Reflective practice in vocational education: Two case studies compared

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Lived experience, reflective practice and informed choice

- Tradesperson-turned-educator's lived experience as an asset to be valued and acknowledged
- Reflective practice is the lever to turn tacit and implicit knowhow into explicit knowledge
- Deliberate choice & awareness
- Polanyi (1958) and Gascoigne & Thornton (2013)
- Externalising knowhow: Personal Construct Theory (PCT) and its methods as a natural choice

✓ Educator meaning-making as the launch-pad for responding to challenges and changes

✓ Theory and techniques

Focus of this paper

Two case studies compared:

Greyling, Belcher & McKnight (2013): Case Study 1 - Hairdressing

http://www.pcp-net.org/journal/pctp13/greyling13.html

Greyling & Lingard (2015): Case Study 2 – Electrical engineering

http://www.pcp-net.org/journal/pctp15/greyling15.html

Purpose: A meta-perspective on our team practices

Elements and Constructs

Elements are contextually relevant aspects of experience:

- **Case study 1**
- **Scenario 1**: Think about a group of hairdressing students who attend only two weeks of practical after spending 10 weeks on theory. All practical work is done in the two-week period.
- **Scenario 2:** Think about your current training in the training salon.
- **Scenario 3:** Imagine the ideal hairdressing salon and how you would want to be trained in that salon

Elements and Constructs

Constructs are personalised, bipolar, contextually relevant lenses for making meaning (Kelly, 1955; 1966/2003)

Case Study 1 example:

Comparing elements 1, 2 and 3:

Linking theory and practice in salon-based training practices vs *master the theory first; practical work can wait.*

Elements are prompts for constructs elicitation

Grids: Elements and Constructs

Ratings grids

7-point Likert Scale

1 and 7 =very strongly agree

2 and 6 = strongly agree

3 and 5 = agree

4 = undecided

Constructs are used to rate all elements

(Fransella, Bell and Bannister, 2004)

Hairdressing grid

	<u>Element 1</u>: 10 weeks theory, then 2 weeks practice	
Pole A	Rating scale	Pole B
Integrate theory and practice in salon	7 6 5 4 3 2 1	Master theory, practicals can wait
Collaborative team work is important	7 6 5 4 3 2 1	Learners work as individuals
Low levels of participation – complete workbooks	7 6 5 4 3 2 1	High levels of salon-based participation

Hairdressing educator's constructs

C1: ***Link theory and practice in salon-based training practices*** *vs master the theory; practical work can wait.*

C2: *Working in teams is unimportant – individual learners have to cope on their own vs* ***working in teams is important – learners collaborate in groups to complete tasks.***

C3: *Low levels of learner participation are acceptable; studying workbook content is most important vs* ***high levels of learner participation in real-life learning are important.***

C4: ***Learners develop a sense of self-confidence and personal responsibility*** *vs learners are left to their own devices – their practical skills are of less importance.*

Electrical engineering educator's constructs

C1: ***Develop multiple role relationships and practices through modelling*** *vs authority-based educator role relationships and practices*

C2: ***Use scaffolding initially, and then eliminate them;*** *vs use scaffolding consistently throughout the course.*

C3: ***Explicitly stated sequential and step-by-step experimentation in learning*** *vs implicit and unstated sequence of actions in experimentation in learning*

C4: ***Socialised into the community of electrical practitioners' socio-cultural practices*** *vs focusing on the individual in relation to the community of electrical practitioners' socio-cultural practices*

Meta-level constructs so far

MC1: Co-operative versus single-researcher reflective inquiry

MC2: A *participant versus non-participant approach to reflective practices*

MC3: V*alidating evidence based on educator PCT results and their pedagogical practices versus validating evidence based on PCT methods only.*

Back to the case studies: Research purposes

Case study 1: A good practices study – with a bit of a twist

Triangulation by asking learners to don her constructs

Case study 2: Reflecting on the challenges of at-risk learners (Resolving conflict in his teaching experience)

Two more meta-level constructs

Methodological triangulation of data findings *versus non-triangulated case study approach.*

Multiple instances of data collection and analysis *versus one-off data collection and analysis*

Let’s recap

Case study 1 we elicited 10 constructs x 7 elements [N=70]

Case study 2, 12 constructs x 7 elements [N=84]

Comparing case study 1 and case study 2 (as elements), we defined 10 meta-level constructs x 10 elements [N=100]

Cumulative lists of constructs

How do we explore the complex interactions among constructs?

