

*Action research as
innovative means to self-
study: A quest for 'thinking
out of my box'!*

OER Africa/SAIDE Convening

17-18 May, Nairobi

Pieter H du Toit



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Structure of Keynote Address

De-construct, starting with the self



Note that You are **Key** and as a collective you are invited to co-**address**/construct meaning

- Living my educational values
- Introducing innovative ideas and whole brain (participatory) action research; auto-ethnography as self-study
- Your active participation
- Your critical observations

Based on the ontological-epistemological questions:

Who am **I**? (AR)

Who are **we**? (PAR)

Let's Play the Diversity Game ...



- Individually prioritise the 6 cards received in order of preference
- Which one suits your way of doing best; which one does not really fit?
- You have 30 seconds



- Compare your choices with your neighbour(s) – especially discuss your first and last choice (30 seconds)



What is your preference?

- What do we learn from this simple exercise?
 - Comfort zone: Challenge – beyond comfort zone
 - Need for adapting teaching/thinking/research
 - becoming an adaptable professional
 - whole brain thinking
 - Challenge students – beyond comfort zone (maximizing potential)
- Impact on:
 - Professional development
- - Scholarship of teaching (andragogy)
 - Research scholarship
 - Scholarship of engagement



Practical Application

- Write down the first observation that comes to mind when looking at the next scene on the screen





Let's compare ...

- Responses by those with **blue cards** ...
- ... responses by the **greens** ...
- ... the **reds** ...
- ... the **yellows** ...



What do we learn from this exercise?



*We do not see things as they are;
we see things as we are ...*



Let's have a look at the theory.....
Ned Herrmann (1995)



