

**Extending the interconnected model of teacher professional growth to analyse professional development facilitators' learning**

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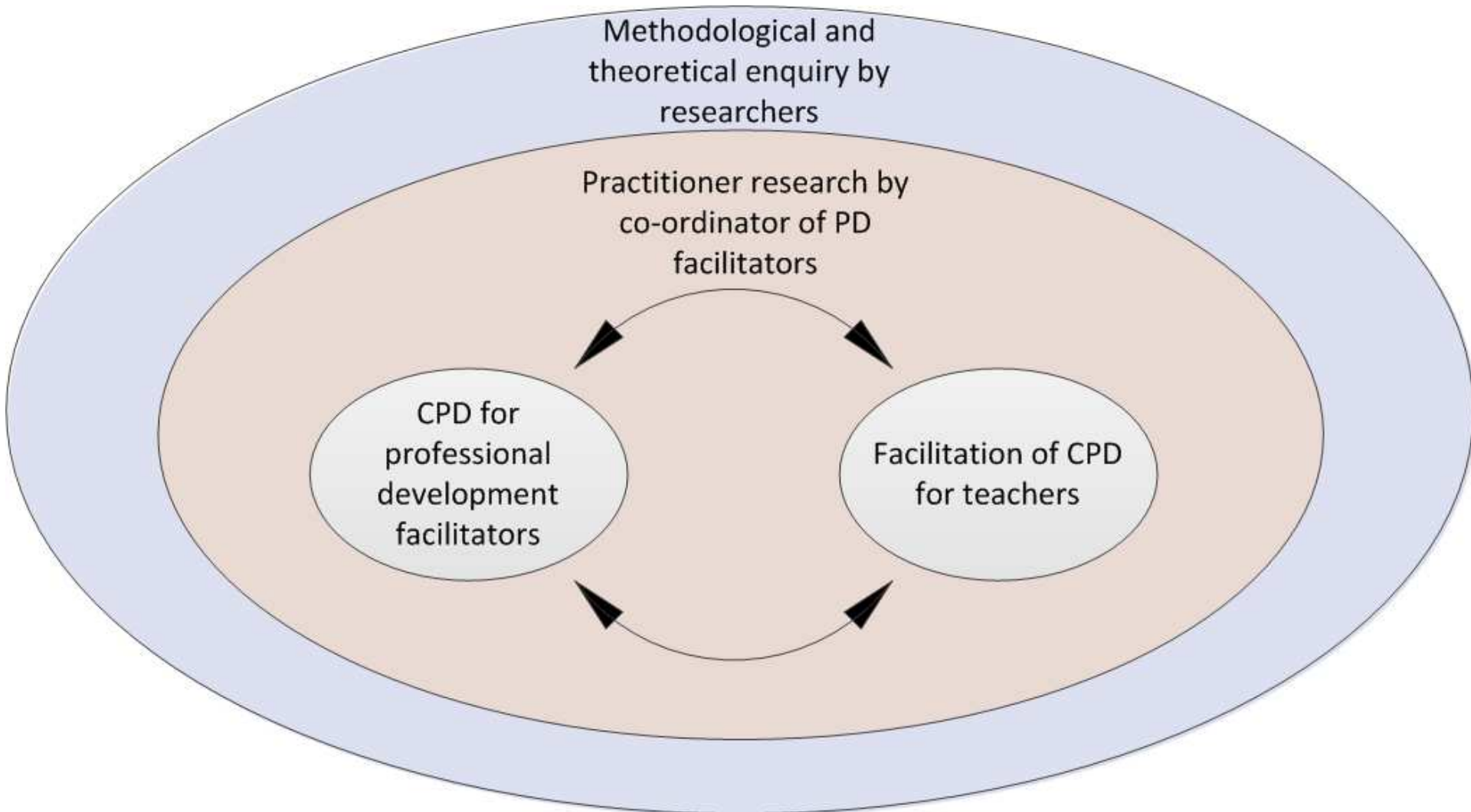
Emily Perry and Mark Boylan  
Sheffield Institute of Education

## Extending the interconnected model of teacher professional growth to analyse professional development facilitators' learning

### Questions:

- What can we learn about the role of a professional development facilitator?
- Can we apply the interconnected model of teacher professional growth to professional development facilitators?
- What can we learn about the interconnected model by using it in this way?

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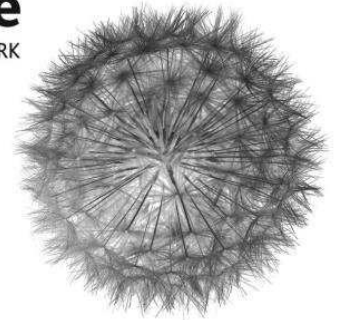
## | Professional development facilitators

- Key players in the education landscape
- An absence of research into or knowledge of the skills, identities, roles of professional development facilitators
- Increasing move towards teachers as facilitators
- How should we go about identifying the teachers who would make good professional development facilitators?
- What support should we provide for professional development facilitators to help them enquire into their own practice?

## | CPD for PD facilitators: context

- National Science Learning Network, funded by the DfE, to deliver CPD to science educators in England across the age ranges
- Five regional centres and the National Science Learning Centre in York
- Workforce of professional development facilitators "in-house" and independent consultants
- Funded programme of support for professional development facilitators

**Science**  
LEARNING NETWORK



## | CPD for PD facilitators: aims

- To improve understanding of the skills and pedagogies used by effective professional development leaders;
- To trial and evaluate the use of video observation and sharing technology to support practitioners in developing their practice;
- To explore and better understand how to support teachers in enquiring into their own practice.

Participant	Role	Experience as a PD facilitator	Subject specialism
Liz	independent consultant	11 years	biology
Adam	independent consultant	11 years	biology
Sarah	independent consultant	10 years	biology
Rose	combined role	8 years	chemistry
Mike	combined role	7 years	chemistry
Jack	Science Learning Centre employee	4 years	physics & chemistry
Ben	hybrid teacher leader	4 years	biology



## CPD for PD facilitators: participants

Reasons for taking part included:

- to expand knowledge of different styles and modes of CPD
- to alleviate concerns, anxieties I have about my role as a PD facilitator
- to critically evaluate how video technology can encourage active professional interaction between staff
- an opportunity to investigate a tool/process for use in CPD
- to improve my performance as a PDL... so that I can continue to give value for money
- not many opportunities exist for independent consultants to support each other

## CPD for PD facilitators: structure

December	Face-to-face day 1	<ul style="list-style-type: none"><li>• video</li><li>• self-analysis</li><li>• share</li><li>• critical friend analysis</li></ul>
January	Online meetings	
February	Face-to-face day 2	
March	Online discussions	
April	Follow up meetings and interviews	



Recorded video



Context Participants Tools Files Flag

Obs ID: 48141

Date: Saturday 12 January 2013

Time: 10:00 AM - 10:00 AM

Duration:

Location: Science Learning Centre (Sheffield Hallam Uni) --

Hardware:

Title: SKE Chemistry Day 2 Video 3 (Copy)

Purpose: SKE Day 2: modelling elements, mixtures and compounds

Comments **Forms** Instruments

Self Study analysis for video owner

**Emily Perry**

Self Study analysis for video owner Expand questions

Instructions

Use this form when watching your own videos.

