

Visible Learning for Mathematics (K-12)

**PRESENTED BY****Connie Hamilton****SERIES SESSIONS**

| Date | Time |
|-------------------|-------------------|
| November 17, 2017 | 9:00 AM - 3:30 PM |
| January 22, 2018 | 4:30 PM - 5:30 PM |
| March 23, 2018 | 9:00 AM - 3:30 PM |

**LOCATION****Ramada Plaza Calgary Airport - 3515-26
Street NE****FEE****\$175.00****QUESTIONS?****Contact Us:****crc-register@arpdc.ab.ca
403-291-0967****REGISTER ONLINE****Visit our website to register:
crcpd.ab.ca**

Program

AUDIENCE: K-12 EDUCATORS, ADMINISTRATORS AND COACHES ARE ENCOURAGED TO ATTEND.

Rich tasks, collaborative work, number talks, problem-based learning, direct instruction...with so many possible approaches, how do we know which ones work the best? In *Visible Learning for Mathematics*, six acclaimed educators assert it's not about which one—it's about when—and show you how to design high-impact instruction so all students demonstrate more than a year's worth of mathematics learning for a year spent in school.

Registration in this 3-part series includes:

- A copy of the book, *Visible Learning for Mathematics*
- Part 1: November 17, 2017 full day session with Connie Hamilton
- Part 2: January 22, 2018 webinar with Connie (webinar will be recorded)
- Part 3: March 23, 2018 full day session with Connie
- Automatic registration in CRC's Smart Talk math community for the 2017-2018 school year.

Smart Talk contains online division level specific Math Collaborative Communities (Div 1, Div 2, Div 3, Div 4) that will run parallel to this series. We have dynamic facilitators from various school jurisdictions to help facilitate the Smart Talk conversations and sharing.

Part 1: Making Mathematics Learning Visible

This full-day workshop demonstrates how using the right approach at the right time helps educators intentionally design classroom experiences that hit the surface, deep, and transfer phases of mathematics learning. This framework helps educators reach the level of rigor today's students must meet through the combination of conceptual understanding, procedural fluency, and application. The workshop also delves into the role of clear learning

intentions and success criteria as the first step to better learning, as well as the kinds of rich mathematical tasks and mathematical discourse central to each phase of learning. Participants will be actively engaged in doing mathematics during the session.

Participants will:

- Apply the principles of Visible Learning research to the mathematics classroom
- Understand that there are three phases of learning and the unique importance of each: surface, deep, and transfer.
- Learn which mathematics practices have the greatest impact on student growth in each phase (and which have the least) to maximize teaching time
- Strategize what practices to implement when in a student's learning.
- Understand how clear learning intentions and success criteria are the bedrock of any good mathematics lesson
- Understand the importance of rich tasks and mathematical discourse at all phases of rigorous learning.

Part 2: Webinar

We have a 1 hour webinar scheduled with Connie Hamilton. The specific content of this webinar will be determined after part 1 is completed, as this will allow Connie to customize the webinar based on the needs of our specific group. This webinar will be recorded and available to all registered participants.

Part 3: Surface - Deep Learning in Mathematics

Surface learning isn't superficial. It isn't algorithms and memorization of facts. In the surface learning phase, students explore mathematical ideas to develop initial conceptual understanding and then formalize that understanding by developing procedural skills and vocabulary. This is the essential foundation that sets the stage for deeper learning. This workshop focuses on practical classroom strategies and routines for surface learning in mathematics. Participants in this full day workshop will understand the type of rich tasks and math talk appropriate at the surface phase, and experience practice in some of the strategies most appropriate to surface learning. Participants will be actively engaged in doing mathematics and continually reflecting on their own practice during the session.

Participants will:

- Apply the principles of Visible Learning research to the mathematics classroom with a focus on surface learning.
- Understand the importance of surface learning and experience the kinds of rich tasks and mathematical discourse that work best at this phase
- Learn which mathematics teaching and learning practices have the greatest impact on student growth at this learning phase (and which have the least) to maximize learning
- Reflect on their own practice and strategize what practices to implement for surface learning, keeping rigor in mind.

For those participants who wish to dig deeper into the content, we invite you to join one of our division level specific Math Collaborative Communities.

[Division 1](#)

[Division 2](#)

[Division 3](#)

[Division 4](#)

Presenters

Connie Hamilton

has over 20 years in education as a teacher, instructional coach, and administrator. A connected educator, she asks questions, makes connections, and develops systems to enhance professional learning and collaboration.

Connie Hamilton is one of Corwin's lead associates for the Fisher/Frey framework and has co-created all of the Visible Learning for Mathematics curriculum with Linda Gojak and John Almarode.

Registration Notes

Fee includes a copy of the book, Visible Learning for Mathematics, lunch during the face to face sessions, and membership to CRC's Smart Talk math community.



**Providing Quality Professional Learning
Opportunities to K-12 Education Staff**