Our different selves

A

Intellectual

D

Experimental

Logical
Analytical
Fact Based
Quantitative

Holistic
Intuitive
Integrating
Synthesizing

Left Mode

Right Mode

Sequential
Organized
Detailed
Planned

Interpersonal
Feeling Based
Kinesthetic
Emotional

Safekeeping

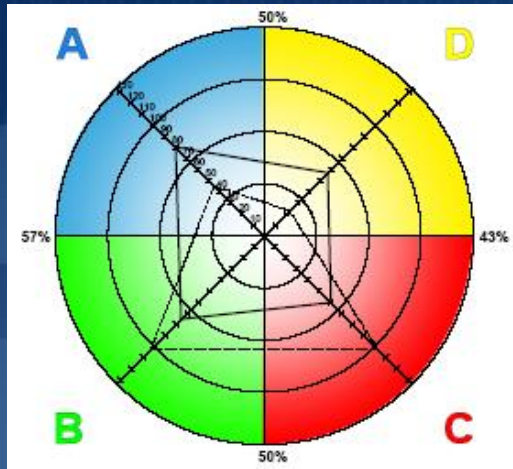
B

Emotional

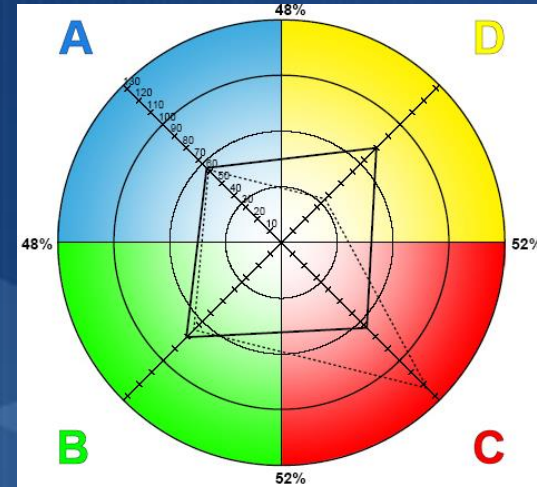
C

Examples of Individual Profiles

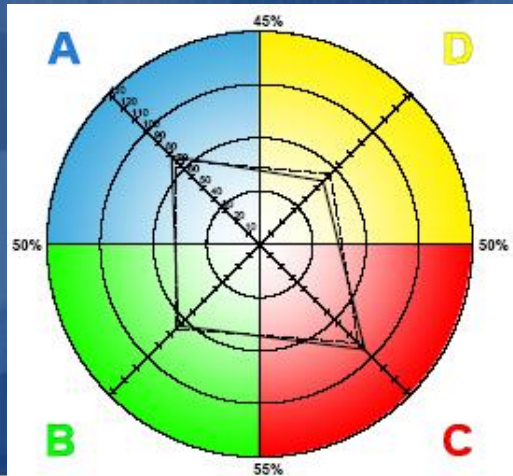
I



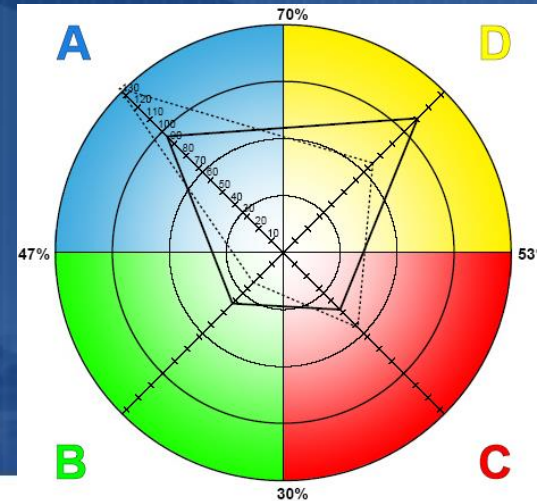
II



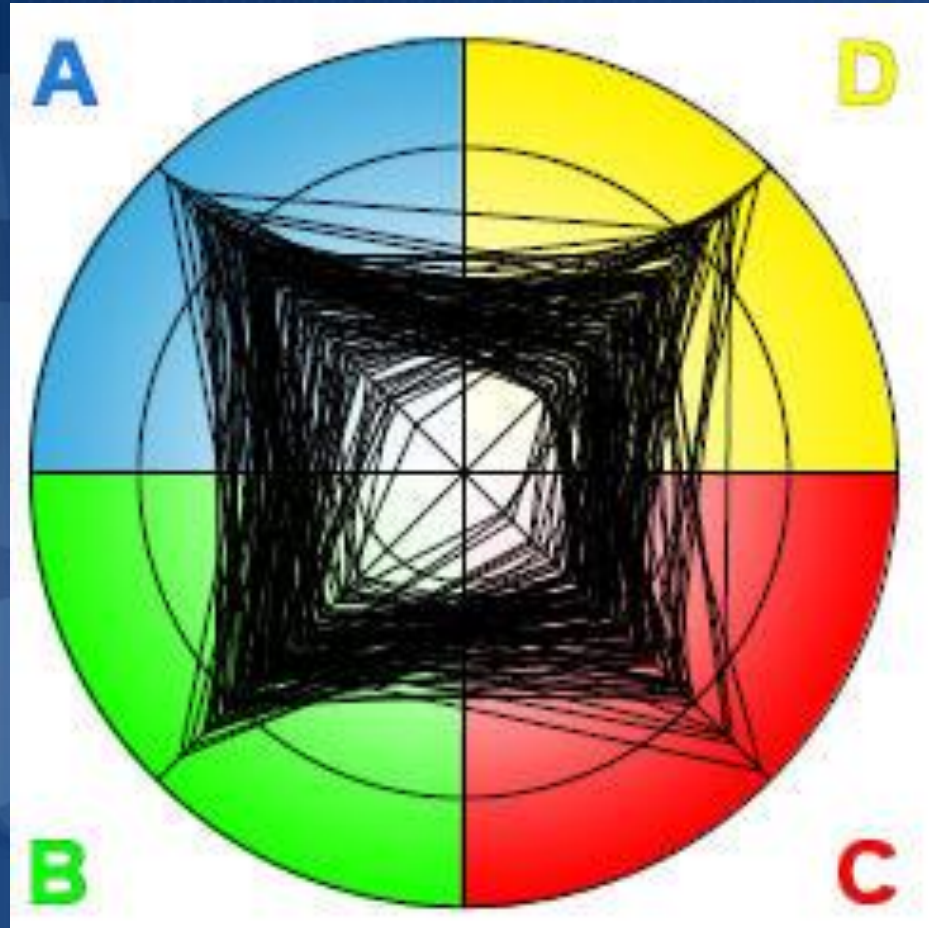
III



IV

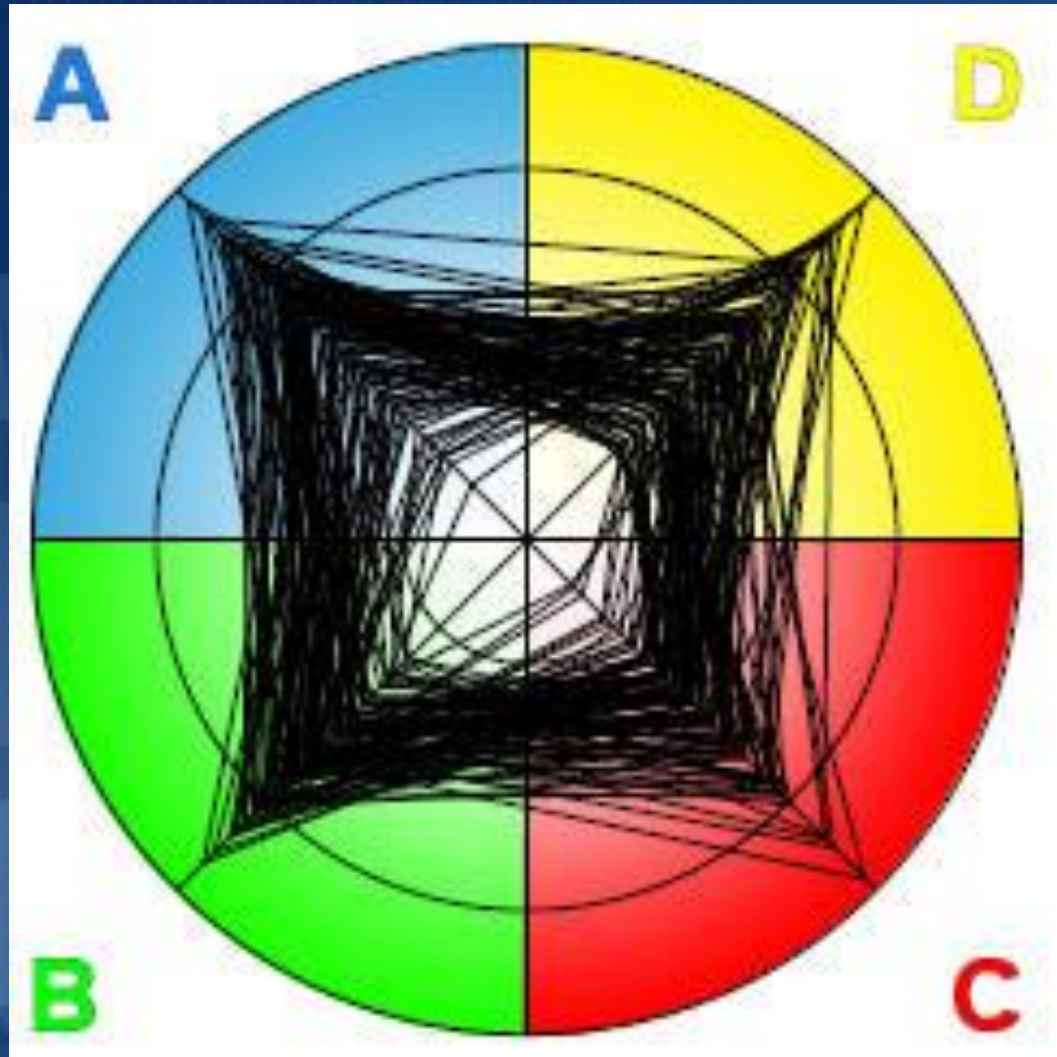


First Year Composite Group Profile (n=1004)



