Research Seminar Series

Framework to Real Work: A Realist Tale of Knowledge Mobilization Across a Complex Adaptive System

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DDEC, Frankland Building

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Introduction

Knowledge into Action at Scale (KIAAS)

Explore the creation, flow and application of knowledge in support of quality improvement and service redesign.

Ready to Act (R2A) 2016
Transforming AHP services for CYP
Research Aim
How does a government policy transform into individuals creating sharing and actioning knowledge to secure changes in practice.

Adding detail to the journey from policy to practice
Critical Realism: 3 Levels of Reality

• **Empirical Level**
  Events are experienced and observed

• **Actual Level**
  Events occur, whether they are observed or not

• **Real Level**
  Mechanisms cause events to occur at a different level
Methodology: Critical Realism

“Research has to answer questions on what are the social and cultural conditions necessary for change mechanisms to operate and how are they distributed within and between programme contexts.” Pawson & Tilley 1998
## Conceptual Lens

<table>
<thead>
<tr>
<th>Knowledge Mobilisation</th>
<th>Complexity Theory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximising the impact of knowledge ... on public policy and professional practice.</td>
<td>Complex Adaptive Systems</td>
</tr>
<tr>
<td>(Phipps, 2012)</td>
<td>• Interconnected components</td>
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<td></td>
<td>• Different Starting Points</td>
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<td></td>
<td>• Emergent rather than predictable outcomes</td>
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<td>• Self-organisation</td>
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<td>• Feedback Loops</td>
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(Zimmerman, Lindberg, Plsek, 2009)
Conceptual Lens 1: Knowledge Mobilisation

Conceptual model of determinants of diffusion, dissemination and implementation of innovations in health services

(Greenhalgh et al 2004)
Conceptual Lens 2: Complexity Theory
The SIS Improvement Science Learning Activity

- SIS Learning activity bespoke, preceded the development of the SIFS virtual learning programme.
- Focused on the practical application of IS tools and methods
- Improvement projects were identified prior to the start of the course
- Variety of approaches used to recruit participants to each of the project workstreams
Participant Groups

Request for Assistance (RFA)
- 6 different AHPs
- Geographically dispersed
- Develop common ground
- Difficult task
- Formed basis for next forum

Job Planning (JP)
- Already established
- Common understanding
- Able to advocate for the group
- Commitment beyond SIS
Provisional CMO Theory

• **Policy Level:** building the knowledge and skills of local practitioners supporting the spread of innovation.

• **NHS Level:** a forum of multi-professional learning will enable practitioners to collaborate to create practice innovations.

• **Practitioner Level:** increasing skills will help develop innovative practice within our profession.
## Data Collection

<table>
<thead>
<tr>
<th></th>
<th>Tranche 1</th>
<th>Tranche 2</th>
<th>Tranche 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>April –Sept 17</td>
<td>Dec 17- Feb 18</td>
<td>April 18-Aug 18</td>
</tr>
<tr>
<td><strong>Interviews</strong></td>
<td>5</td>
<td>4 +3*</td>
<td>7 +3*</td>
</tr>
<tr>
<td><strong>Focus Groups</strong></td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>1540 mins</td>
<td>360 mins</td>
<td>1200 mins</td>
</tr>
<tr>
<td><strong>Documentary Analysis</strong></td>
<td>Early Intervention Docs/policies</td>
<td>Financial Doc &amp; Policies</td>
<td>Local/National Outcomes</td>
</tr>
</tbody>
</table>
# Data Analysis: Coding Process

<table>
<thead>
<tr>
<th><strong>Empirical Code (Indigenous)</strong></th>
<th><strong>Analytical Themes</strong></th>
<th><strong>Theoretical Concepts</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Top-Down/ Bottom Up</td>
<td>Distributed Leadership</td>
</tr>
<tr>
<td>top-down targets</td>
<td>Leadership perspective, practitioner perspective, conflict between learning activity and policy ambitions, voluntary participation, directed participation, complexity features,</td>
<td></td>
</tr>
<tr>
<td>Very little guidance</td>
<td></td>
<td></td>
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<tr>
<td>expectation to fit it in,</td>
<td></td>
<td></td>
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<tr>
<td>hidden agenda</td>
<td></td>
<td></td>
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<tr>
<td>Time pressures, reduce scope</td>
<td>Fidelity to learning, adaptation to context, fidelity to policy ambitions, epitaph comments,</td>
<td>Feedback Loops</td>
</tr>
<tr>
<td>of task to fit time constraints, wasted time, primary drivers, unreal timescales, I can make sense of the indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trying to make us all the same</td>
<td>Allocentric / professioncentric</td>
<td>Interconnectivity</td>
</tr>
<tr>
<td>People wanting to make it as effective as we can get it need to be working within your own service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling as if you're getting something done</td>
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</tbody>
</table>

