

Creating a *Blueprint for Resilience* in Educational systems Management

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Calling all agents of change

<http://www.comicbookmovie.com/fansites/CallMeDaGod/news/?a=94186>

School leaders, teachers, educators, trainers, learning designers, academic developers, managers of learning technology systems, practising academics, technology champions ... in Primary, Secondary & Tertiary sectors

Aims

- Introduce the Blueprint for Resilience participants to a variety of tools for developing resilience in their work environments
- Explore the planning and development of organisational systems that can absorb and accommodate change





Survival strategies

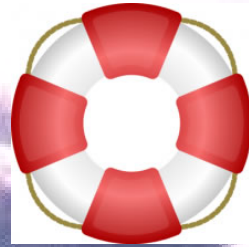


© Paul Scharff Photography
"Beautiful Barnacles"

The barnacles?

Image source: <http://www.paulscharffphotography.com/m-beautifulbarnacles.htm>

The floaters



The *Blueprint for Resilience* in Educational Systems Management

Step 1
Identify and understand the problem

- **Tool 1:** Planning for the future through an interactive board game, a not so trivial pursuit
- **Tool 2:** Identify the 'wicked problem'

Step 2
Identify environmental impacts and Sphere of Influence / Locus of Control

- **Tool 3:** The Sphere of Influence/ Locus of Control Model

Step 3
Analyse and describe the institutional environment

- **Tool 4:** Para-analysis
- **Tool 5:** Adaptive Cycle Framework
- **Tool 6:** Understanding the adaptability of individuals

Step 4
Determine the resilience outcomes for the institution and individuals

- **Tool 7:** Ball in the basin Model for determining Resilience and Transformability

Step 5
Identify and plan actions

- **Tool 8:** Create your Dream Team.
- **Tool 9:** SCOPE - A guide to Institutional System Variables

Step 6
Carry out the action plan

- **Tool 10:** Continuous improvement
- **Tool 11:** Change management

SCENARIO: The Real World Challenge

- The problem: Institutional online learning systems no longer support new modes of educational delivery
- Solution: Implement a new learning management system (LMS)

?



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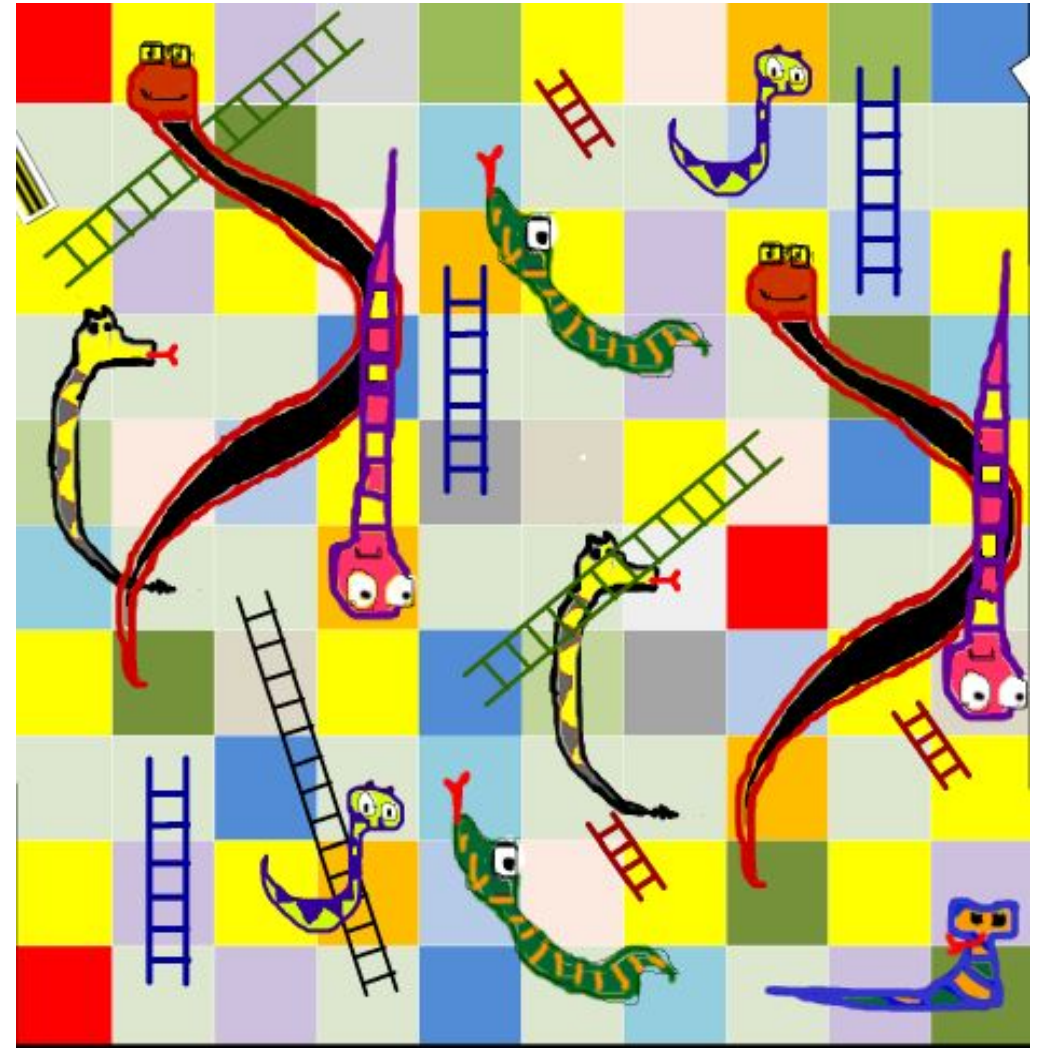
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Step 1

Identify and understand the problem

- Tool 1: Planning for the future through an interactive board game, a not so trivial pursuit
- Tool 2: Identify the ‘Wicked Problem’

Tool 1: Planning for the future through an interactive board game, a not so trivial pursuit.



