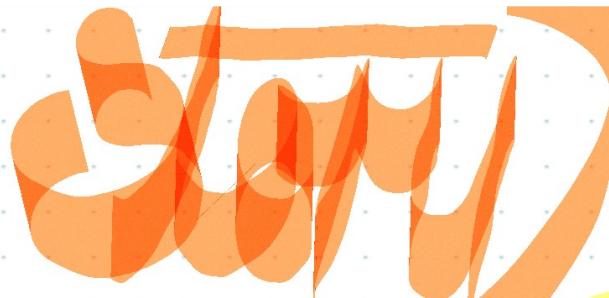


comparative
empirical
component
around the
method
not data



online
diverse
measured
problem

Research & Learning for the Brave New World

What could possibly go wrong?

environment.

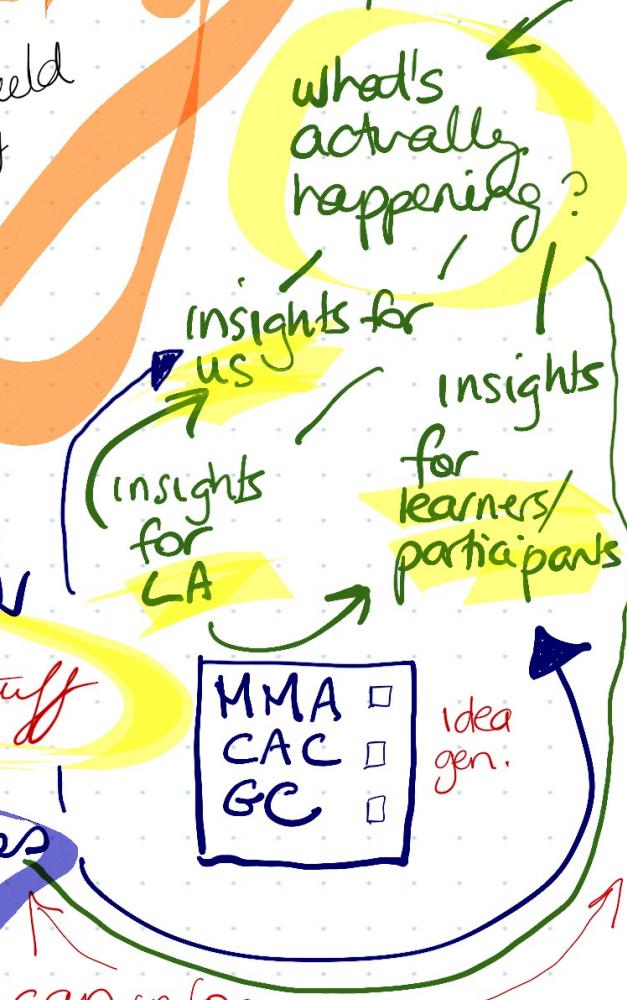
PBL in ^{challenges} collab

teamwork
pedagogies
object

GMB
because stuff

also RepGrid
as mediating process

Knowledge Building
what is RepGrid's role in Knowledge Building theory?



can inform teaching as design across levels cohort sizes disciplines

ReGrid - what does it pick up?

implications

for redesign

for - designer

- teacher

- student

how does it
overcome
traditional
limits of G-M-B
& proj-based-ped?

given my obs across 3 studies

usefulness?

Some times we can't
do what we want

Likert versus
The Grid

particularly group perceptions

main redesign
would be
how to
use it
for
feedback

students
grappling with
abstraction

what can this show us
without going into
learning processes in detail

what I didn't do is
systematically give
feedback but that
is a recommend

CHALLENGES - tech

Picking the
right devices
for students

me

elements engagement

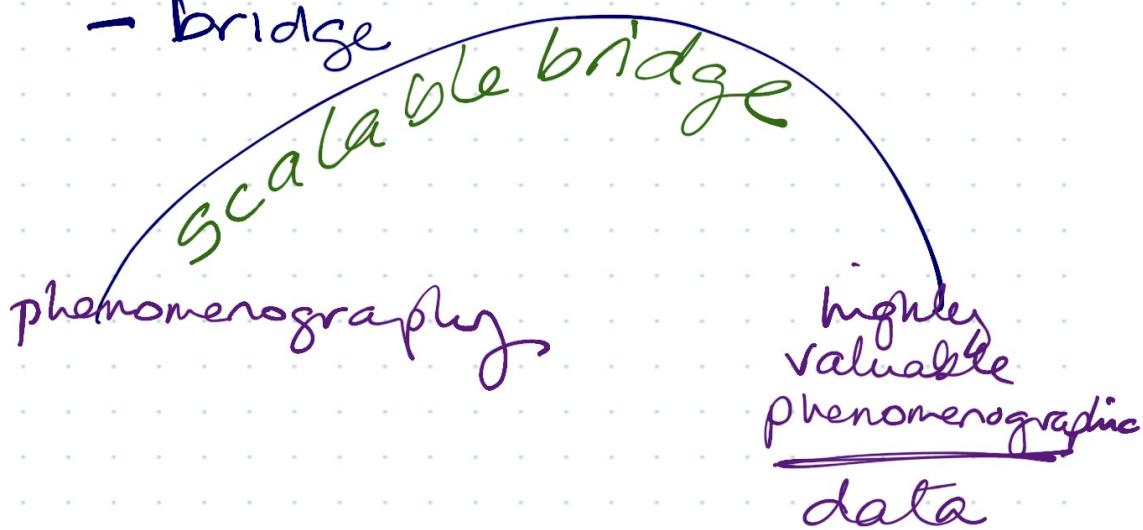
constructs

how can my
experience help others do this?

teachers don't
have a lot of time

a phenomenographic approach

- scarce research in Australia HE
- connection between Repsner & phenomenography not made.
- bridge



Study uses convenience sampling
of PBP + GMB BECAUSE
comparison across levels & disc.