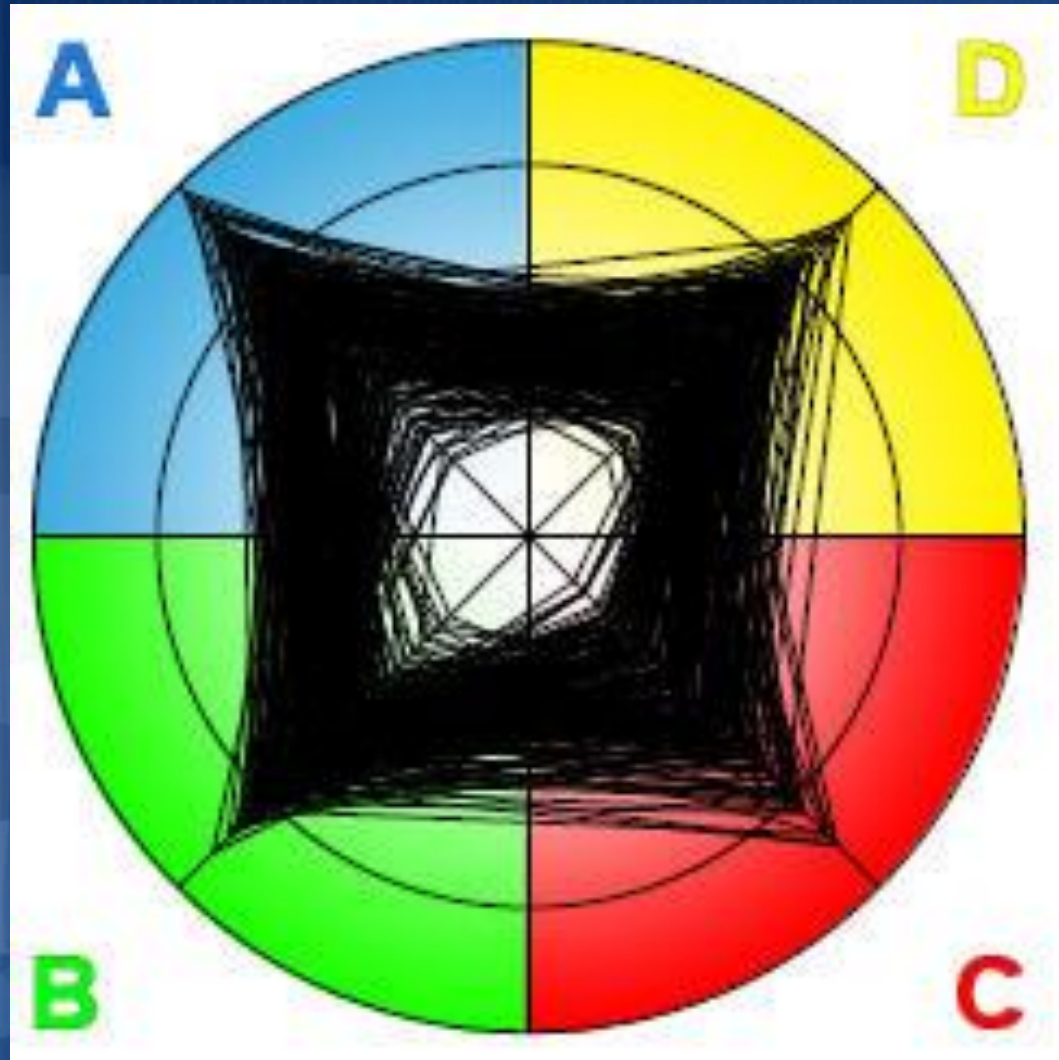
What do you think would a typical profile of a medical student look like?





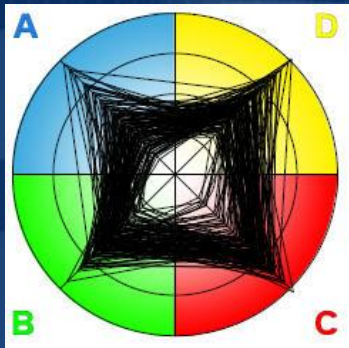
What do you think would a typical profile of an engineering student look like?



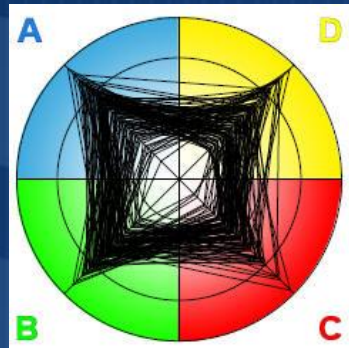


Group Profiles

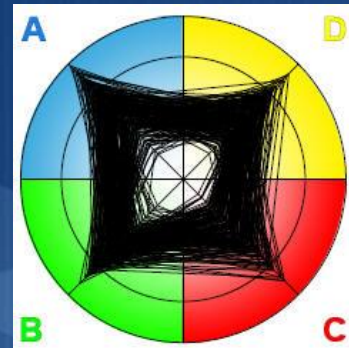
IT (n = 132)