- 1. Watch the video of yourself, and then note one or two features of your practice you think are interesting, whether that's because they are effective or less effective (in your view).

At one point I ask a question along the lines of "what question do you think I was going to ask?" I have also noticed here something

Timeline: 00:00:00 - 00:00:00

Start tag End tag

- 2. What made you notice these features of your practice?

What made me notice it is that it may be a way of subtly supporting a less confident participant (actually the participant it was

Timeline: 00:00:00 - 00:00:00

Start tag End tag

- 3. What do you think these features of your practice mean in terms of your effectiveness as a professional development leader?

I think the questioning technique here and

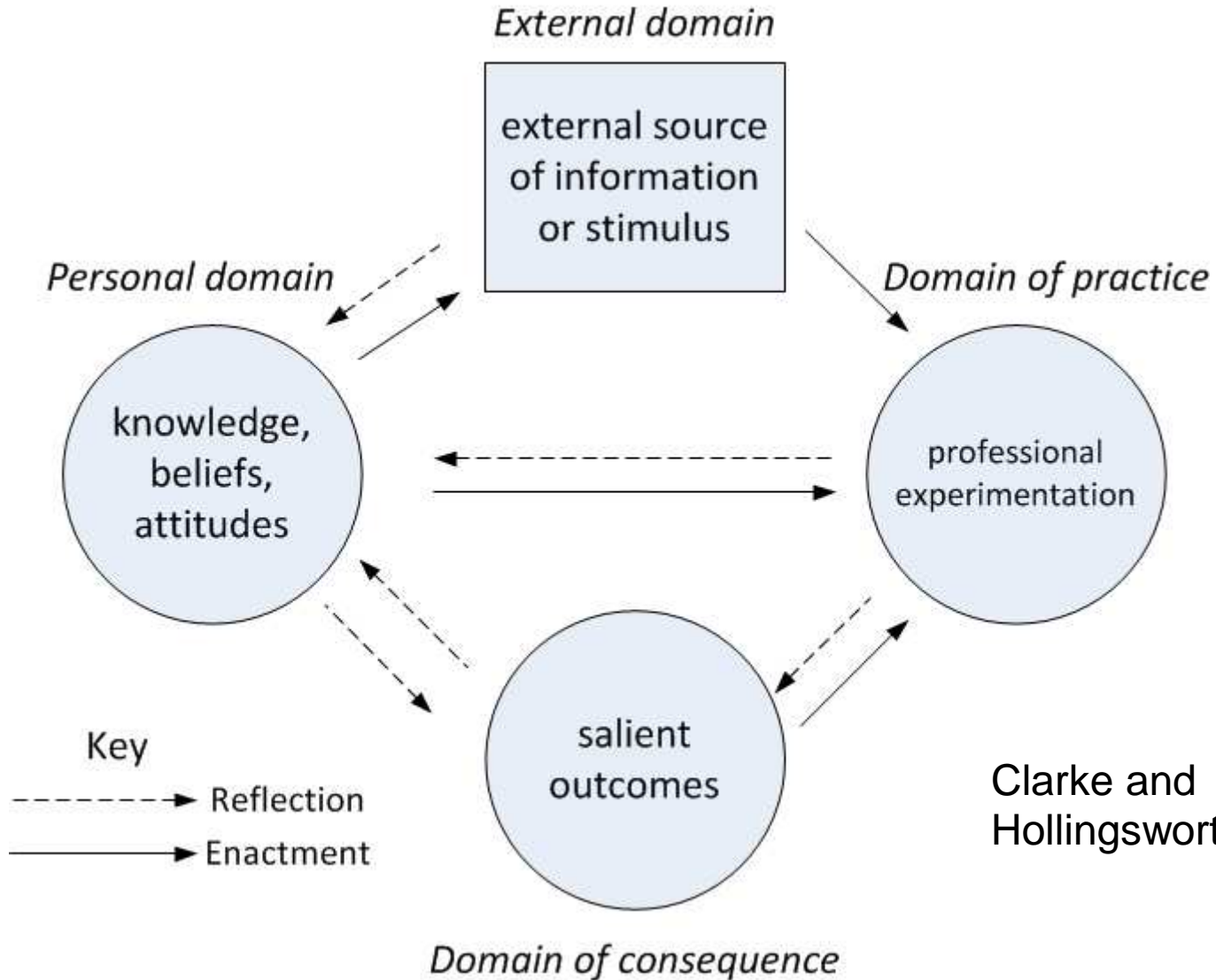
## CPD for PD facilitators: video observation

Participant	Video shared
Liz	in-school departmental twilight
Adam	one-off group workshop
Sarah	1:1 support for subject leader
Rose	no video
Mike	multisession group CPD
Jack	one-off group workshop
Ben	conference presentation

## CPD for PD facilitators: what was noticed in the videos?

Theme	Examples
<b>Identity:</b> Appearing to be a competent facilitator of professional development	seeming knowledgeable, confident, relaxed, prepared, use of humour, building a relaxed atmosphere
<b>Pedagogy:</b> Engaging the teachers in professional development activity	use of questions, working in groups, talking time, modelling an activity, getting started in sessions, gathering evidence of impact/learning
<b>Physical presence:</b> Using body and voice	making eye contact, standing or sitting, saying “um”

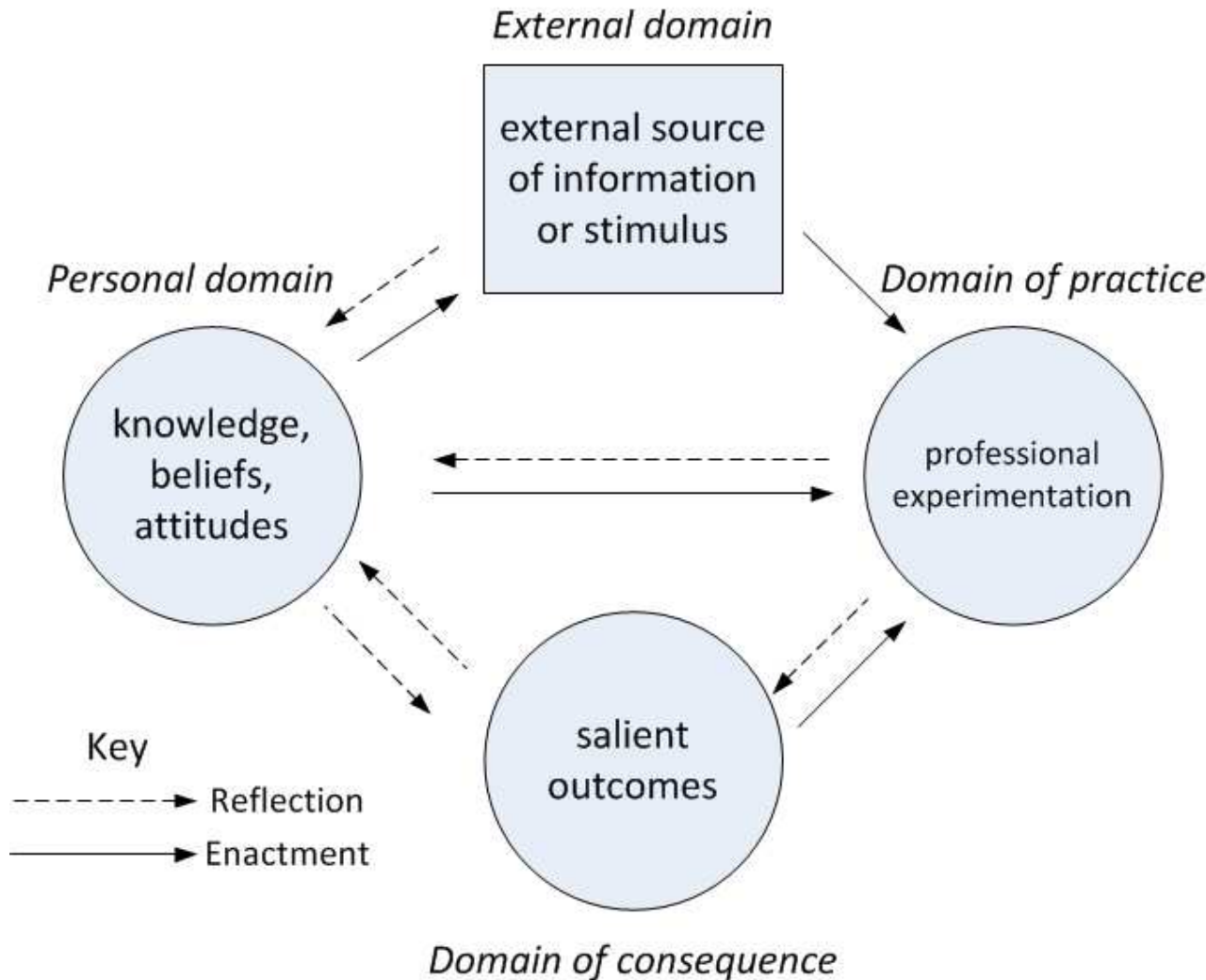
# The interconnected model of teacher professional growth