→ authentic teacher
research context

→ messy data

different approaches
viable for researcher (eg 1/n)
versus teacher (eg online grid)

advanced analysis options

REFRID ALREADY
VALIDATED AS A
METHOD

CAN IT SHOW
WHETHER THE
DESIGN AIDS
HAVE BEEN
REACHED AND
WHAT/HOW
REDISIGN IS
NEEDED?

PBP & GMB: Designing for Knowledge-Building

Given the data from other
process-based studies,
what does it add?

what kind of data &
analysis could you expect
in a course like this?

→ what questions would it
answer?

→ what could be observed,
using this pedagogically?

What is known about RepGrid in HE?

- is it reliable
- Scalable?
- how do we get students to do ^{productive} meaningful grids without an interview?
- What about as a research tool?
[sans identité]
- how is its use here different from the way it's used in psychology?
- what can it add to existing HE theory and methods?
tell us something new

current research around the processes of learning

Rep Grid
&
Knows
Builds

- Paavola & Halkkarainen
- Engestrom
- Damsgaard

look at project-based pedagogies

Vygotsky

- social nature of learning
- Rep Grid data can add value

link

back to - ENA

how to (teachers don't
do it well know how do
this)

online

CHAT ↑

links back
to lensing

'different'
'dimensions'

link back to
occasional user

tensions around RepGrid as method

link back to current research methods

-1950s] reader may see RepGrid
-1970s] as **cognitivist**

→ long way from
Engestrom &
Paavola

contemporary
pedagogy
based in a different theoretical
foundation

each other?

ground PERSONAL relationships - what do students think about

Research often polarised as

it is a quantitative way to probe a qualitative experience

why not use quant for single group?

Quant
RepGrid

Qual

link to Learning Analytics

WHAT ABOUT AGGREGATING THEM?

Origin of RepGrid
look back at individual data - individual/group/cohort

BUT always seen in their social context

how can it be interpreted
productively?

- short time
- occasional users

↗ potential ways
of analysing data
in real-world
environment

- viable
- useful
- meaningful
- scalable
- machine

how do
they
access
the
maths?

While behaviour may show interactions of their quantitative frequency - RepGrid can view of others and their decisions in subjective influence

for group work & collaboration

- idea generation
- model building combination of factors.

3rd dimension
is to show students

- what about phenomenographic approaches to collaboration research?

what are the perceptions

around collaboration?

(relationships
roles)

IT IS MORE IMPORTANT THAT STUDENTS UNDERSTAND THAT THEIR RELATIONSHIPS MIGHT BE MORE TO DO WITH WHAT IS THOUGHT RATHER THAN WHAT IS OBSERVED

The underlying graph theory & statistical modelling

- if I see how I relate to others
- limited workable models around this
- Part of a family of methods
- about the relationship between things
- methods like RepGrid can represent more complex data than a simple scalar

and complicated ideas

- feedback to students

ENA/SNA specifically

RG is like ENA/SNA but adds other data b

frequency-based methods

so even if ENA is done, this still adds valuable data because

to do ENA,
you need
to understand
the discourse

link back
to content
process
obsenⁿ
methods



While it is, practically, the same problem, measuring change and /or connectedness quantifiable but doesn't come down to a single number.]

link back to teachers don't have a lot of time

specifically in relation to Learning Analytics

- LA often counting or multi-regress equation
- this adds qualitative dimension

→ extends LA to Qual + Quant
repertoire

THE MIDDLE GROUND
BETWEEN EASY NUMBERS
AND HARD NUMBERS

it actually
asks what
people are
thinking

how
does the
data
inform
decisions?

look
up
Shane
Dawes
Unisa

- too little cluster analysis

if we want to personalise, the method needs to be sensitive to individual differences.
Not just maintain.

THE IMPORTANCE OF LOOKING AT
RELATIONSHIPS (eg ENA, SNA) IS
ALREADY ESTABLISHED

What questions come out of the findings

- dual function
- empirical topic
- why wide use but under-explored in HE?
- we don't know how it scales, eg online
- how do the representations play out for students & teachers?
 - [We don't yet have data]
 - how can it shed light on TEL courses at uni, particularly online
 - what value can it add?
 - for design? → there is a loss of data in traditional methods of measurement
 - esp. representations
 - how do we see ReppenGrid in a modern light?
 - where did these ideas go?
 - might they still be relevant?
 - when tested, did they show potential? what challenges?
 - what is too much simplification
 - link back to L A Ed-R
 - data & ref n

- even contemporary methods have weak points
- the resolution is a relational view of knowledge
- RepGrid can enable
- RepGrid still relevant in its epistemic foundation
- RepGrid fits with contemporary Knowledge Building theory; philosophy
- with training & practise, RepGrid can show respondent potentials, with no claim to outcomes
- not just numbers
- more complicated to interpret
→ more careful consideration