Capturing Change And Experience Through Metaphor: Understanding The Learning Journeys Of Out-Of-Field Teachers

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Can you think of an object that describes learning to teach something new?
Recently, according to...

The problem: Teaching out-of-field is a problem in schools because it has the potential to damage Australia’s productivity.

The fix: professional development that upskills teachers. Recruiting teachers with industry experience.
Journey of learning to be an effective teacher is unique to the individual and school context

Teaching out-of-field adds particular demands on teachers.

Effects of these demands can:

• Build professional practice and identity, diversify teacher expertise and commitments
• De-stablise and lead to teacher attirtion, ineffective teaching, costs to the sector
1. As a problem to be fixed

OR

2. A part of the professional lives of teachers as a strategy for a) responding to teacher shortages (external), b) diversification of a teacher’s role (internal)

Where there is ...
3. Potential for learning, transformation, agency, identity expansion. Caveat: as long as the teacher:

- Operates within an adequate culture of support (emotional, pedagogical, social, sympathetic)
- Recognises their potential to learn, disposition to learning, and willingness to forgo efficiency for innovation (Adaptive expertise)

Therefore, implications for more than the teacher – locus of change shifts to also include school leaders, policy makers, whole school culture and community
Learning to teach when out-of-field

Teacher’s Professional Competence: Affective components

Aesthetic understanding:
- Knowledge
- Passion/motivation
- Identity

Identity as:
- Process and product
- Role vs. identity
- Doing, knowing, becoming, being

Lived experience

Teacher’s Professional Competence: Cognitive components

Cognitive models of learning

Shulman and others knowledge categories

Relationships between orientations, beliefs, practice

Self-efficacy

Adaptive expertise

Mediating personal lens

Communities of Practice

Change environment: Clarke & Hollingsworth

TOOF as the change environment

Social cultural

Boundary crossing

Professional learning principles

Learning trajectories
Learning to teach when out-of-field

Learning trajectories

Effects on the individual teacher
Power of the metaphor to communicate obtuse and abstract ideas, emotions

Metaphor facilitates reflection on the journey of teaching, learning to teach, identity development and other factors that come to bear and are often challenged at this time – confidence, competence, enjoyment, passion.
Methods

Two tools:

(1) Fortune lines

(2) Metaphorical Object
Method 1. Fortune lines

Originally from White and Gunstone (1998) as part of conceptual change processes for teachers and pre-service teachers:

- Examining how something changes over time or across a sequence of events

<table>
<thead>
<tr>
<th>Symbols of Fortune Lines</th>
<th>Meanings of Symbols Fortune Lines</th>
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<tr>
<td>➡️</td>
<td>Developing, positive fortune lines</td>
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<td>➡️</td>
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<tr>
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<td>⬇️</td>
<td>Changing, variable fortune lines</td>
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From ÖZARSLAN and ÇETİN (2014)
The story of Little Red Riding Hood was divided into 10 chapters for children to then put into a fortune line.
Used in other studies to examine:

Affective response along a trajectory of learning (Wall et al, 2010)

- examined whether +ve or –ve trajectory, complex and simple;
- y axis = neutral, neutral=–happy, happy and could quantify # graphs falling into these ranges.
- Peaks and troughs lines; curve and blip lines
- Led to understandings of students’ conceptions of learning

Mentor/Mentee interview #2 – teacher and mentor asked to complete 4 graphs showing change over time (x=time, y=level of perceived competence and enjoyment):

- In-field competence and enjoyment
- Out-of-field competence and enjoyment
What could capacity relate to: knowledge, skills, beliefs, identity, orientation, resilience, effectiveness, competence, self-efficacy
Method 2. Metaphors in education research and work:

- provide structure to the data/analysis tool (Carpenter, 2008);
- understand a familiar process in a new light (Carpenter, 2008);
- exploring abstract, novel and speculative ideas (Yob, 2003) can lead to new forms of conceptual insight (Zhao, Coombs, & Zhou, 2010);
- identify situation-specific interventions (Carpenter, 2008);
- framework for enabling people to make meaning of their lives (Lakoff & Johnson, 1980) and professional lives and identities (Midgely & Trimmer, 2013);
- evoke emotion (Carpenter, 2008).
Could you identify an object that represents your feelings about learning to teach out-of-field?