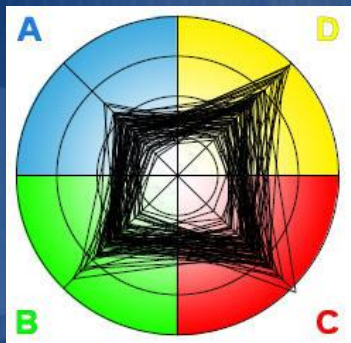
Medical (n = 103)



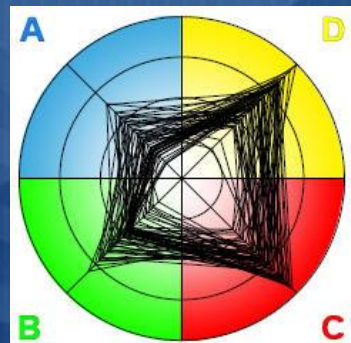
Engineering (n = 220)



Psychology (n = 71)



Drama/Music (n = 55)



Examples of practical application



Example from Dentistry



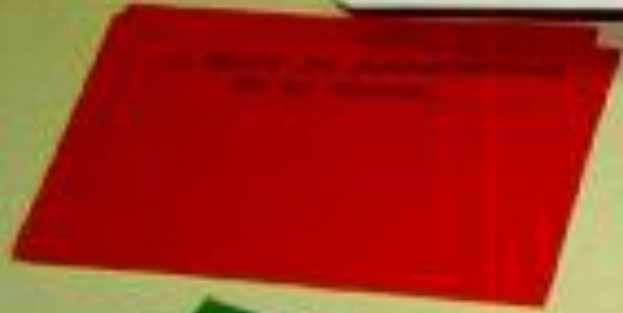












38



Inflight

DENTAL



FLY DENTAL
SKYWAYS

WE COMPLEMENTARY DENT

17 5'08

Tooth Morphology



Razia Khattak
9712650
BChD II

17 5'00



Examples from Taxation



Celebration



AR studies across institution(s)

PGCHE students implementing (constructed) ideas in own practice:

- Veterinary Science
- Health Sciences: Public Health, Anatomy, Nursing
- Foundation for Professional Development
- Authentic assessment: Publications, conference papers (e.g. of 12 (former) students at HELTASA)

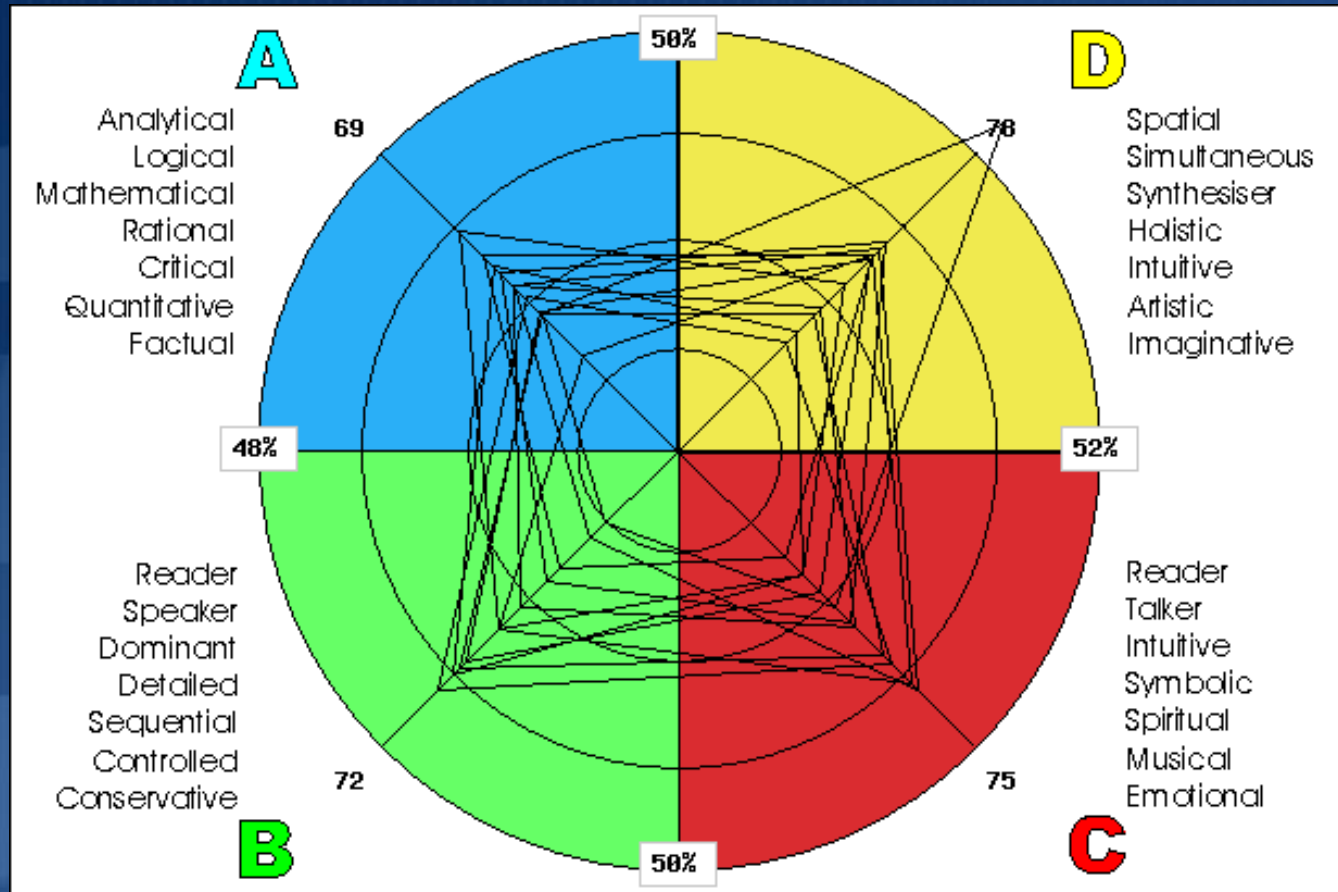
PAR through academic staff development initiatives

- Family Medicine, Public Health
- Economic and Management Sciences: Taxation
- Engineering: Information Science
(8 000+ first-year students)

Education innovation awards

- Institutional
- National

Composite group profile of department



Let's get the energy flowing

...