Clarke and  
Hollingsworth (2002)

## CPD for PD facilitators: data collection

<b>Data</b>	<b>Collection method</b>	<b>Timescale</b>
Intended learning outcomes	Questionnaire	Before Day 1
Participant background information	Online survey	During the programme
Participants' analyses of videos	Questionnaire	During the programme
<b>Evaluations</b>	<b>Questionnaire</b>	<b>Day 2</b>
<b>Follow-up interviews</b>	<b>Paired interviews</b>	<b>A month after Day 2</b>
<b>Follow-up questionnaires</b>	<b>Questionnaire</b>	<b>Eight months after Day 2</b>

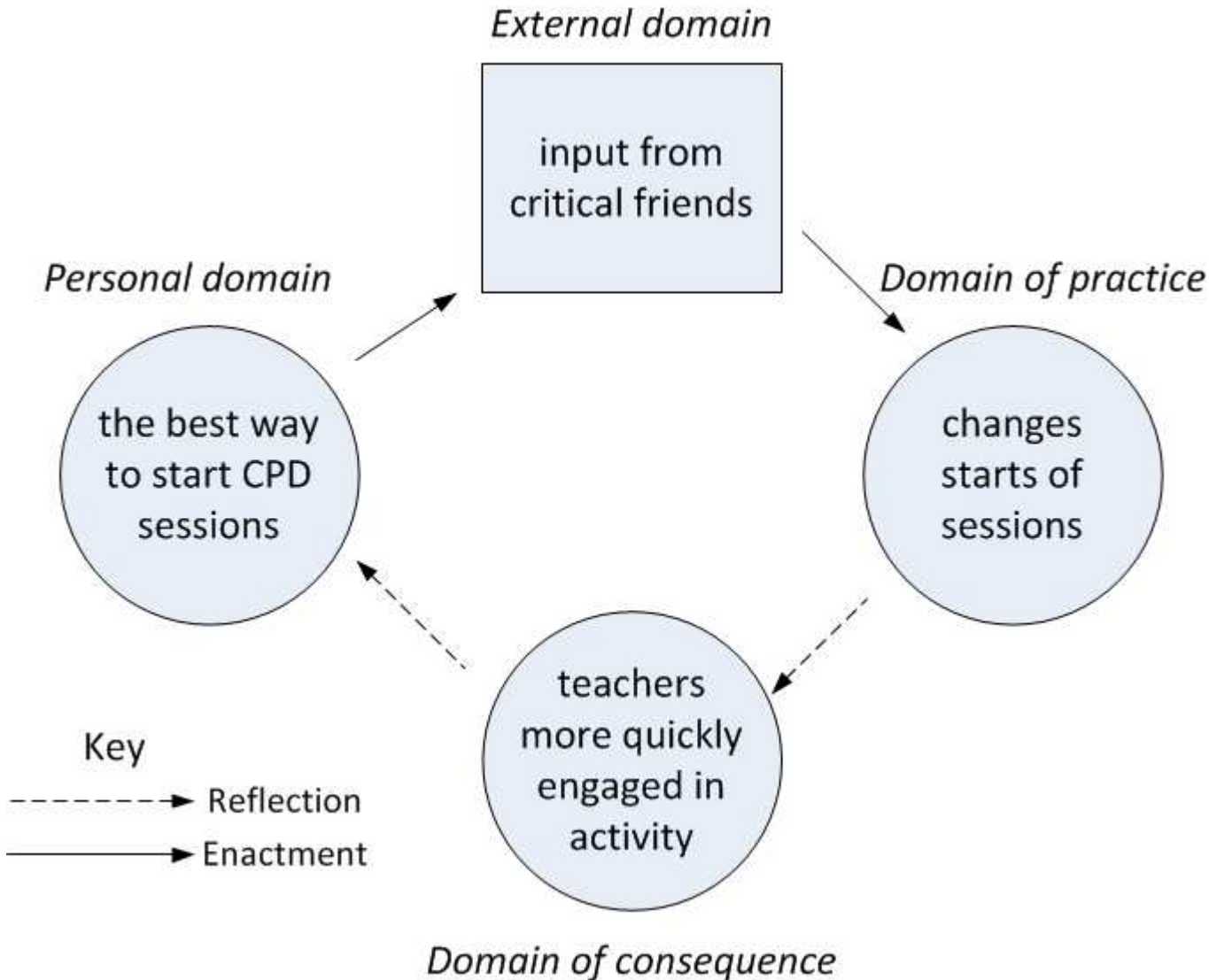


The interconnected model was used for:

