Shifting Gears ...

Using a teaching and learning framework to drive pedagogical change

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What’s under the hood?

TRUE OR FALSE?
1. We are born with all the brain cells we will ever have.
2. PET scans show that the resting female brain is as active as the activated male brain.
3. Males can store more trivia than females for a longer period of time.
4. The communication centre and emotional memory centre of the female brain is larger and contains greater neural density than the male brain.
5. In most cases the female brain matures earlier than the male brain.
6. Oxytocin, a brain chemical that promotes bonding, is much more functionally present in female brains than male brains.
7. Sitting still in chairs for extended periods of time supports optimal student learning.
8. Good teachers keep the learner’s attention for less than half of the time they are in contact.

Tinkering with the Engine
### TOPIC/UNIT

### DESIRED RESULTS

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<tr>
<th>Outcomes:</th>
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### ASSESSMENT FOR LEARNING

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### TEACHING AND LEARNING ACTIVITIES:
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## DESIRED RESULTS

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What learning outcomes will this unit/lesson attempt to produce?

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How will students show that they can apply/explain the information or concepts in order to demonstrate understanding?

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What provocative/big issues are at the heart of the unit/lesson?

What issues will foster a transfer of learning to other topics or situations?

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What specific knowledge will students acquire?

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What specific skills will students acquire?

## ASSESSMENT FOR LEARNING

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What authentic performance task(s) will students undertake to demonstrate the desired understanding?

What criteria will be used to judge the performance?

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What other evidence (e.g. quizzes, tests, homework, teacher observations etc) will show student achievement of the desired results?

What opportunities will there be for reflection, self-assessment and improvement?

## TEACHING AND LEARNING ACTIVITIES:

What learning experiences and instruction activities will be used to assist students to achieve the desired outcomes?

- **W** = where is the unit going (from the student’s perspective)?
- **H** = hook and hold student’s interest?
- **E** = equip students with skills, experience ideas, explore issues?
- **R** = opportunities to rethink, reflect and revise their work and understanding?
- **E** = allow students to evaluate their work and progress?
- **T** = tailored to suit the different needs, interests, abilities of learners?
- **O** = organised to maximise engagement and effective learning?
The rest of the vehicle

**DIMENSION 4**
While human beings are capable of thinking skilfully, it is their intelligent behaviours – sometimes referred to as “habits of mind” -  that provide the basis of personal academic growth. For example, in order to engage in effective thinking, and in particular the development of knowledge, skills and understanding, students might need to be equipped with the ability to manage their impulsivity, display empathy, be inquisitive and persistent.

These intelligent behaviours encompass all subject areas taught at Cranbrook and they are applicable to adults as well as students. They are part of the culture, values ethos and norms of the entire school community.

The sixteen intelligent behaviours integral to the Cranbrook School Teaching and Learning Framework are:

- applying past knowledge to new situations;
- finding humour;
- creating, innovating, imagining;
- responding with wonderment and awe;
- acting with understanding and empathy;
- questioning and posing problems;
- managing impulsivity;
- persisting;
- remaining open to continuous learning;
- taking responsible risks;
- thinking flexibly;
- striving for accuracy and precision;
- thinking about thinking (metacognition);
- thinking and communicating with clarity and precision;
- thinking and working interdependently;
- gathering data through all senses.

Students are assisted to develop intelligent behaviours by their teachers, tutors, directors, conductors, coaches and parents who model, teach and reinforce these same behaviours.

**DIMENSION 5**
Assessment for Learning acknowledges that assessment should occur as a regular part of teaching and learning and that the information gained from assessment activities can be used to shape the teaching and learning process. It provides students with the learning opportunities to achieve the desired learning outcomes identified at the beginning of the unit of work.
Searching for spare parts?

- Grant Wiggins and Jay McTighe, *The Understanding by Design Professional Development Workbook*, ASCD, Alexandria, 2004
- Grant Wiggins and Jay McTighe, *Understanding by Design*, ASCD, Alexandria, 2005