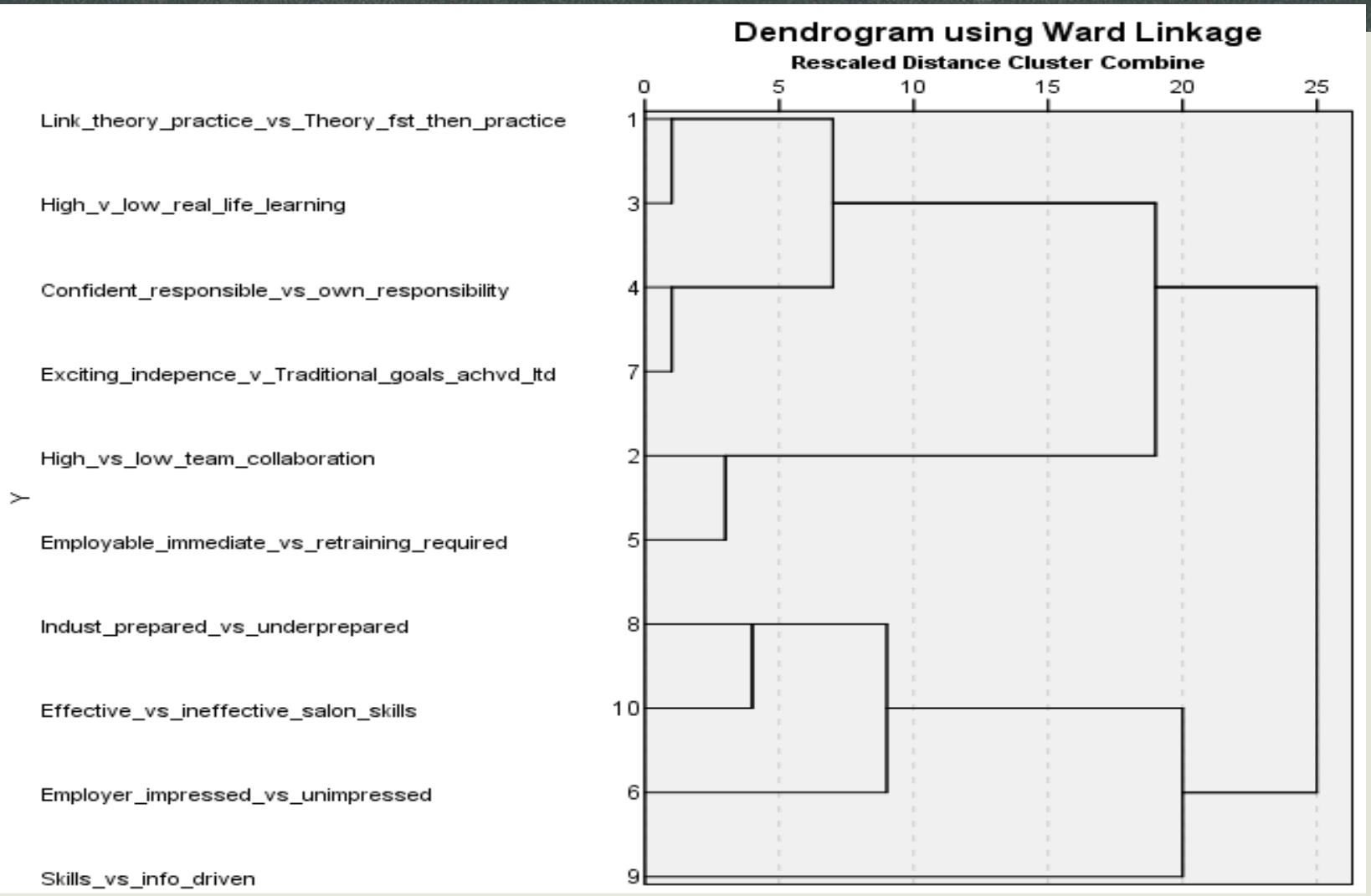
Case study 1

Focus group

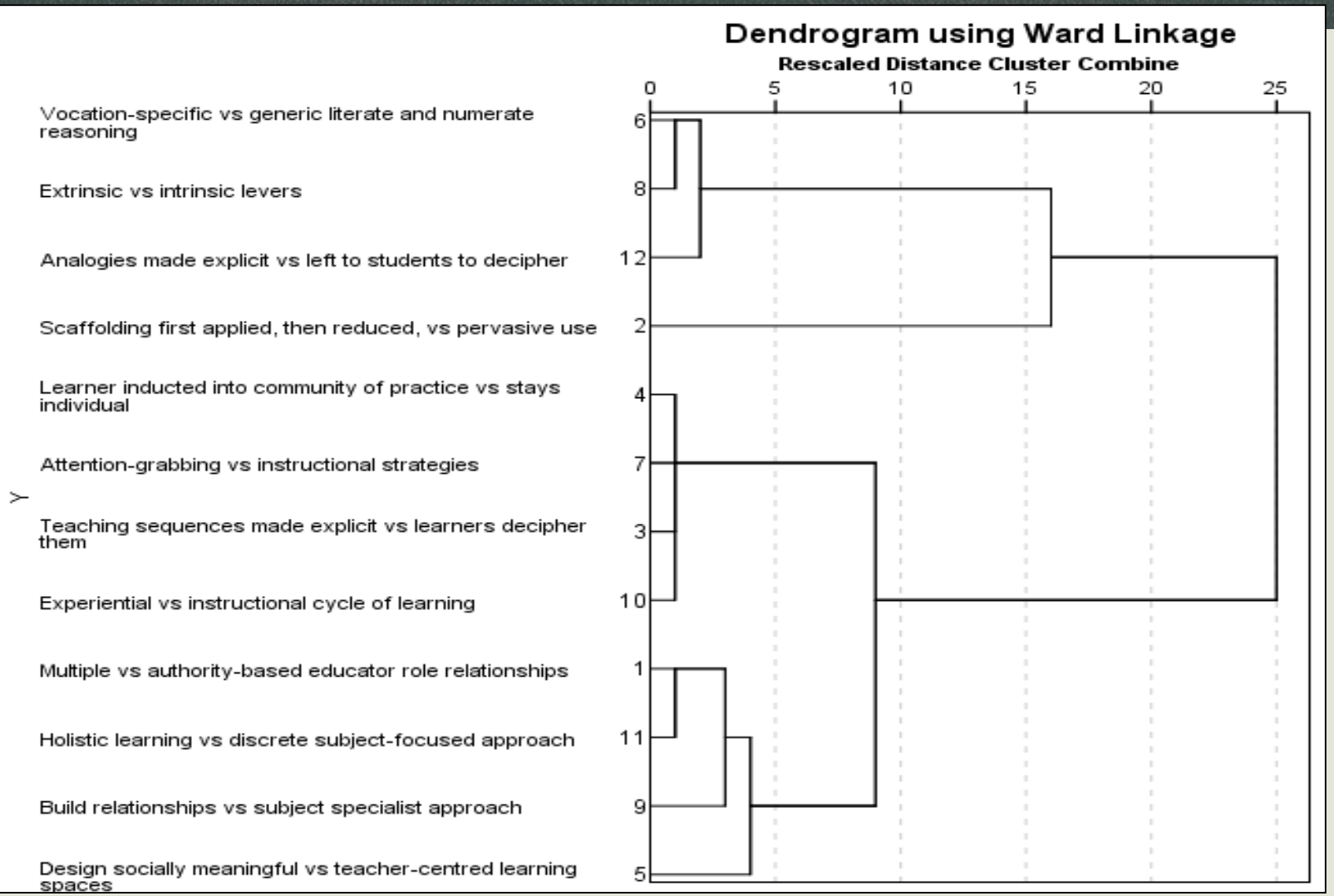
To triangulate: Repertory grid

10 constructs x 7 elements (training scenarios and roles)

Cluster Analysis: Hairdressing learners' dendrograms (N=12; N [ratings]= 70]



Cluster Analysis: Electrical engineering educator's dendrogram (N=1; N [ratings]= 84]



Another meta-level construct:

Inter-related *versus cumulative list of* ***pedagogical constructs***

Meta-analysis grid

Element 1:Case Study 1

Pole A	Rating scale	Pole B
Co-operative inquiry	7 6 5 4 3 2 1	Single-researcher inquiry
Non-participant approach to research practices	7 6 5 4 3 2 1	Participant approach to research practices
Responding participant's verbal account of pedagogical constructs	7 6 5 4 3 2 1	Crafted verbal accounts of pedagogical constructs
Multiple instances of data collection and analysis	7 6 5 4 3 2 1	One-off occurrence of data collection
Methodological triangulation of data	7 6 5 4 3 2 1	Non-triangulated case study approach