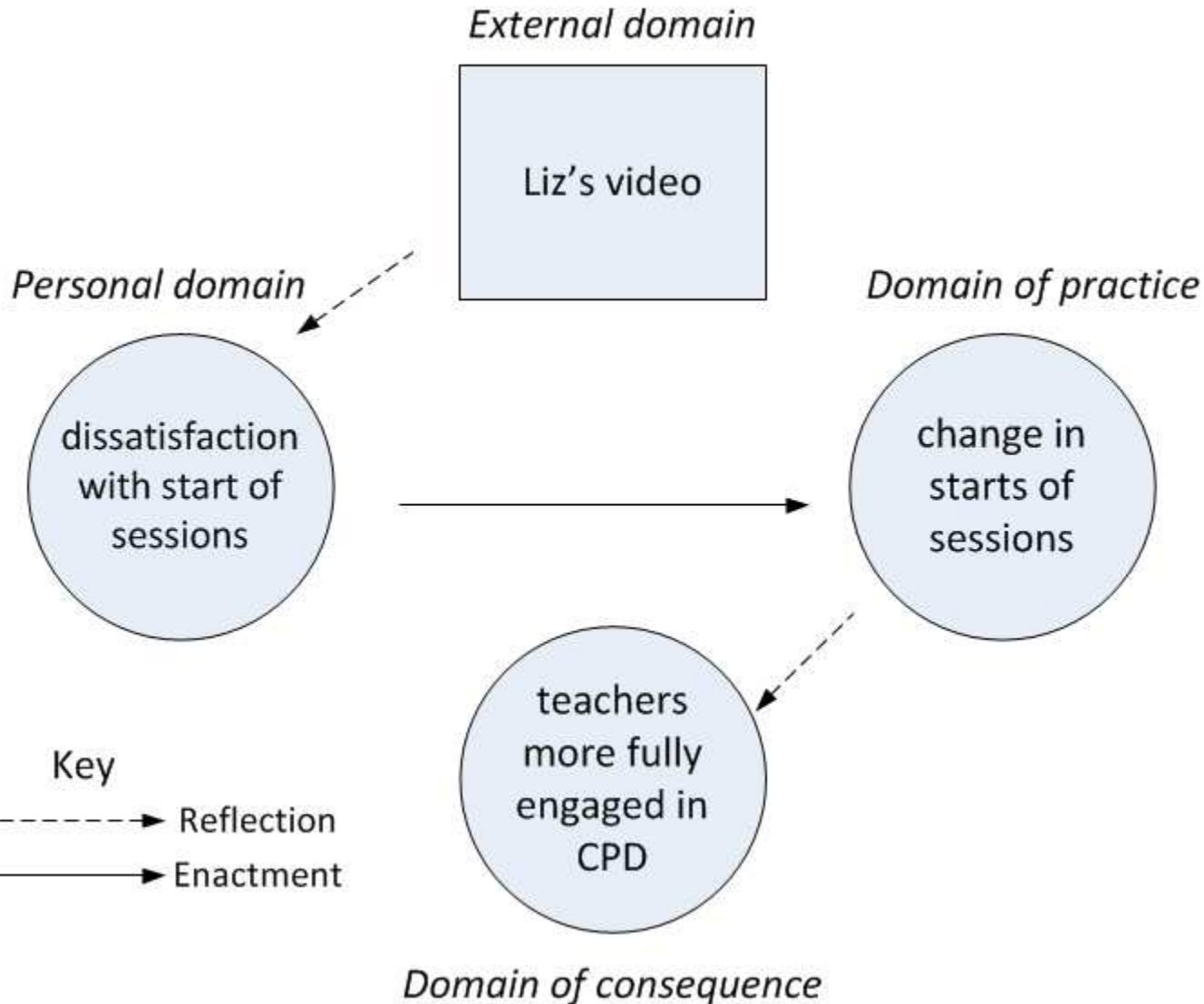
- identification of individual pathways
- classification of reported impacts in each domain



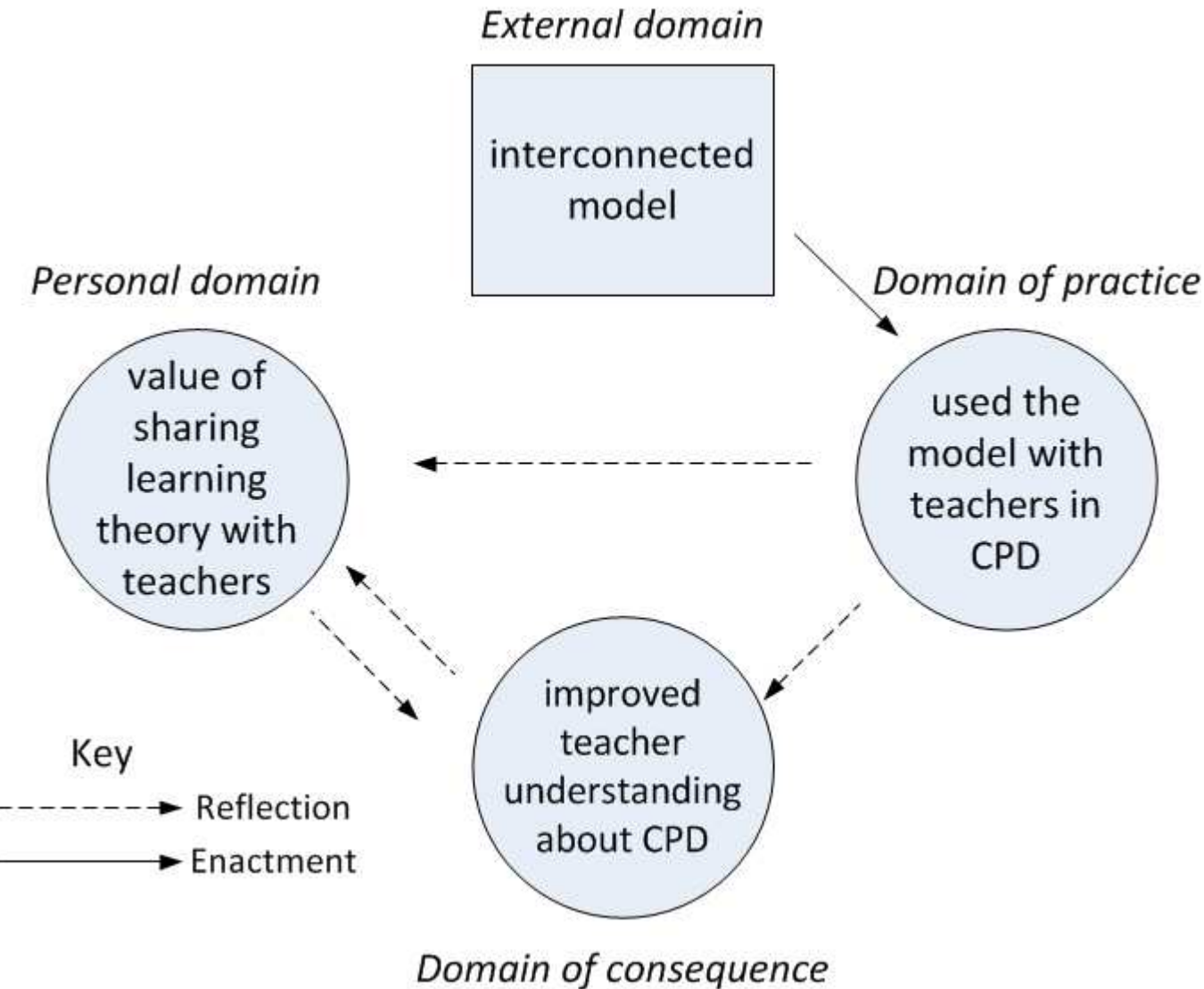
"I've been very frustrated about how long it takes to start a course because of the paperwork that you have, so I decided that I'd film that bit just to see what it looked like"



"Having seen Liz, it's made me think that I don't do it well enough, so I have gone and improved a little bit there"



"I used the interconnected model with a group of teachers to explain the purpose of what they were here for, to try and give them a more accurate perception of how CPD should work"



*Personal domain*



Changes in:

- knowledge & beliefs about own practice
- knowledge & beliefs about others' practice
- knowledge of research in CPD
- knowledge & beliefs about use of video

- Made me think about how I start days, body language, challenges, questioning;
- If it hadn't been for the video she could have told me what she does, but would it have had the same effect?
- I have become more aware of the need to be more challenging of participants;
- Has definitely clarified the subtle skills used by effective CPD providers and some of the differences with teachers.

