

Assessment

Assessment is an integral part of instruction and involves the ongoing gathering of, and acting upon, evidence so that teachers and students can determine how best to support and extend their learning.

- What is valued as evidence of learning?
- How is the purpose of assessment different from the purpose of evaluation?
- How can assessment be used for teachers, parents and students?
- What do students learn from assessment? What can they learn?
- How might assessment measure growth versus achievement?
- How do our assessments honour the fact that learning is ongoing and individual?
- What are your beliefs and practices around re-assessments?



Professional Learning

As teachers, we have a responsibility to reflect on our practice, to set and to pursue goals to guide our professional growth, and to support colleagues in their learning.

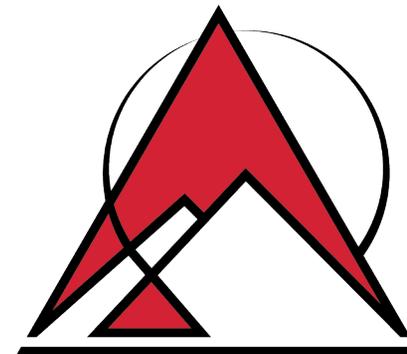
- In what ways can one engage in professional development?
- What are your most effective sources of professional development?
- How do you support ongoing professional learning?
- How do you know you have grown professionally?
- How do collaborative and individual professional development work together?



BC Association of Mathematics Teachers

A Provincial Specialist Association
of the BC Teachers' Federation
email: president@bcamt.ca

www.bcamt.ca



BCAMT

British Columbia Association
of Mathematics Teachers

Beliefs & Questions



Background

There are some questions around mathematics education in BC that are common and difficult to answer. It is not as much about getting final answers to these questions as it is about valuing the discussion and ideas that often result when these questions are posed to a group of educators. To this end, the BCAMT has compiled a list of thought-provoking questions to be used in workshops or even just around the lunchroom table. We include a perspective for each of the topics, and this is intended to add a dimension to your own discussions around these questions. We know that good ideas and personal growth often result from collegial interactions and discussions, so we hope that this pamphlet can be a starting place for this to happen.

Numeracy

A numerate person applies and communicates mathematical understanding and ways of thinking to engage in interpreting, analyzing, and solving problems in a variety of situations.

- What are the differences between numeracy, number sense, and number facts?
- Is mathematics a subset of numeracy or vice versa?
- What practices support student growth along the numeracy continuum?
- How are numeracy and literacy related?
- What can we do to improve the public view of numeracy?
- Is numeracy an achievable goal for everyone?



Curriculum

A mathematics curriculum should value, and define developmentally, both mathematical concepts that are coherent and connected, and competencies through which students engage in the learning and the doing of mathematics.

- What does “coherent and connected” mean?
- What does it look like to value both concepts and competencies?
- Is mathematics best described as a linear sequence of learning, a connected web of learning, or both?
- How does a change in curriculum influence our practice?
- To what extent does a resource inform our implementation of the curriculum?
- A strong curriculum values depth over breadth. To what extent does a curriculum need to define the depth specifically?



Teaching & Learning

Effective teaching of mathematics engages the students themselves in the *doing* of mathematics. It recognizes the importance of collaboration, communication, and reflection to support student learning towards conceptual understanding and fluency, as well as a positive disposition in mathematics.

- What does it mean to *do* mathematics?
- Why is it important for students to have a positive disposition towards mathematics?
- How can we encourage a positive disposition in our students towards mathematics?
- How can we encourage more student engagement and ownership in their learning?
- What does fluency in mathematics look like?