Elements rated

E1: Case study 1

E2: Case study 2

E3: Research or a researcher I admire

E4: Positivist research

E5: Ideal future reflective practices

E6: My current research

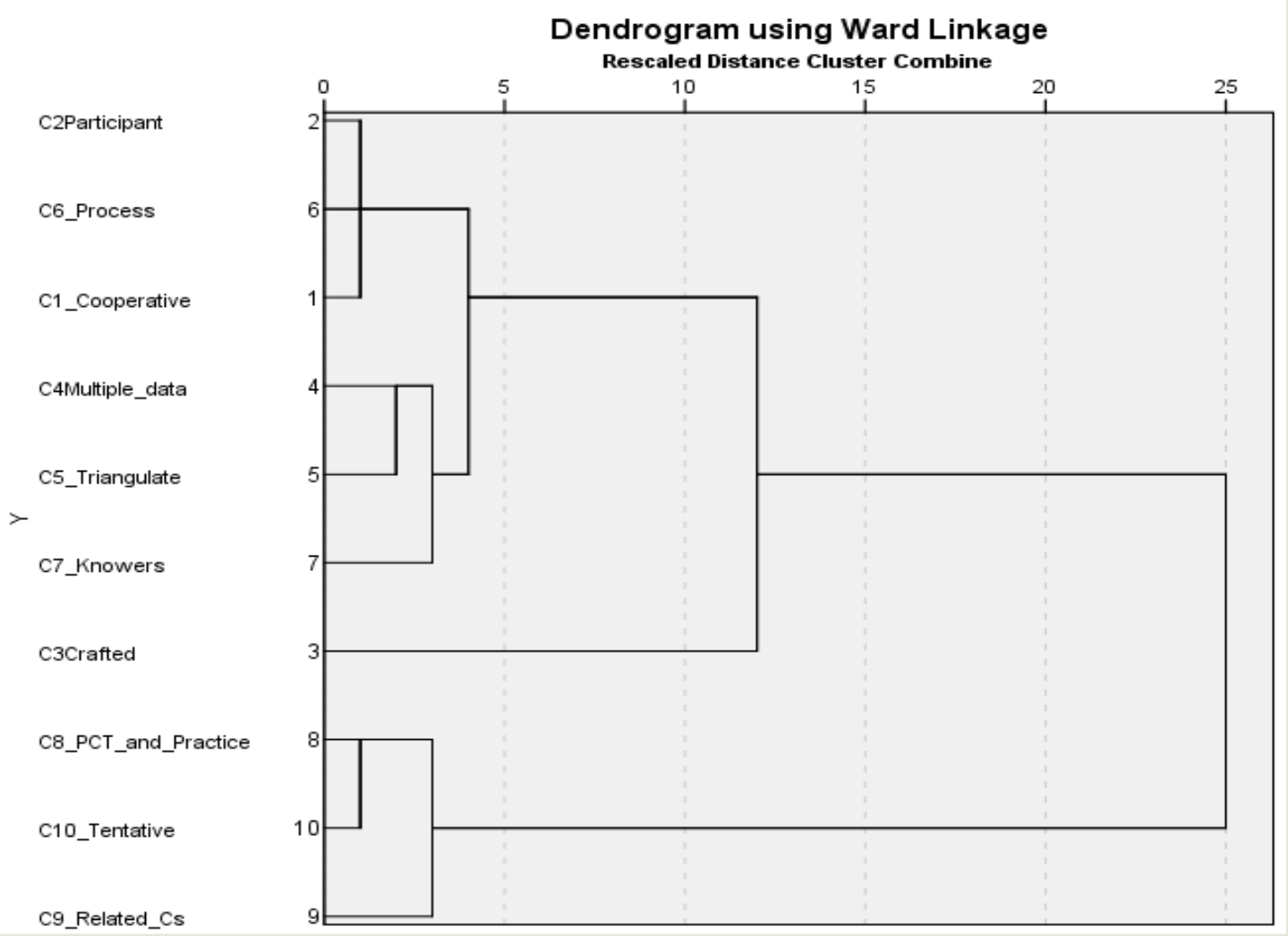
E7: My current approach to organisational change

E8: Developmental alliances

E9: Customised reflective cycles

E10:This meta-analysis

Findings:
Dendrogram of meta-level constructs-based ratings



Conclusion

PCT methods were ideal for pursuing reflective practice in the two case studies, and developing a meta-perspective.

Recommendations:

Raise awareness of educator belief systems and mental models that inform their educational practices

Acknowledge educators' pedagogical meanings as individual, unique and valuable

Develop and track educator constructs that allow them to be innovative problem-solvers

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Thanks for attending.