What do you see on the next slide?
Is the figure turning clockwise or anti-clockwise?





It is quite amazing ...



If you see this lady turning in clockwise you are using your **right brain**

If you see it the other way, you are using **left brain**

Some people do see both ways, but most see it only one way

If you try to see it the other way and if you do, your IQ is above 160 which is almost a genius

Then see if you can make her go one way and then the other by shifting the brain's current

BOTH DIRECTIONS CAN BE SEEN – Proved at Yale University , over a 5 year study on the human brain and it's functions. Only 14% of the US population can see her move both ways.

What is your current understanding of AR?

- Share your ideas with your next-door neighbour
- ... and PAR?



Action research

Focus of research is on the **I/self**

I taking responsibility for monitoring **my**
practice/professional learning

I investigating/learning about **Me**
as professional

Intrapersonal = Self-study



PAR: Scholarly community of practice

Focus of research is on **Us/the We**

We taking responsibility for monitoring **our** practice/professional learning

We investigating/learning about **Us** as professionals

Interpersonal = self-study as a collective



How do your ideas about AR match the following?

*To research actively is to **plan, act, observe** and **reflect** more carefully, more **systematically**, and more **rigorously** than one usually does in **everyday life**; and to use the relationships between these moments in the process as source of both **improvement** and **knowledge***
(Kemmis & McTaggart)

My adaptation: ... of both **emancipation**/empowerment;
transformation and new meaning making/**constructing**
new meaning



*Collaborative, critical enquiry by the
practitioners themselves (rather than
expert researchers) into their **own
practice**, into students' **problems***

(Zuber-Skerritt)

My adaptation: ... into implementing of
innovative ideas



*Action research is a **small-scale intervention** in the functioning of the **real world** and a close **examination** of the **effect** of such intervention*

(Cohen & Manion)

My adaptation: ... small-scale **initiative**



... and ...

- It is **practitioner-research**
- It is done within the context of **living theory**
- It offers opportunity for developing **practice theory**

(McNiff & Whitehead)

It has as focus: **self-study**

New constructs

- Marriage between scholarship of teaching and research scholarship contributing to the wish of the University to be research-intensive
- Deficit approach X asset-based approach
Assets = self (human capital), innovative idea, thinking preferences, initiative, experiment
- Change/improve X transform



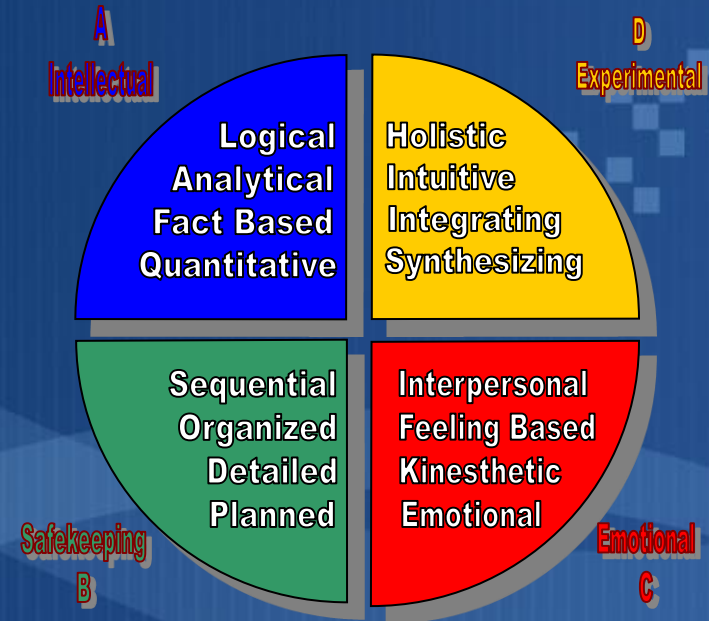
Rationale for using Action Research

- Self-study
- Experimenting with innovative ideas
- Transforming practice
- Deep professional learning
- Professional portfolio building
- Lifelong professional learning
- Scholarly thinking
- Emancipatory
- Intrapersonal development
- Enacting leadership role
- Reflective practitioner, etc



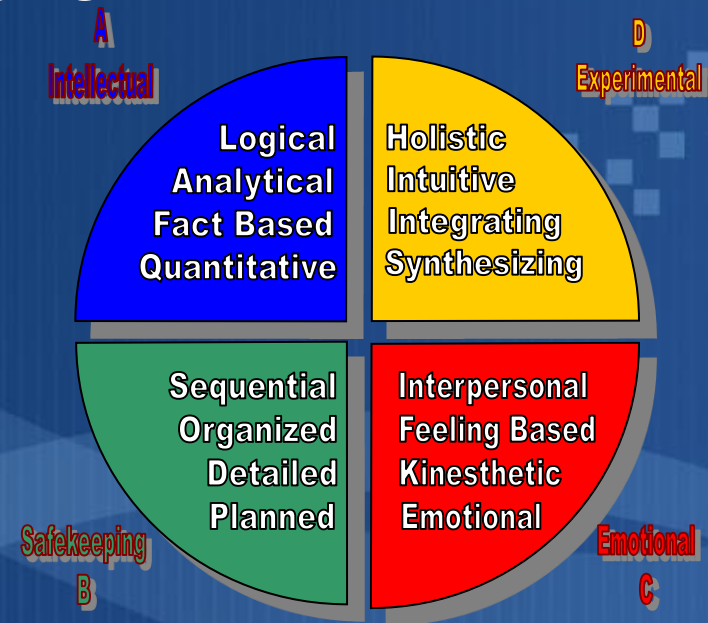
AR is whole brain research

- **Experimental**
- **Intrapersonal**
- **Process**
- **Constructing new meaning**