Why did you choose that object?
The participants and data collection

“Teaching Across Subject Boundaries” (TASB)

ARC Discovery (2015-2017)
3 universities, 6 schools,

Objects

4 schools
12 teachers but 1 teacher couldn’t think of an object:

Metaphors

3 schools
7 teachers (some with mentors)
Preliminary analysis

1. What did teachers fixate on in their object and its description?

2. What can we learn about the experience of learning to teach out-of-field (or teach new content)?

[How did they align with the fortune lines?]

-> Two metaphor categories: (1) Being a teacher (2) Teaching
Category 1: Being a teacher of new content/subject

Playdough 1 — “I have to be malleable and willing to change to help them”

Playdough 2 - “If I wasn’t forced to, I’d still be sitting there just as regular playdough”

Putty – “if you force it to do something it it, but it will also go back to what it was before”

BEING SHAPED – ones’ self and practice – external V internal agency
Category 1: Being a teacher of new content/subject

Tassie Devil and Little Miss Messy

“you’re feeling like you’ve just got control of it... it’s really busy and I don’t know got all these things going in your head ”

“Little Miss Messy because its just a ball of uncontrollable shit”

Disruption, out of control
“when you’re at the top of your game, you’ve got more space. If you’re feeling unorganised you’re at the bottom of the cone and you’re feeling squashed and you’ve got no room... A bit more knowledge, a bit more space”
Deflated football

“you might have been self-important; you might have been the best teacher out there – useful and you’ve been kicked around the park... suddenly you walk into a class and your ego takes a bit of a second place and things get pressured down and then you are sort of compressed down and then I think over time you start refilling yourself again with confidence”
Category 2: The practice of teaching new content

Whisk

“starts gently but then it's like nice and fluffy by the end of it, and it's good by the end of the term”

Soft to firm – tentative to confident/sure
“instead of a circle that rolls easily, it still rolls but just not as quickly... I’ve got to think about more how to make it move as naturally as my English does”

Hard to get moving, not as quickly
Rollercoaster

“there’s always those up and down days... I feel like it’s exciting, what’s going to happen next? ... for that first time when you’re going, slowly climbing up the rollercoaster and you don’t know where the drops going to come.”

Expecting and anticipating the challenges
Dimmer light

“It starts off, and it’s a bit dark. Like you walk in and it’s like, where the hell is everything... it’s not clear...Over time it gets brighter and clearer, and you can see exactly what you should be aiming for, or more exactly...”
Reflection – what did the metaphors show?

What was particular to being out-of-field?:

- **Agency** – external shaping vs shaping the self
- **Pressure** relating to developing knowledge
- **Disruption** due to newness, but then teachers navigating a way through the unknown, potential for learning
- **Learning curve** steep at the beginning, needing to establish or re-establish quality teaching and a sense of self

What is the expected learning outcomes for the out-of-field teacher?:

- A teacher has **shape** (which is formed by others or self - knowledge), **tidiness** (not messy - control), **confidence** (not pressure and insecurity in expertise - knowledge), **maximum usefulness** (rather than unintended purpose - calling)
- Gaining teaching efficiency and effectiveness depicted as **speed** (not stunted - acting), firm and **holding shape** (not runniness - affecting), **clarity** (rather than dimness or murkiness - knowing).
Metaphorical heuristic tools highlighted key moments, events, people that impact on feelings of confidence and competence.

Difficult to talk about out-of-field teaching without the use of metaphor. Helped to understand:

- The complexity of the experience, and the variety of experiences – potential for disruption vs edification. Dynamic and temporal for many. Part of their professional development as they generate and sustain quality teaching.
- Effect of context and inform school leaders and policy makers of the challenges and support needs without value-laden language. Need a way that to communicate the complexity of Out-of-field teaching that problematises the issue - becomes a research problem, not necessarily a ‘problem’ per se.
- And reinforces that the impetus for change does not lay only with the teacher, but it is systematically/culturally generated, and that our threshold of acceptance is related to incidence, effect (perceived and/or actual), and capacity and willingness to change