The Need for Innovation in Professional Learning

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Why Do We Need Innovation in Professional Learning

Because most professional learning and development has:

- Little impact on teaching
- No impact on student learning
Compliance OR Curiosity and Commitment
Shifts to Inquiry Mindsets: Student learning in the past
<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td>My job is to learn curriculum content determined by the teacher</td>
<td>My job is to actively engage in identifying my learning goals and co-construct their meaning with my teachers</td>
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<tr>
<td>Assessment – I receive marks from my teachers and this reflects my ability</td>
<td>Assessment – I work with my teachers to identify what I know and need to know next to reach my goal</td>
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Inquiry questions

How am I doing?

Where am I going?

Where to Next?

Students
Teacher learning in the past
Teacher Learning Now
The Teachers’ Point of View

From

- Professional development is something I do to improve my teaching
- I receive knowledge and skills from experts to help me improve my teaching
- I assess students to find out about their ability and what they know

To

- Professional learning is about improving outcomes for targeted students
- I need to identify PL goals and actively problem-solve teaching-learning challenges to meet them
- I assess students to find out about the effectiveness of my teaching and what I and the students need to learn next
Inquiry questions

Where are we going?

How are we doing?

Where to Next?

Students

Teachers
An inquiry approach ensures active learning and problem solving on the part of teachers.
So, what’s the evidence?
One of the top performing multi-lingual, multi-cultural systems in the world

http://www.conferenceboard.ca/hcp/provincial/education.aspx
Teacher Professional Learning in High Performing Systems

- Inquiry – based
- Collaborative
- Linked and coherent
- Takes place over time
- Professionally led
- The ‘right’ focus

http://www.learningfirst.org.au
http://www.oecd.org/edu/school/talis.htm
Teaching and Learning International Survey
Professional Development Project in Literacy

Over 300 primary schools in New Zealand

Writing: Average gains 2.5 to 3.2 expected rate over two years
Lowest 20% 5-6 times expected rate

Reading: Average gains 1.5 to 1.9 expected rate over two years
Lowest 20% 3 times expected rate.

Sustained over the three year monitoring period
What’s going on for our learners?

How do we know?
What is our focus?
What will we do differently?

What’s going on for our learners?
How are we contributing to this situation?

Have we made enough of a difference?
How can we learn more about what to do?

FOCUSING
DEVELOPING A HUNCH
LEARNING
TAKING ACTION
SCANNING
CHECKING
Engaging in Inquiry Requires New Ways to Think about What It Means to be Professional: Adaptive Expertise
Adaptive Expertise

Educators who:
• Are responsive to the needs of students
• Constantly seek new knowledge and understanding
• Actively explore alternative solutions
• Think evaluatively and check impact
• Act transformatively

Le Fevre, Timperley, Twyford & Ell (forthcoming)
Routine to Adaptive Expertise

Routine Expertise
• Apply a set of skills with increasing fluency and efficiency
• Own beliefs are taken for granted and not open to discussion or scrutiny
• Based on notions of novice to expert – practice makes perfect

Adaptive Expertise
• Flexibly retrieve, organise and apply professional knowledge
• Aware of own beliefs underpinning practice and when they get in the way
• Recognise when old problems persist or new problems arise and seek expert knowledge
Two students are often off-task in maths. They do not appear to be motivated to even attempt the work.
An example from assessment

**Routine expertise**

- Assessment and learning are sequential
- Assessment results reflect student capability
- Investigating the impact of teaching undermines professionalism

**Adaptive expertise**

- Assessment and learning are integrated
- Assessment results are about the effectiveness of teaching
- Investigating the impact of teaching is essential to improvement
I can’t believe that half the students flunked the test and it was so easy!
Different approaches to problem solving
A Personality Trait? or Something that can be Learned?
Why Worry?

• Routine expertise works in stable situations with some certainty
  • Standard teaching procedures get the job done well (efficient)
  • Still requires expertise to do so

• Adaptive expertise needed in a changing and unpredictable world
  • Difficult to codify practice
  • Diverse learners in complex settings interacting in unpredictable ways with an uncertain curriculum
Clearly defined problems with clear solutions

Routine Expertise

Increasing Complexity

Difficult to define problems with less clear solutions

Adaptive Expertise

From Le Fevre, Timperley, Twyford & Ell, forthcoming
Technical problems

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<th>Have no predictable known solution</th>
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<td>Are relatively easy to identify</td>
<td>Usually feel uncomfortable to identify and are easy to deny or resist</td>
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<td>Have known solutions</td>
<td>Cannot be ‘fixed’, but can be navigated through</td>
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<td>Solutions can be taught</td>
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<td>Can look up the answer - usually a technical problem</td>
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Clearly defined problems with established solutions  

Routine Expertise

Difficult to define problems with less clear solutions

Adaptive Expertise

Increasing Complexity

Responsiveness

From Le Fevre, Timperley, Twyford & Ell, forthcoming
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<td>Best supported by a teacher &gt; learner relationship, where the teacher is the expert (may be PD provider &gt; teachers; leader &gt; teachers)</td>
<td>Best supported through collaborative inquiry</td>
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Routine Expertise

- Clearly defined problems with clear solutions
- Receiving knowledge
- Working with known solutions
- Assuming effectiveness
- Avoiding different perspectives

Adaptive Expertise

- Increasing Complexity
- Difficult to define problems with less clear solutions
- Seeking new knowledge and understanding
- Identifying alternative solutions
- Thinking evaluatively and checking effectiveness
- Welcoming different perspectives

From Le Fevre, Timperley, Twyford & Ell, forthcoming
Seeking new knowledge and alternative solutions
Welcoming different perspectives
Acting transformatively
Thinking evaluatively

Routine Expertise

Clearly defined problems with established solutions

Inefficient response

Increasing Complexity

Responsive

Adaptive Expertise

Difficult to define problems with less clear solutions

Ineffective response

Receiving knowledge
Avoiding different perspectives
Preferring predictable solutions
Adjusting incrementally
Assuming effectiveness

From Le Fevre, Timperley, Twyford & Ell (2019)
For too long ...

We have been trying to solve complex problems with routine expertise