*External domain*

external source  
of information  
or stimulus

Effect of:

- discussions with colleagues
- observing others
- being and having a critical friend
- reading research into CPD

- The most useful aspect was discussions with other CPD leaders;
- Both watching others and reflecting on their comments has made me think about my practice;
- Being a critical friend is as valuable as having a critical friend;
- Sharing ideas, successes and challenges is invaluable.

Trying out new ways of facilitating CPD:

- starting sessions, asking questions, assessing learning...
- embedding research
- video as a tool for enquiry

*Domain of practice*

professional  
experimentation

- I used the interconnected model with a group of teachers to explain the purpose of what they were here for, to try and give them that more accurate perception of how CPD should work;
- I enjoyed experimenting using the video technologies to observe others;
- I have gone and improved a little bit there [in the starts of sessions].

## Reported changes: domain of consequence

- I think that [using the interconnected model] was quite successful;
- I feel happier with the starts of sessions;
- I would feel able to support others in making use of this technology.

Changes in:

- effectiveness of CPD facilitation;
- impact on teachers.

salient  
outcomes

*Domain of consequence*

## Extending the interconnected model of teacher professional growth to analyse professional development facilitators' learning

### Questions:

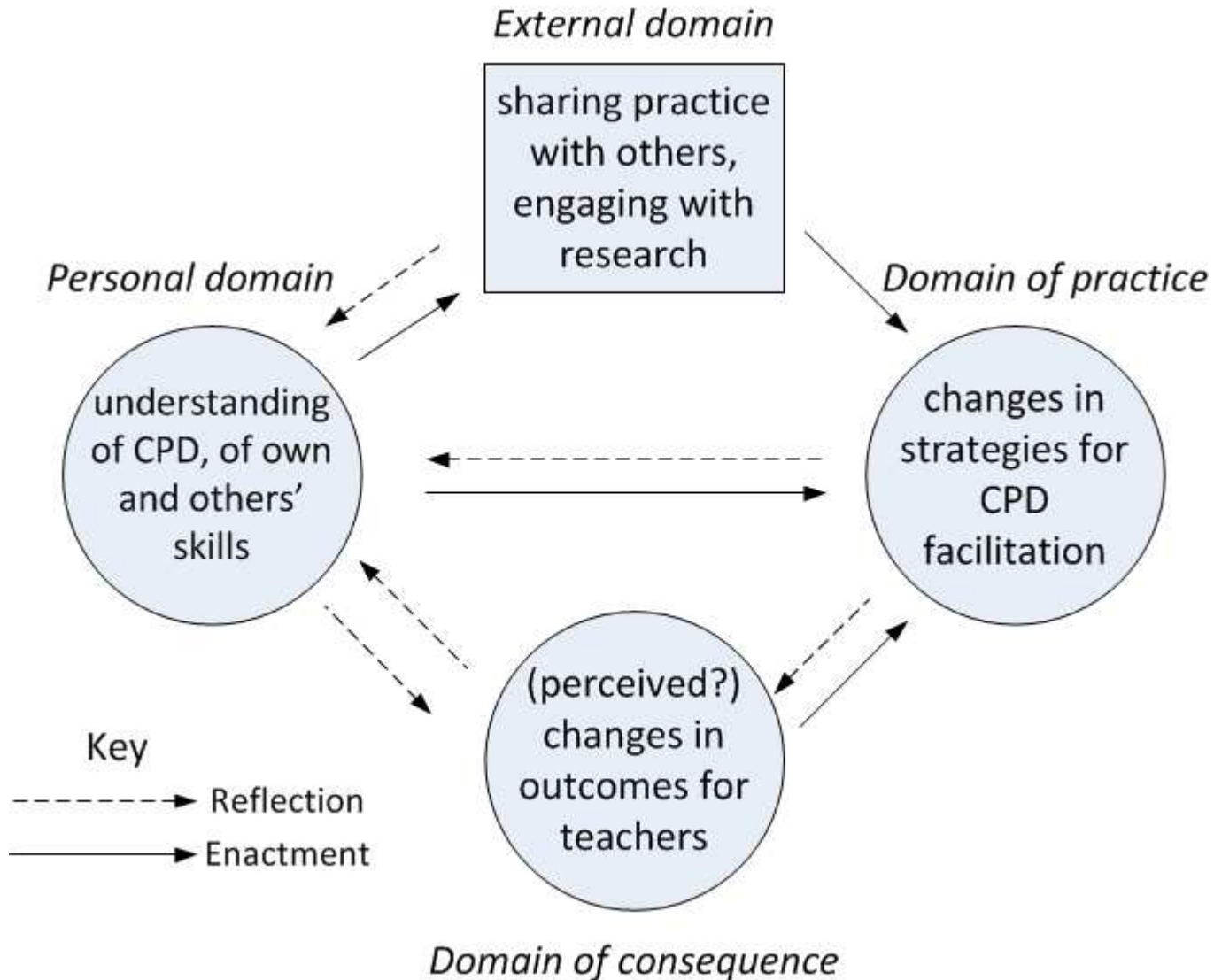
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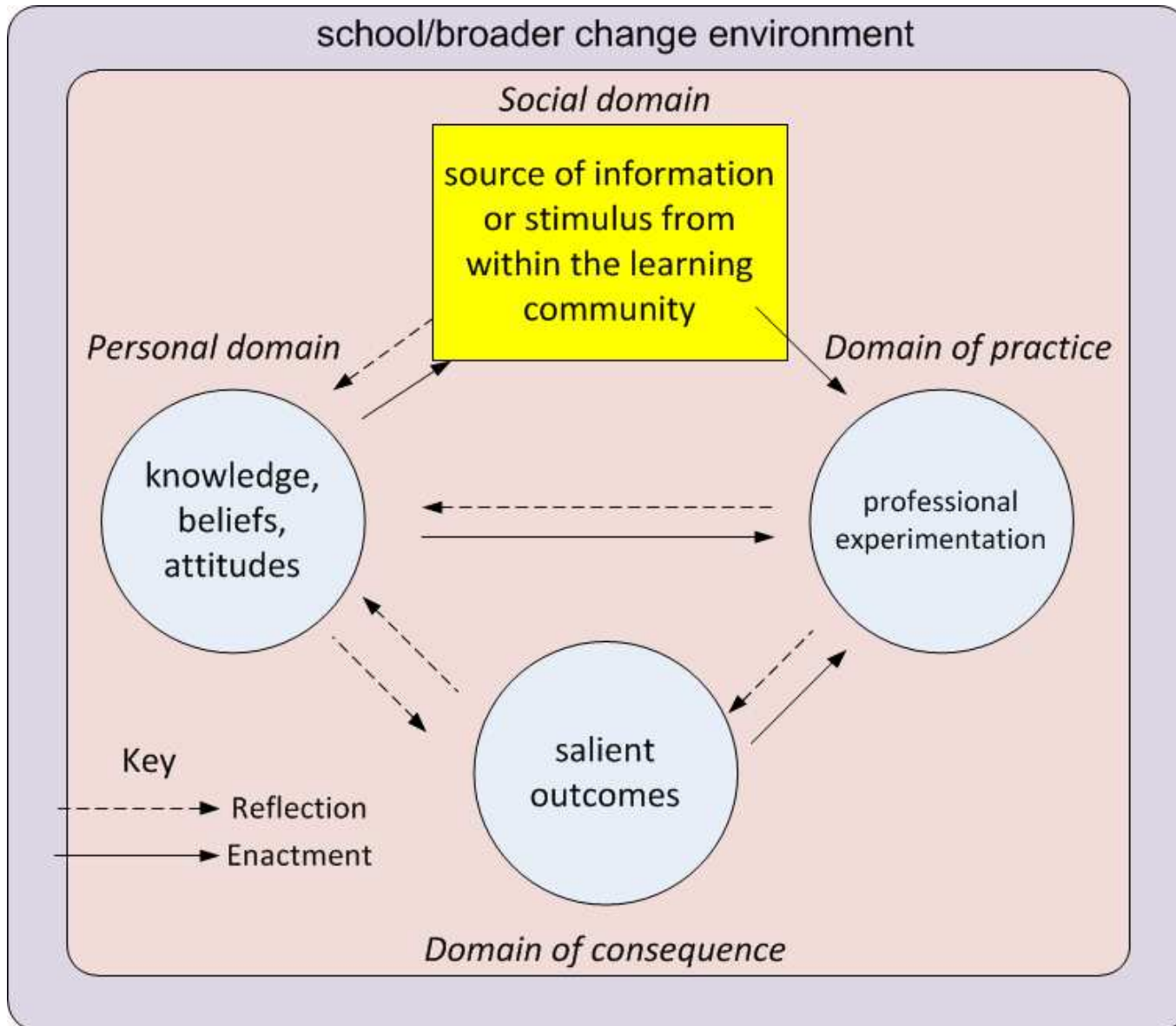
## What can we learn about professional development facilitators?

