

## Nurturing curiosity through inquiry: *strategies to harness, provoke and sustain curiosity*

- Presentation to the Canberra PYP network

- 8 August, 2017

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*These are text-slides only. Much of this presentation was shared through photos, clips and stories from classrooms but this collection of some slides from the talk may help jog your memory!*

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- "At birth we are endowed with the dispositions and mechanisms to discover the world and make it a meaningful place in which to live. Without a desire to look, to explore by hand, by mouth, eye and ear we would not grow up to be the human beings we are" (John Barrell 2003:12)

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## Curiosity helps learning 'stick'

- Several studies have made correlation between individuals who showed curiosity in a learning situation – and long term, more accurate memory of what was learned. (Singh, 2014)
- When people are curious about something – they learn more, and better. (Engel, 2013)

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## Bringing 'fluency' to inquiry

Curiosity helps 'grease the wheel' of inquiry. Without it, inquiry is dulled and mechanical. Curiosity brings with it the passion needed to sustain and persevere through problems and challenges. It keeps our eyes and ears open to the unexpected.

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## Killing off curiosity...

- Mastery rather than inquiry seemed to be the dominant goal for almost all of the classrooms observed. In fact, it often seemed that finishing specific tasks was more salient than actually learning the material. When children asked questions to seek nonsocial information, it was rare for a teacher to pursue the topic. It was not unusual to hear a child express interest in something and for the teacher to ignore the interest or explain that it was off topic ... (Engel)

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## Curiosity in the PYP

- As one of the 'attitudes' identified in the PYP, curiosity has a central place in an IB school. In addition, the emphasis on inquiry as an approach to designing and teaching integrative learning journeys ('Units of Inquiry') suggests an investigative stance – one that is dependent on the learner's questions and hunger to find out.

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## •7 steps to amplifying curiosity in the PYP classroom

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### Step 1. Be curious – and show it. Curious adults help nurture curious children

- Parents who model an exploratory stance- who see dialogue as an opportunity for sharing and exchanging information – are likely to have children who emulate that stance' (Harris: 2012: 34)

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- "The extent to which a child is curious about her world is strongly predicted by the curiosity her parents, and later on her teachers and other caring adults, exhibit. Children are likely to seek explanations for unexpected events when they see adults do the same and when they trust that adults will provide opportunities to explore."

• Gottlieb discussing the work of Susan Engel (The Hungry Mind: The Origins of Curiosity in Childhood by Susan Engel) <http://www.learningandthebrain.com/blog/the-hungry-mind-the-origins-of-curiosity-in-childhood-by-susan-engel/> Dec 2014.

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- Sharing *your* wonderings
- Being fascinated by what your students have to say/share
- Sharing your awe and wonderment
- Taking something you genuinely want to inquire into and showing them how you go about it
- Keeping an inquiry diary of the things that fascinate you
- Being intrigued by what they have to share
- Being intrigued about a word/math challenge etc

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### Step 2: Mind your language

It is discourse rather than delivery of content that helps shape the manner of learning and the attitude towards it.

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### Language as a 'lubricant' for powerful learning

- "I wonder..." represents a class of linguistic lubricants. It marks the offering of a possible hypothesis, or a tentative idea with an invitation, (but not an insistence) to pick it up and improve it or take it further. For group discussions to take place such lubricants are necessary. Other examples include "maybe", "seems like", "perhaps" or "I think"...this kind of "exploratory talk" brings multiple minds together to work on the same problem in powerful ways.

Peter Johnson

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- *What does that make you wonder?*
- *What makes you say that?*
- *So how is your/our thinking changing?*
- *What an interesting question...where might you take that idea?*
- *Now THAT's got me thinking in a new way...*
- *Isn't this fascinating? How INTERESTING – that's really got my brain working hard. I LOVE this feeling!*
- *What if? Maybe? Possibly? Might? Could?*

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How we respond to children's questions influences the way they think ABOUT their questions...and indeed about the nature of learning itself

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### Step 3 Give them something to be curious about!

- "When students are curious about something, *they seek an explanation*. This motivates them to persevere in seeking the information they now WANT to learn, what they need to be taught"
- Willis, J. 2010

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- Stimulating classroom activities are those that offer novelty, surprise, and complexity, allowing greater autonomy and student choice; they also encourage students to ask questions, question assumptions, and achieve mastery through revision rather than judgment-day-style testing.

- Kauffman, reporting in: <https://www.theatlantic.com/amp/article/534573/>

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- "It's when teachers make you just HAVE to know something – you SO need to find it out because it doesn't make sense or there is something missing or you all have like different opinions about something." (year 5 student, St Fidelis PS)

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#### Step 4: Curate for Curiosity

- The sterility of emotionally drained and aesthetically neutered learning materials and environments contribute to low learning achievement.

21st Century Learning Initiative [www.21learn.org](http://www.21learn.org)

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#### Step 5 Slow down!!!

- “All year I worked with my students to loosen them and wake them up—to get them agile and responsive and able to move laterally in their learning as they consider task, purpose, technology, and place. To look first inside themselves, and move outward from there. On a daily basis I fought my instincts to plan and control and *cause*, and their instincts to be “finished,” listless, and compliant. ...”

- Heick, T. “Want to become a better teacher? Slow down” 2014

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Do you think adults are curious?

*“Not really – they know most things so they don’t have to ask about stuff”*

*“Well....I think old people are. Its when you are middle aged that you aren’t curious.*

*“What makes you say that?”*

*“When you are middle aged you are so busy working and running around that you don’t have time”*

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Time...

- Less is more
- Permission to keep going
- Spaces in the conversation
- Returning and digging deeper
- Time to be in flow

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#### Step 6: teach through questions

**Seek out, value and use questions (students’ and your own) – and stay open to possibility**

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*a question is a sign of engagement...it is the smoke signal of the fire of curiosity and, as such, should bring delight to the teacher (Bond, 2008)*

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This means...Relinquish control...learn to be at home in the fog..

Curiosity thrives best in an “environment where the rigid adherence to a plan is not a necessity”

Eisner, E. 2002: 7

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The best laid plans ...

When students reveal ardent curiosity - we are often best to “go with the flow” rather than teach against the tide. Spontaneous inquiry can co-exist with the more “planned” variety but the former will include a passion and persistence often unmatched by the contexts we fabricate for students.

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Step 7: Provide time for personal, ‘open’ inquiry

“For students to be curious, they must feel worthy of seeking, entitled to ask, encouraged to explore.”

Shonstrom (2014)

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Teaching as Inquiry

Remain passionately curious about your students...

- Ask: what are they revealing to us?
- Where to next?
- How are they thinking about this?



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•Remain curious about teaching and learning

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remain curious about yourself...

- How am I learning this?
- What am I noticing?
- How does this feel?
- What am I wondering?
- What's different? What's the same?
- What is this reminding me of?

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- All of us want to know how the world works: why a piece of music is beautiful to one person and cacophonous to another, how engines are able to make cars move, why green leaves turn brown and helium balloons stay aloft, or how new languages develop. Living means perpetually searching for meaning. Schools need to be places that keep this search alive. Brooks: 2004:12 (EL\_ 2004 sep)

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