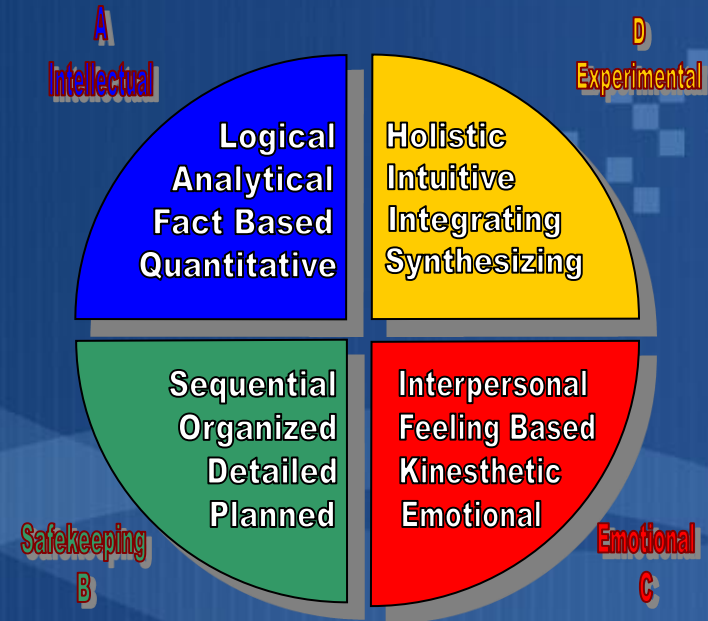
PAR is whole brain research

- **Experimental**
- **Interpersonal**
- **Process**
- **Constructing new meaning**



It is about thinking out of the box. Or is it?

- Out of
 - My
 - Thinking
 - Box
-
- The perfect mismatch



Self-study as autoethnography

*Autoethnography is a form of qualitative research in which an author uses **self-reflection** and writing to explore her **personal** experience and connect this autobiographical story to wider cultural, political, and social meanings and understandings*



- *Autoethnography is a vulnerable, **self-reflective** form of writing used across various disciplines*
 - *Autoethnography is a form or method of research that involves **self-observation** and **reflexive** investigation*
- (Maréchal 2010)



Social life [education/teaching practice] is messy, uncertain, and emotional. If we desire to research social life, then we must embrace a research method that, to the best of its/our ability, acknowledges and accommodates mess and chaos, uncertainty and emotion.

(Adams, 2015)



Visionary AR model = cyclical

- Spiral (spin-off spirals): flowing from context and vision
- Cycles (spin-off cycles)
- Steps