- open to reflective enquiry;
- attached high value to the (rare) opportunity to work together;
- comfortable and confident both giving and receiving feedback;
- greater focus on generic facilitation strategies (questioning techniques, ways of organising groups, feedback, etc) than in subject specific or subject-knowledge based strategies;
- interested in using video observation;
- prepared to engage with research and to push this to teachers;
- the programme increased their self-confidence.

# Can we apply the interconnected model to professional development facilitators?

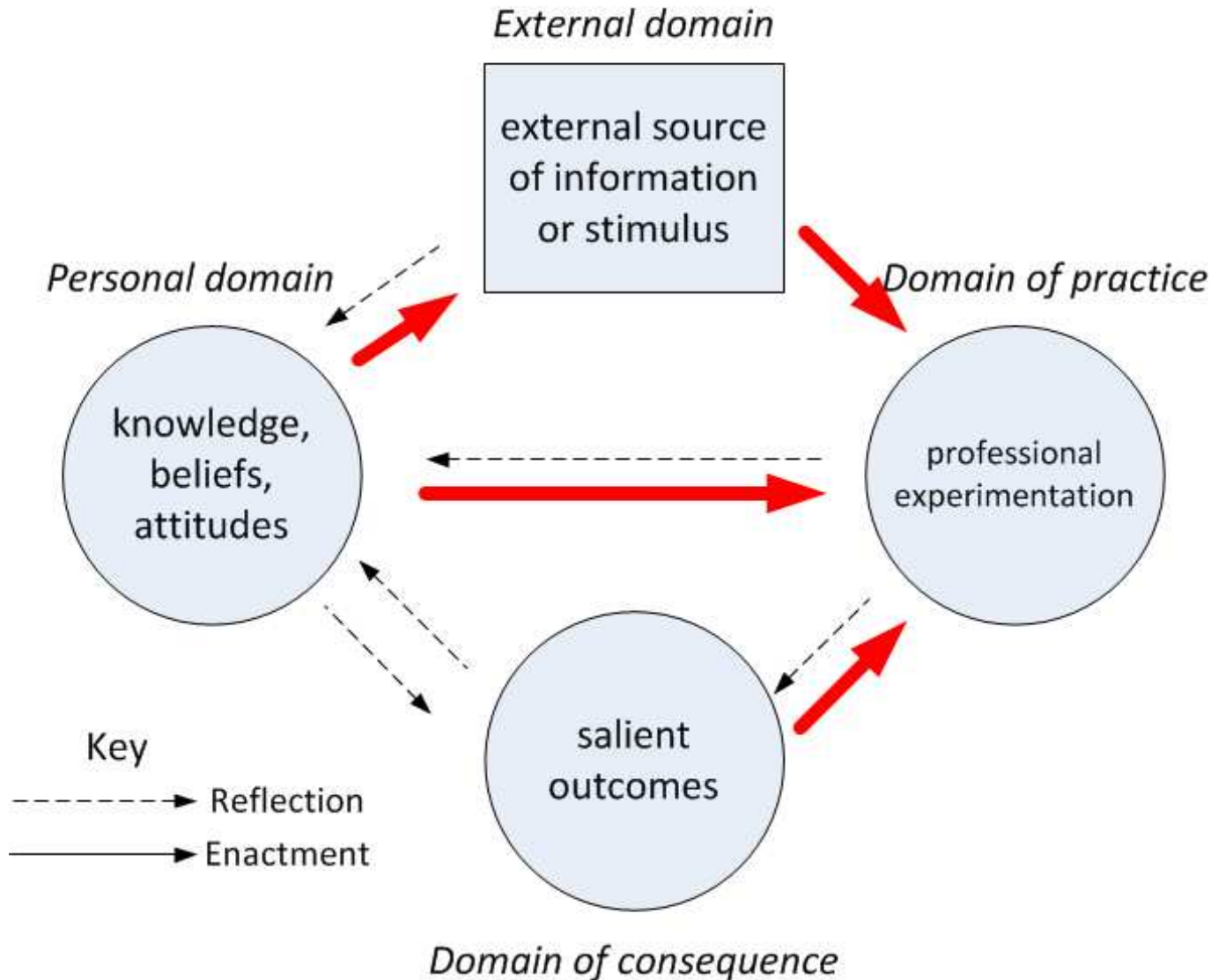


# What can we learn about the interconnected model?



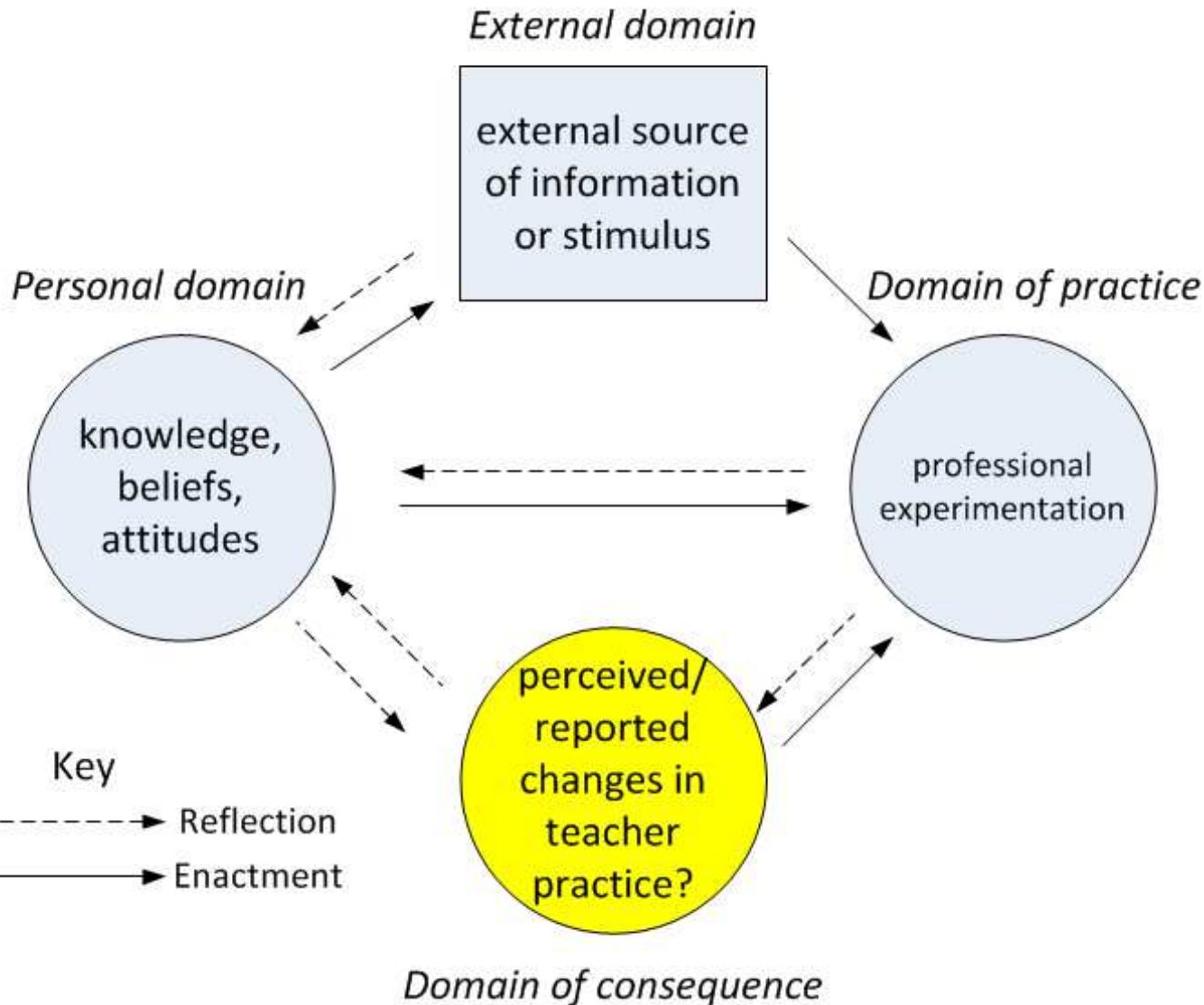
- What if we reclassified the external domain as the social domain?

# What can we learn about the interconnected model?



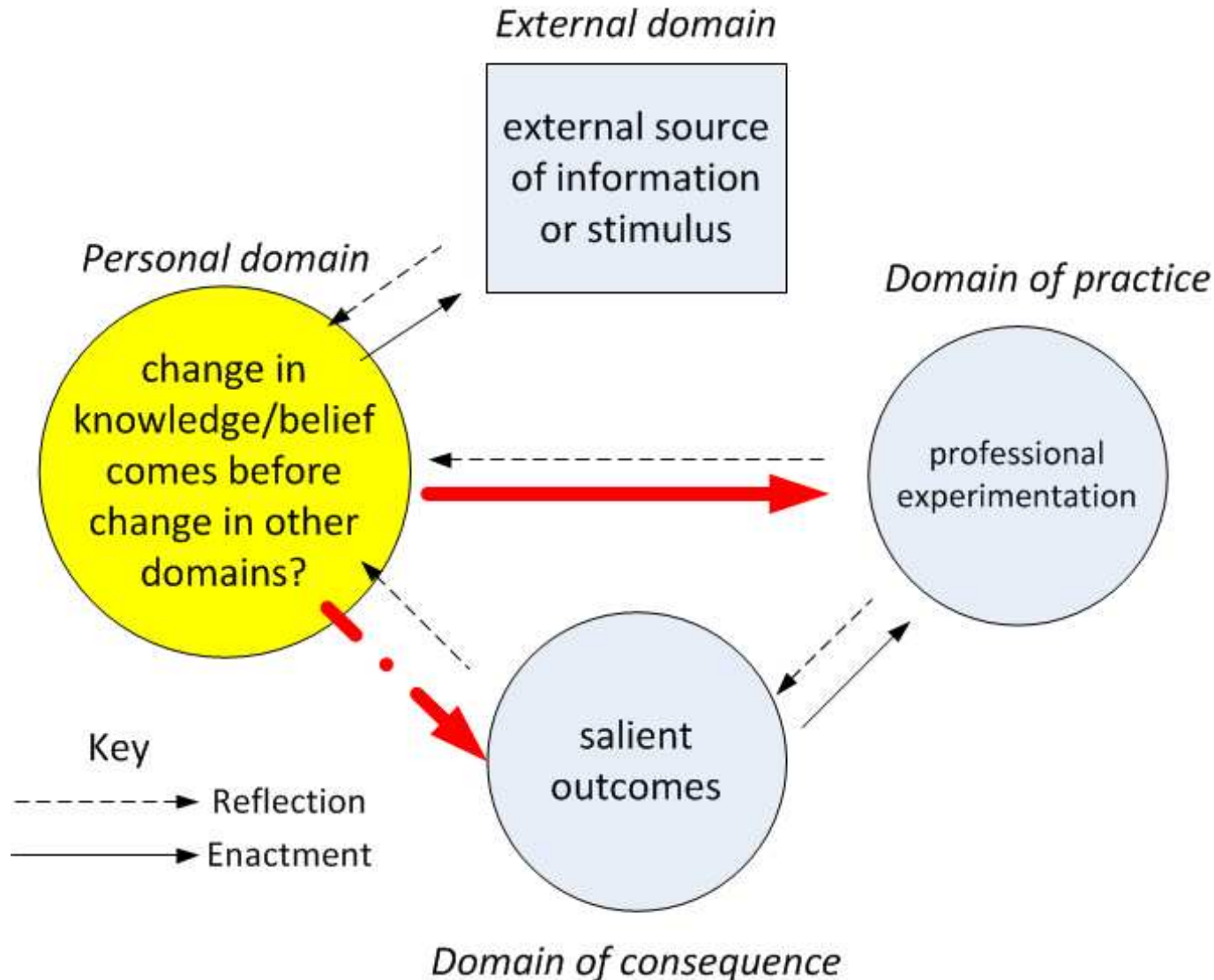
- What does the process of "enactment" really mean?
- In what ways is it different from believing or doing?

