Australian teachers experience professional learning through open education

(In the context of STEM education)

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Australia
A teachers’ experience
(Teacher 1)

Source: Harvard education guide
A teachers’ experience
(Teacher 13)
Why does my research matter?
The STEM Rhetoric

A crisis....

International benchmarks for student assessment

Program for International Student Assessment

Student participation and performance in STEM subjects is of concern

Teachers need to be more effective, quality teaching.....
Teachers are not happy with their professional learning as a ‘culture of compliance’ instead of a ‘culture of professional learning’ (Liberman & Pointer Mace, 2008)
Professional development...

'Spray on'
(Mockler, 2005)

'Drive by'
(Senge, 2000)

'Hit and run'
(Loucks-Horsley, 1999)
Open Professional Learning

#OPL

Web tools and platforms

Resources

Practices
What are the *different ways* in which Australian teachers experience professional learning through open education? (In the context of STEM education)
What is an experience?

We are all experiencing the **phenomenon** of ‘attending OE Global 2018’

What does this experience ‘attending OE Global 2018’ **mean** to you?

What are you **aware** of while experiencing ‘attending OE Global 2018’?
What theoretical lenses informed my research?

From the teachers’ perspective

**Phenomenography**
Marton (1981)
- Interpretive
- Relational view of experience
- Meaning
- Awareness
- Variation of experience

**Transformative Learning Theory**
Mezirow (1991)
- Adult learning
- Meaning of experience
- Perspective change
- Transformative learning

Source: Wellcome Images
What did I do to explore experience?

Data collection in the ‘Open’

OER Hub research question remix

Expression of interest n=48
Pilot survey n=3
Survey n=35
Pilot interviews n=3
Interviews n=18
Reclaiming Autonomy

Teachers are aware of the decisions they make and the independence they have over their professional learning journeys.

Meaning is related to teachers reclaiming autonomy over their professional learning.

I just find there is a great divide between what the school thinks I should partake in and what I think I should partake in.

I'd just say the incredibly expansive open-ended nature of what, when, where, how, why you can learn.
Becoming More Knowledgeable

Teachers are **aware** they can use information to build their STEM pedagogical and content knowledge.

**Meaning** is related to teachers becoming more knowledgeable about STEM education. Learning can be deliberate or incidental.

*Professional development is one thing I think I could probably say, on any given day through my social media feed I would see comments, tips, a link to a Ted talk, a short video clip. At the moment it's all the inspirational memes and quotes and things that come by you and just remind you about things that you decide might be important for you.*
Teachers are aware of participating in the learning process through interactions in a digital learning environment.

**Meaning** is related to teachers experiencing professional learning through open education as being part of something much bigger than what exists in their school-based professional learning environments.

*OK, the breadth and depth of interaction that you're able to explore in the open Web far surpasses what you'll have in the confines of your staffroom. I think that’s the beauty and that’s what attracts people to it.*
Amplifying Good Ideas

Teachers are **aware** of the formation, development, use and dissemination of ideas and role of serendipity in their learning.

**Meaning** is related to professional learning through open education as a creative process
Enhancing Student Learning

Teachers are **aware** of how they learn with, from and for their students.

The **meaning** of professional learning through open education as enhancing student learning.
Becoming More Self-aware

Teachers are aware of reflecting critically on their professional learning and practice.

The meaning of professional learning through open education is related to teachers becoming more self-aware.
The phenomenon of professional learning through open education is experienced as:

- Reclaiming autonomy
- Becoming more knowledgable
- Being part of something much bigger, more than just one teacher in a school
- Amplifying good ideas
- Enhancing student learning
- Developing self-awareness
Application of findings

• We must listen to what teachers have to say about their experiences
• Teachers learning from each other’s experiences
• Implications for how PL experiences are designed for teachers
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