required to conduct an inquiry. So, teachers have to expect that the process and the products of learning will not look the same as they once did. So, we should be encouraging online collaboration, solving problems in a social network, as well as sharing ideas, conclusions and questions with that wider digital world.

Jennifer Watt

I think one of the key reasons inquiry learning can be so powerful for secondary students, is it really allows them to practice over and over and over again, that analytical thinking that's going to help them as they enter into many different places and spaces in their future. So, some of the analytical questions

I like to work with the students that really anchor inquiry learning are the following. So, students should ask themselves, what is my fundamental purpose in this inquiry, or this problem trying to solve? What is my point of view with respect to this issue or problem? What is the most basic concept in this question that I'm trying to answer. What assumptions do I make in my reasoning? What are the implications of my reasoning, if I am indeed correct? What information do I need to answer my question or solve my problem? What are my most fundamental inferences or conclusions?

Jennifer Watt

So secondary students have the ability to engage in some deep self-reflection on these analytical questions, if encouraged to do so, given the opportunity to practice over and over and over again, I think that is important, as secondary students know that their own perspectives are not universal, that that ability to live with ambiguity, and to have intellectual humility is really important in our world. And our secondary students can really deepen these qualities as they pursue those inquiry questions that move their minds and their hearts.

Shayle Graham

You know, Jennifer, the way that you articulate your thoughts around a free based learning in secondary, you are so engaging, it sounds so appetizing. And you can just get a sense of how passionate you are, you know, around this topic and how knowledgeable you are. And with that being said, considering the challenges around shifting to this approach because this approach is we know it's very unconventional, it is quite different than our traditional ways of teaching. Would you be able to share some strategies with us, that secondary educators can use as a first step to shifting this approach from theory into practice?

Jennifer Watt

Yeah, sure. As a first step, teachers may need to challenge their own notions, as well as their students' notions about what knowledge really is. The fact that knowledge is living and changing because it is personally and socially constructed as something to talk about a lot in our secondary classrooms. So, I suggest, you know, find a theory or an idea that's really important and fundamental and essential in your course, and map the changes that have occurred over time to that theory or idea. Create learning narratives where students can notice and name how their thinking has changed over time, on an issue that impacts their lives. I would also suggest it's important to broaden what we traditionally think of as a source. So, answering questions and problem solving should involve our friends, or community or family members as appropriate sources. So, we really need to move beyond published texts when examining inquiry issues.

Jennifer Watt

So I spent a lot of time teaching the skill of asking questions. So, one of my mantras is, if there is no questioning, there is no thinking. So I use different types of text, videos, images, social media posts, artwork, creative performances, and even athletic performances, and get students to ask questions. And to ask questions for different purposes, and from different points of views. One of the types of questions that students should learn how to ask our inquiry questions. So, you know, inquiry questions are that, you know, invitation to think are totally open ended, but they require support or justification to be answered. Often teachers and students aren't really sure about whether their inquiry questions are

good questions. So, one criteria of a good inquiry question is whether it evokes strong emotions and feelings. If the question generates debate and controversy, you've likely got yourself a good question. So, this requires the co-creation of success criteria for what makes good questions with your students and what makes your students good questioners.

Jennifer Watt

You also need to support students during the inquiry process by planning to uncover some preconceived ideas and misconceptions, locating selection of appropriate sources from a variety of perspectives, and helping the students assess credibility of sources. So just remodel these skills every day we practice in practice, we analyze social media posts, news, speeches, documents, artifacts, theories, proposals, formulas. I think you should spend considerable time having students strengthen their thinking, by considering their own assumptions and biases, and not just looking for them in all these various text forms. I mean, even questions are never neutral. In selecting sources or analyzing sources, bias influences reasoning. So, students can learn to actively question their beliefs and consider alternate views and update their topic knowledge. I think as teachers, it's really important to encourage and applaud students who are changing their minds.

Jennifer Watt

I would say you should also find yourself a friend who wants to deepen their inquiry practice and plan together, maybe even more than one friend. And with your friends you should advocate for and plan for opportunities for discussion and sharing a practical strategy on how inquiry learning can be taken up in different classes and courses. So ultimately, students can make connections between the act of knowledge creation that is important in each discipline, and, and to highlight those transferable skills. I would also suggest, you know, one of your friends, is your teacher librarian, because they are experts in inquiry learning, and they can be so helpful and not just pointing you to the best resources to help your students, but they can offer specific strategies on how to teach explicit skills of gathering, assessing and evaluating sources.

Jennifer Watt

So I would say if you're hesitant to begin inquiry learning in your secondary classroom, I would encourage you to take the leap now, and be prepared to feel a bit like you have lost control as a teacher, because you have, but in a good way. So, you're now free to co-learn with your students and to become intellectually and emotionally engaged in new ways that can't happen when you're merely following, you know, the lock step traditional curriculum.

Jennifer Watt

So to begin, you need to find out how much experience your students might have had an inquiry learning, and you need to know about them as people -- Are they curious, what are they curious about? Do they know how to analyze and evaluate sources? Do they feel inspired to change something that impacts their futures? Are they willing to consider new ideas? The best inquiry happens when we really know about our students. And finally, I would advise everyone to create an assessment plan that maps the when and the how you would purposely analyze student work throughout the inquiry process. An assessment plan also includes how you will evaluate inquiry skills and any other curriculum outcomes that you might have identified as crucial to student learning in a specific inquiry. And remember that the

burden of assessment doesn't fall to you alone, students really need to be partners in the assessment process.

Jennifer Watt

So, to finish up, I just, I would just say to everyone, remember that inquiry-based learning in your classroom will look and sound very different over time, as both you and your students develop more expertise and experience. At some point, your classroom will function very differently than it does now. And you and your students will be excited to pursue those essential questions that have personal significance.

Shayle Graham

Thank you, Jennifer, for that we are so privileged to have you with us today. You were such a wealth of wisdom, and knowledge and expertise. Colleague community, I hope you were taking notes. Jennifer, on behalf of the Equity, Anti-Racism and Anti-Oppression Team, we would like to thank you for stopping by and chatting with us around inquiry-based learning within secondary school settings. Before you go, I do have one ask, can you share with us a few resources that educators can dive into and indulge in, if they would like to learn more about inquiry-based learning or require further support in this area?

Jennifer Watt

Thanks for having me today. I really enjoyed talking to you. I think I would suggest Natural Curiosity. It's published by the Jackman Institute of Child Study Laboratory School OISE/UofT. And even though it's aimed at primary grades, and it's for children, it's such a beautiful book on the power of inquiry. And I think the theories and the examples in them can really be pulled up by teachers in other divisions intermediate or secondary, and they have a fantastic new addition to which focuses on the importance of Indigenous perspectives. in children's environmental inquiry. And the second resource, I'd say it's hard to pick a digital resource specifically, but there is a website geniushour.com. It's a site that explains that whole process of students exploring their own passions and wonders for a set amount of time, which usually ranges from an hour a week, to 20% of their total class time. And at that site, they give you a lot of practical ideas on how to bring that into your classroom space. I would also suggest a book on assessment by Susan M. Brookhart and the book is called, "How to Assess Higher-Order Thinking Skills in Your Classroom". So, I think for a lot of us, when we try to inquiry learning, assessment can be a bit of a challenge. And I think Susan Brookhart does a good idea in providing again, practical examples of assessment tools on all of those skills that permeate inquiry models. So, thanks so much, Shayle.

Shayle Graham

Okay, colleagues, that's all for today. We look forward to you joining us for our next courageous conversation. If you liked this episode, don't forget to share it with a colleague, and post it on social media using the #tdsbtalks. Bye for now.