# What can we learn about the interconnected model?

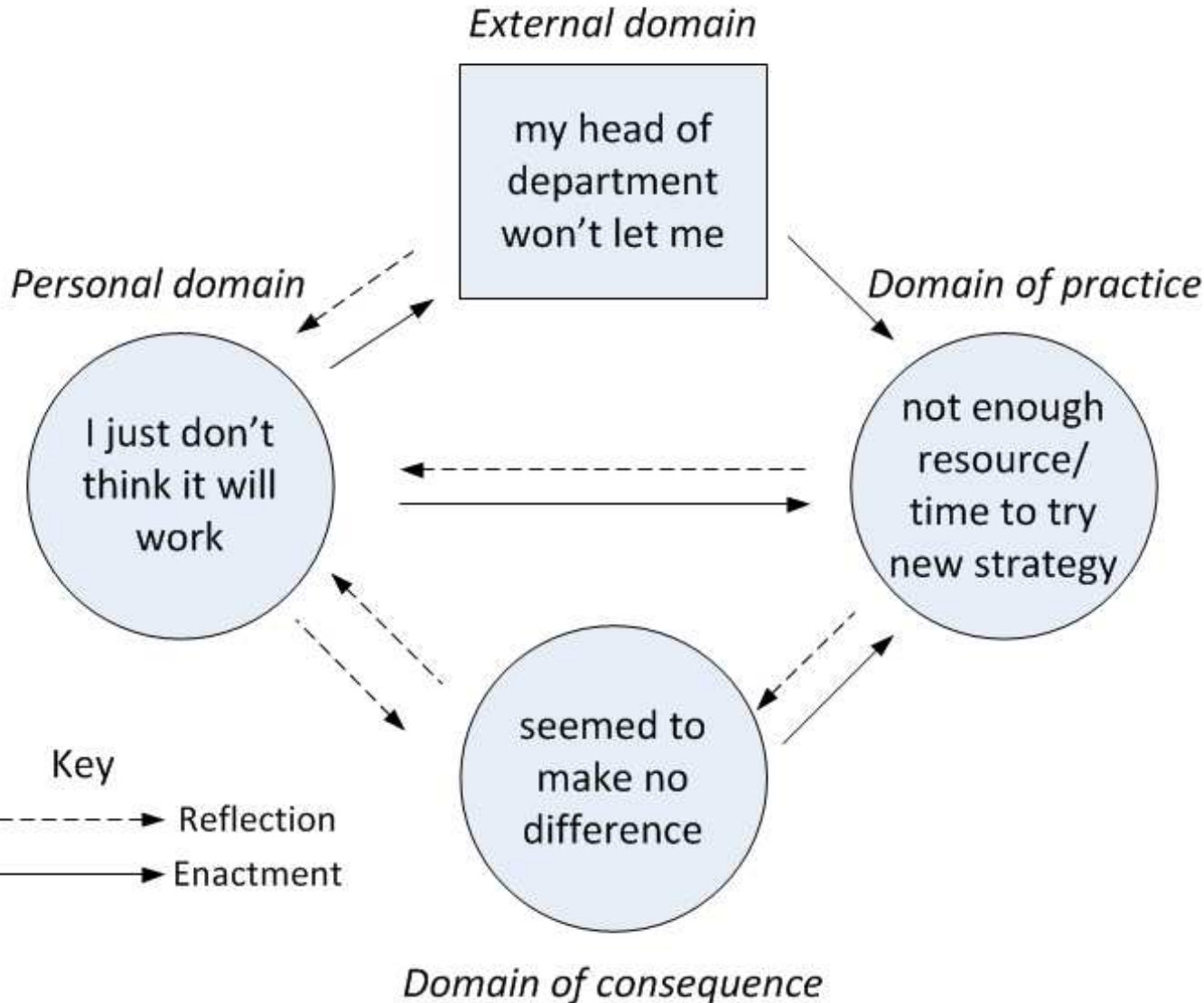


- What are salient outcomes for "second order" practitioners like professional development facilitators?

# What can we learn about the interconnected model?

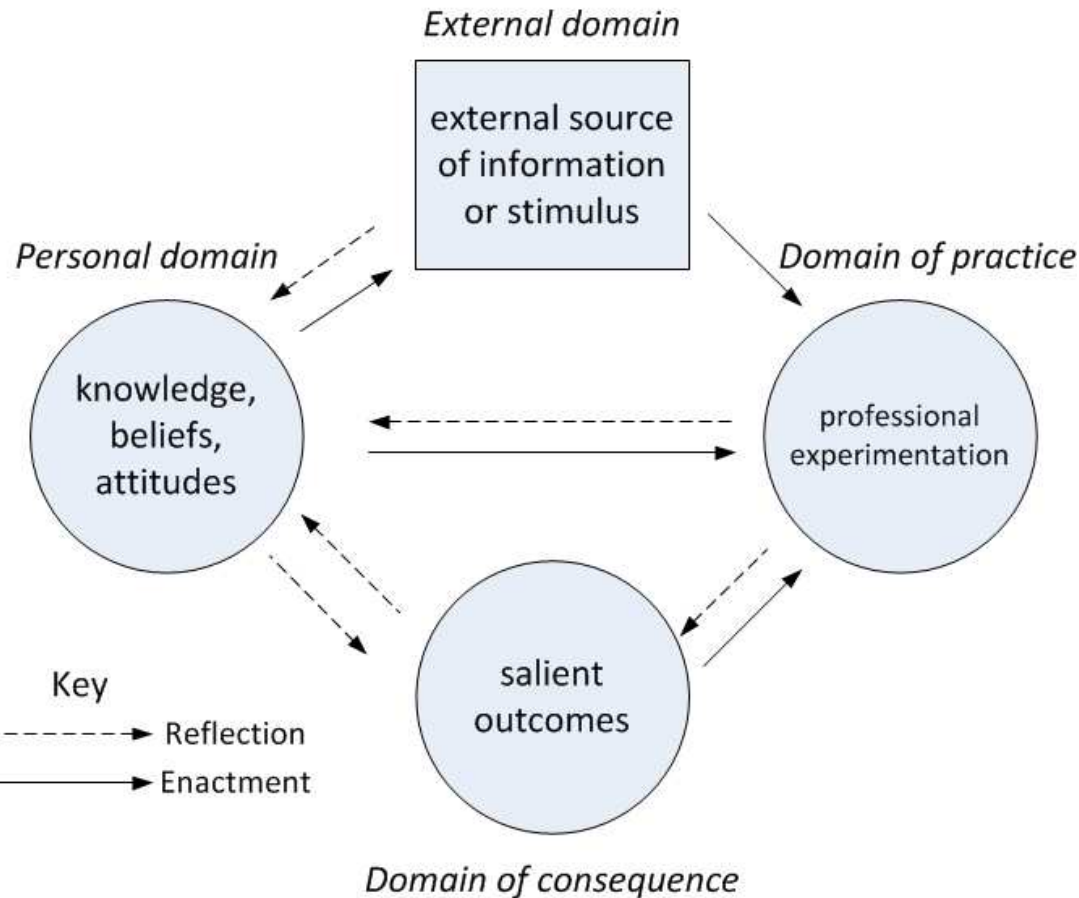


- Does all change pass through the personal domain?



- Can you use the model to identify barriers to change?

# What can we learn about the interconnected model?



- What if we re-classified the external domain as the social domain?
- What does the process of "enactment" really mean?
- What are salient outcomes for "second order" practitioners like professional development facilitators?
- Does all change pass through the personal domain?
- Can you use the model to identify barriers to change?



## Extending the interconnected model of teacher professional growth to analyse professional development facilitators' learning

### Next steps:

- to use the model with other groups of professional development facilitators: new hybrid teacher leaders in the UK and in Ghana;
- to continue to refine and work on the model, building on other models of CPD evaluation.