1 Plan for innovation/transformation = **Asset-based: person, potential, thinking preferences**

2 Implement innovation

3 Reflect (*before action, in action, on action*) (Schön)

4 Evaluate

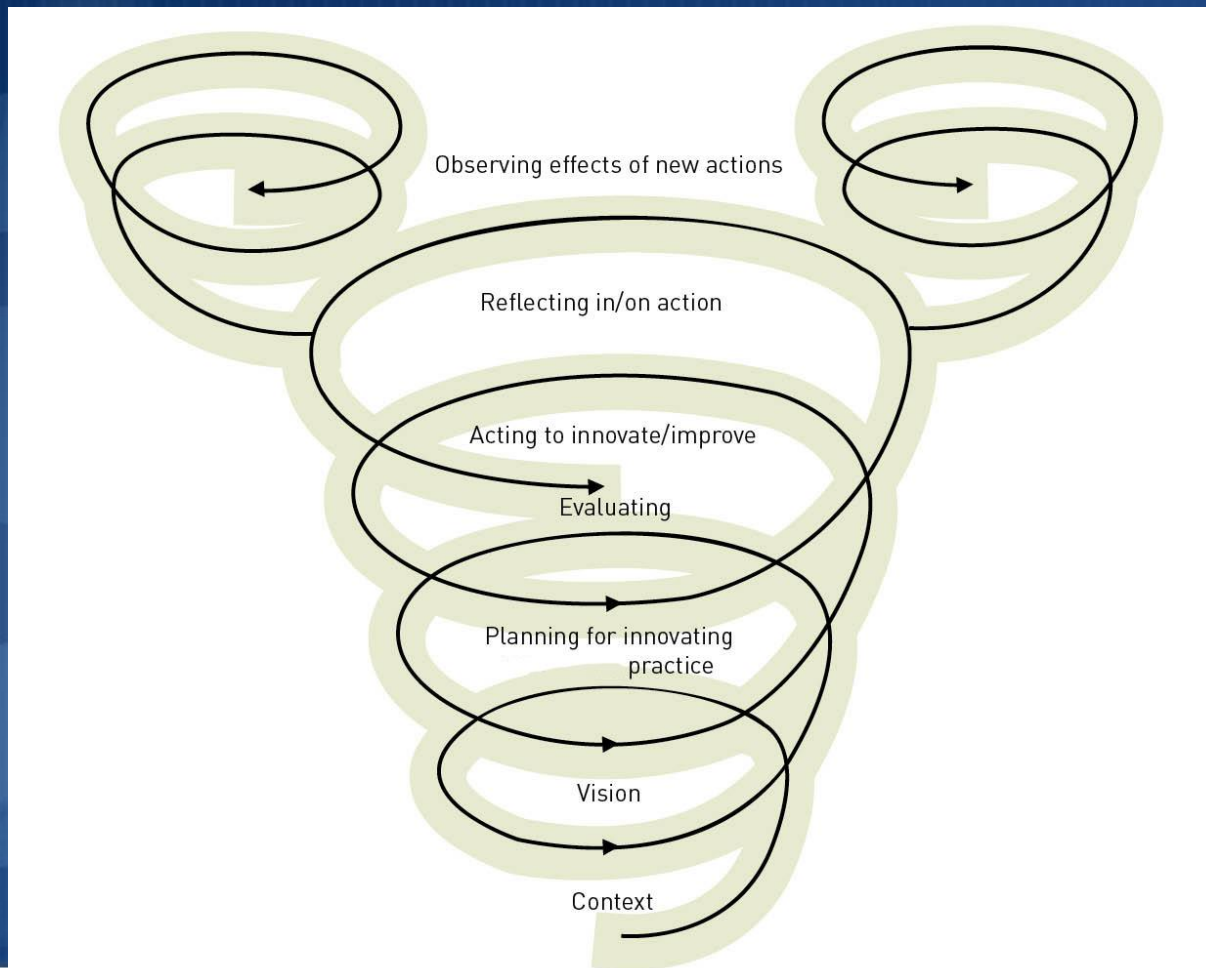
New Cycle

1 Re-plan ...

Meta-reflection

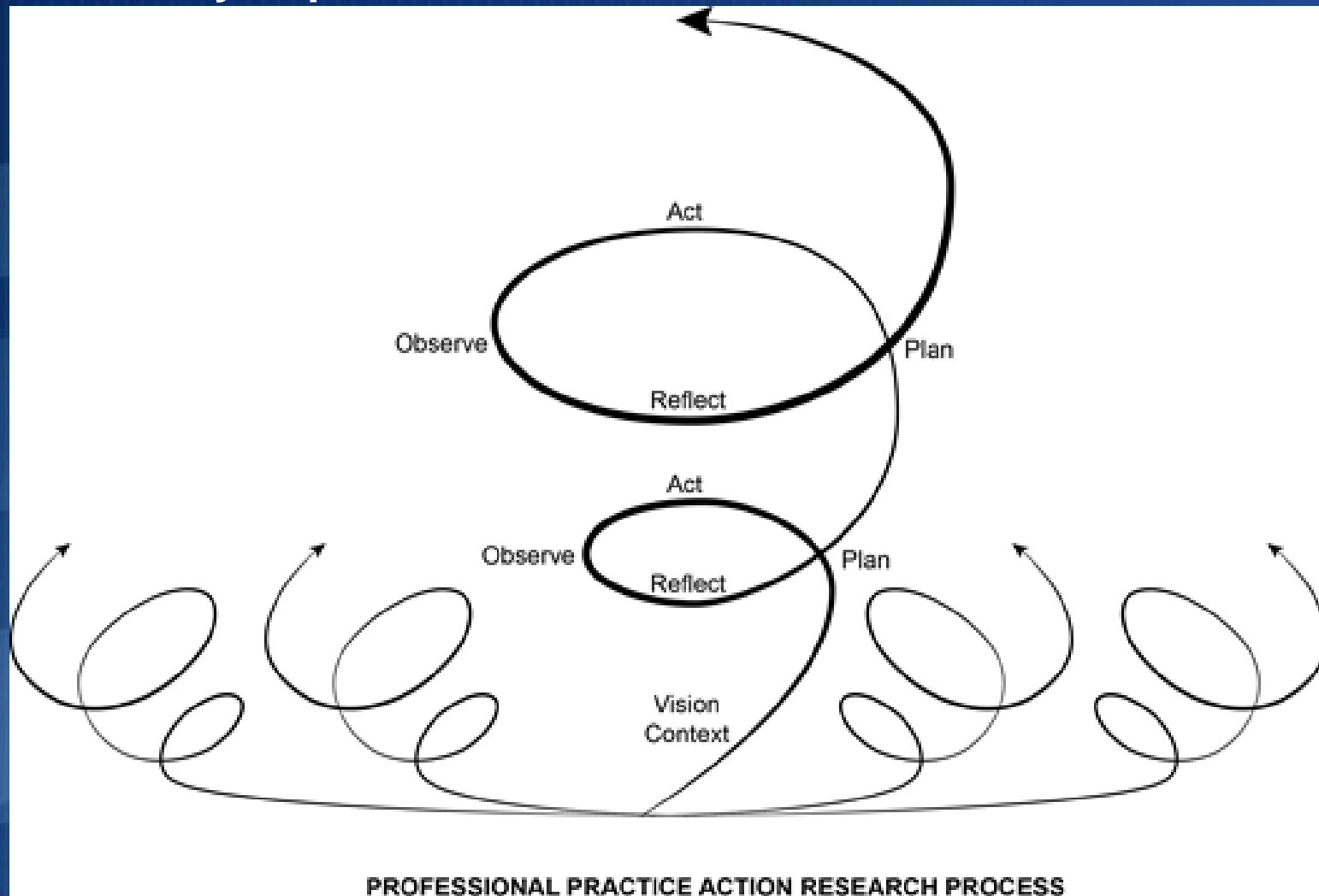


Visionary Action research model (Du Toit)



Visionary Participatory AR (Fringe)

Community of practice



PROFESSIONAL PRACTICE ACTION RESEARCH PROCESS

Comprehensive model

- Teaching in colours
- Researching in colours



A

Logical
Rational
Quantitative
Theoretical

WHAT?

- Fact-based lectures
- Research and research findings
- Higher-order reasoning
- Analytical and critical thinking
- Reference books, readings
- Electronic preference for support systems
- Technical approaches, processes
- Quantitative research
- Databases and spreadsheets
- Websites and wikis
- Case studies
- Use of experts
- Applied logic
- Theories

Ways of Facilitating Learning

D

WHY?