- Empirical Code (Indigenous) - Indigenous codes used in data analysis.
- Analytical Themes - Themes derived from the empirical data.
- Theoretical Concepts - Theoretical concepts that explain the themes.
Findings - Antecedents

Distributed Leadership

- Emerged over time
- Caused discomfort
- Move matrix leadership
- No consensus
Findings - Antecedents

Allocentric Disposition

- Habit, way of being
- Opposite of profession-centric
- Consensus is not necessary
- Evolves through dialogue
- Develops over time
Sustaining Factors
Trajectory & Feedback Loops
Feedback Loops:

Artefacts

“Forging points of connection from the mental model to the phenomena”

Goodyear 2017
Social Artefacts

Social rituals; gestures; behaviours

SIS learning activity; meetings; national network; seating positions
**Linguistic Artefacts:**

**language, symbols**

APPLE Mnemonic; vocabulary (referral /request for assistance); epitaph comments

<table>
<thead>
<tr>
<th>Tranche 1</th>
<th>“So to me it would actually about doing what we said. And delivering”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tranche 2</td>
<td>“I think it’s probably about being a leader who encouraged staff to be in a positive place or supported staff and encouraged staff to be in a place where they could feel ownership of the changes”</td>
</tr>
<tr>
<td>Tranche 3</td>
<td>“Rather they thought I was a leader. That would be great. Cos sometimes you get management. That’s very much that operational dictating. So if anybody thought I was a leader, I would take that as a complement. That would probably be it”</td>
</tr>
</tbody>
</table>
Material Artefacts
Driver Diagrams; R2A Policy; interim report to Scot Gov 2018

Ready to Act
Refined CMO Theories

Multi-professional Learning activities

**Context**
- structured to allow space for the development of allocentric dispositions
- conducted in a context of distributed leadership

**Mechanism**
- supports agents to self-organize
- create changes in practice (M) which deliver the wider organisational ambitions
- lead to the creation of feedback loops which maintain the trajectory of change across interconnected CAS

**Outcome**
- enable transdisciplinary knowledge mobilisation
Contributions

• Theoretical
Combining complexity & KMb revealed how the attributes of a complex system were harnessed to mobilise knowledge and deliver outcomes

• Practice
Complexity theory to explain variations in outcomes across the system gave practitioners a language to express concerns

• Management
Need to balance distributed leadership which fosters innovation with formal authority to provide stability
Contributions

• **Policy**
  • Co-constructed policies provide roadmap for the trajectory of change
  • Flexibility to recognise unanticipated positive outcomes and negative events.
  • Be aware of the potential negative impact of relying on normative measures alone.

• **Empirical**
  • A focus on people as KMb agents rather than considering process, context or intervention.
  • Looking at an under researched group within Health & Social care.
Conclusions

- Where knowledge is a catalyst for changes in practice, scale up and spread is facilitated through micro processes of feedback. These feedback loops are nurtured and evolved within social processes and need to be considered as a key feature of any implementation plan.

- Policy ambitions and research ambitions were different. This research provides an adjunct to the measure of change capture by the SG.
Any Questions?
Data Analysis : Nvivo Queries

Node Comparison EC-SIS

Coding Summary

<table>
<thead>
<tr>
<th>Name</th>
<th>Number Of Sources Coded</th>
<th>Number Of Coding References</th>
</tr>
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<tbody>
<tr>
<td>Changing professional culture</td>
<td>3</td>
<td>9</td>
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<tr>
<td>Complexity Features</td>
<td>8</td>
<td>51</td>
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<tr>
<td>Deliberate Learning Activities</td>
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<td>138</td>
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<tr>
<td>Effective Conversations</td>
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<td>Epitaph Comment</td>
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<td>15</td>
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<tr>
<td>Evolution of RTA</td>
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<td>10</td>
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<tr>
<td>Feedback Loops</td>
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<td>47</td>
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<td>Job Planning Workstream</td>
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<td>4</td>
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<td>New Node</td>
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<td>RFA Workstream</td>
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<tr>
<td>SIS Improvers Training</td>
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<td>110</td>
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<tr>
<td>Structural Maintainance- Innovation</td>
<td>12</td>
<td>79</td>
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<tr>
<td>Top down - Distributed Leadership</td>
<td>10</td>
<td>100</td>
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<tr>
<td>Uni-professional - AHP</td>
<td>11</td>
<td>125</td>
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</tbody>
</table>