Visual
Experimental
Simultaneous
Conceptual

- Brainstorming
- Discovery learning
- Holistic exercises, synthesis
- Learning "laboratories" (exploring)
- Animation, playing games
- Virtual reality environments
- Mind mapping
- Visualisation, mental pictures, metaphors
- Active imagination, creativity
- Illustrations, pictures, photos
- Storyboarding
- Predicting
- Painting, drawing, designs
- Simulation

Student Expectations

- Purpose
- Terminology
- Spreadsheets
- Challenging problems to solve
- Concrete information, presentations
- Expert sources, citations
- Clear objectives

- Mental imagery
- Discovery activities
- Learner choices, freedom
- Big picture overviews
- Brainstorming concepts
- Metaphors
- Visual illustrations

Ways of Facilitating Learning

Ways of Facilitating Learning

struggles with

- Vagueness
- Expressing emotions
- Imprecise concepts, ideas
- Lack of logic

- Autocratic
- Excessive strictness
- Time management
- Lack of flexibility
- Too much detail

Preferences

- Analysing
- Theorising
- Logic processing
- Quantifying

- Exploring
- Discovering
- Conceptualising
- Synthesising

What motivates me?

- Organising
- Sequencing
- Practising

- Sharing
- Internalising
- Moving and feeling
- Involving

Preferences

- Taking risks
- Unclear concepts and instructions
- Ambiguity

- Too much data and analysis
- Lack of interaction
- Lack of time for relationships

struggles with

- Skills practice
- Well-structured activities
- Detailed agendas, outlines
- Clear instructions, expectations
- Practical concrete examples
- Step-by-step processes
- Repetition and review

- Group, team projects
- Hands-on activities
- Small group discussion
- Music, icebreakers
- Sharing of personal reactions
- Stories, human interest, narratives
- Physical activities
- Qualitative research

Student Expectations

Student Expectations

- Outlines
- Checklists, timelines
- Worksheets
- Sequencial and self-paced learning
- Policies, procedures
- Organisation, summaries
- How, what, why, where, when?
- Exercises with steps
- Structured problem solving with steps
- Learning "laboratories" (practice)
- Pre- and post-tests, quizzes
- Clear examples
- Case studies

- Chat, IM, SMS
- Storytelling
- Group discussions, forums, blogs
- Small group, team learning
- Drama, body language, role playing
- Learning "laboratories" (interacting)
- Sharing personal experiences
- Listening and sharing ideas
- Qualitative research
- Auditory, music and rhythm
- Interviews
- Physical, kinaesthetic activities
- Cooperative learning
- Intrareflection

Ways of Facilitating Learning

WHO?

Emotional
Expressive
Interpersonal
Kinaesthetic

Organised
Sequential
Procedural
Methodical

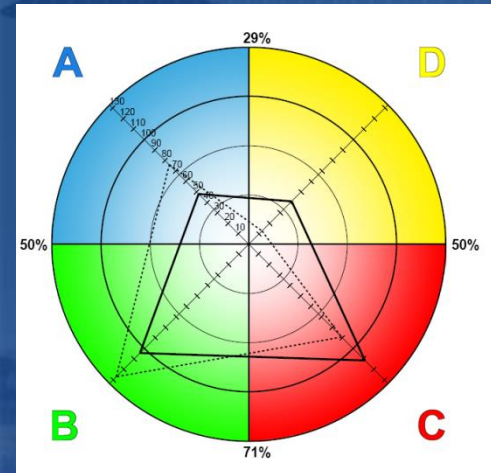
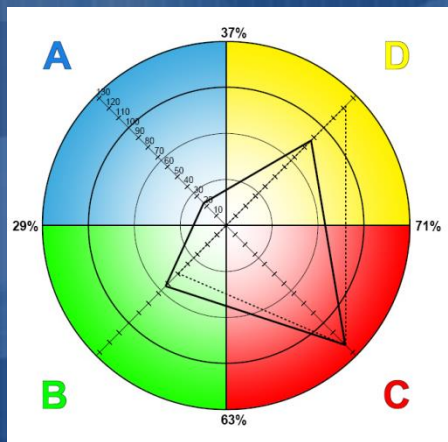
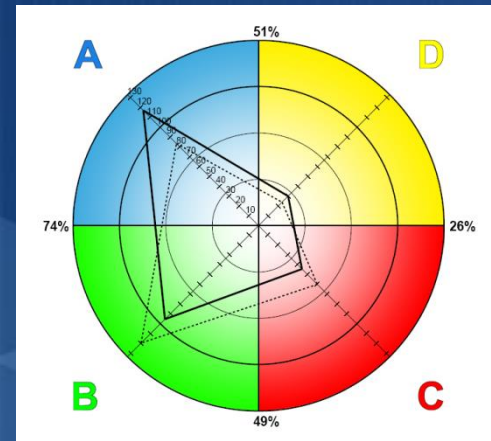
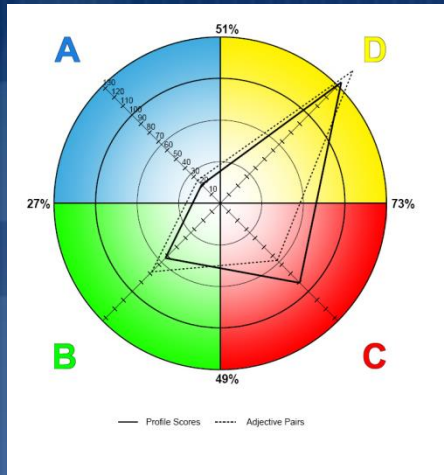
HOW?

B

C



Based on my presentation, which profile fits me? Substantiate your answer



Non of the above as ...

... they did tests on the 2 hemispheres of my brain, and the result:

- a) *In the left, nothing is right!*
- b) *In the right, nothing is left!*