(Buchan, 2011)

Tool 2: Identify the 'Wicked Problem'

Wicked Problem defining characteristics:

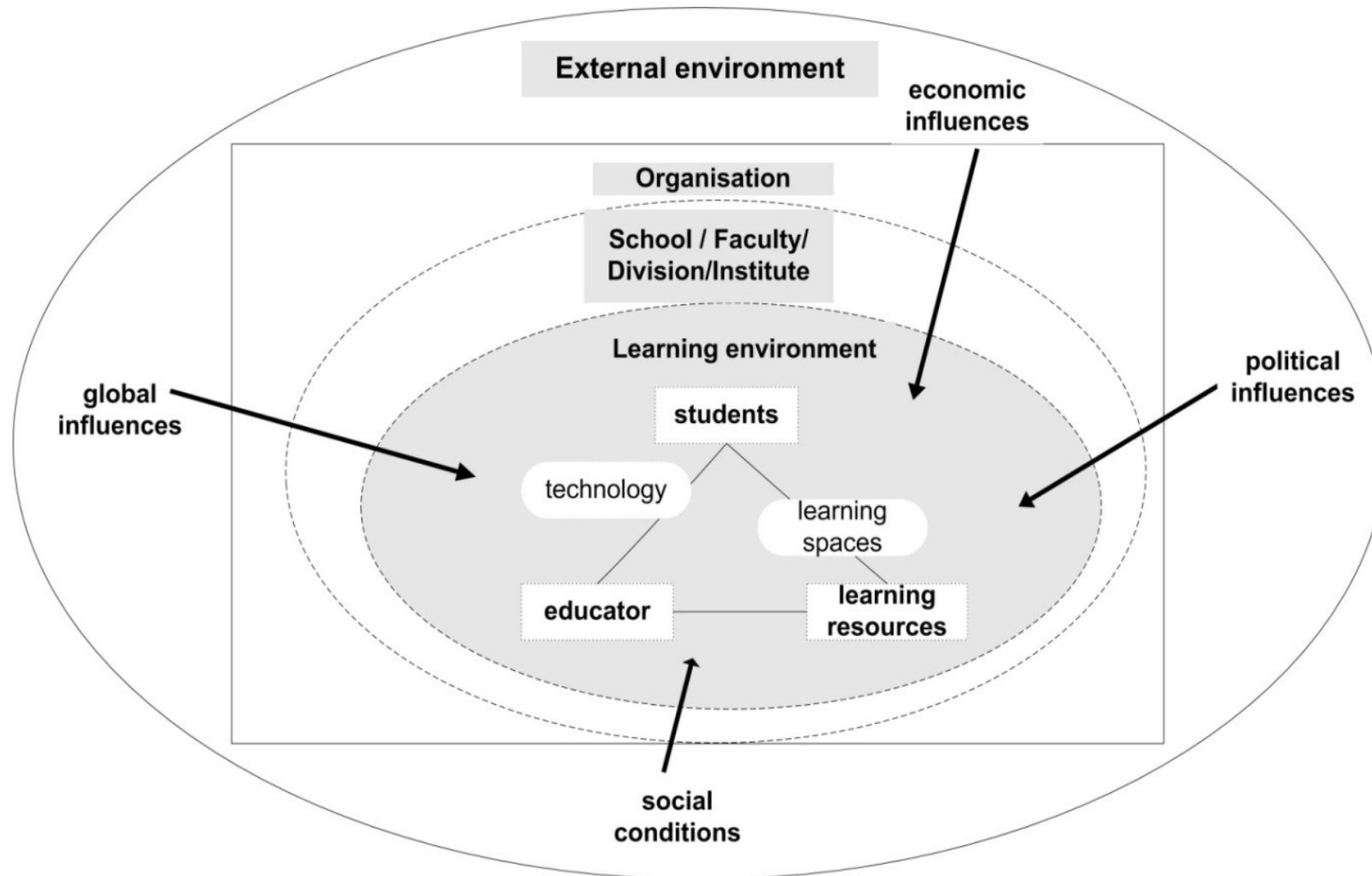
- One cannot understand the problem until one has developed a solution.
- Stakeholders have radically different world views and different frames for understanding the problem.
- Constraints and resources for solving the problem change over time.
- Wicked problems have no stopping rule - the problem is never solved completely.
- Every wicked problem is essentially unique and novel.
- Solutions to wicked problems are not right or wrong.
- Every solution to a wicked problem is a 'one-shot' operation.

(Buchan, 2012).

**Step 2
Identify
environmental
impacts and Sphere
of Influence / Locus
of Control**

- **Tool 3:** The Sphere of Influence/
Locus of Control Model

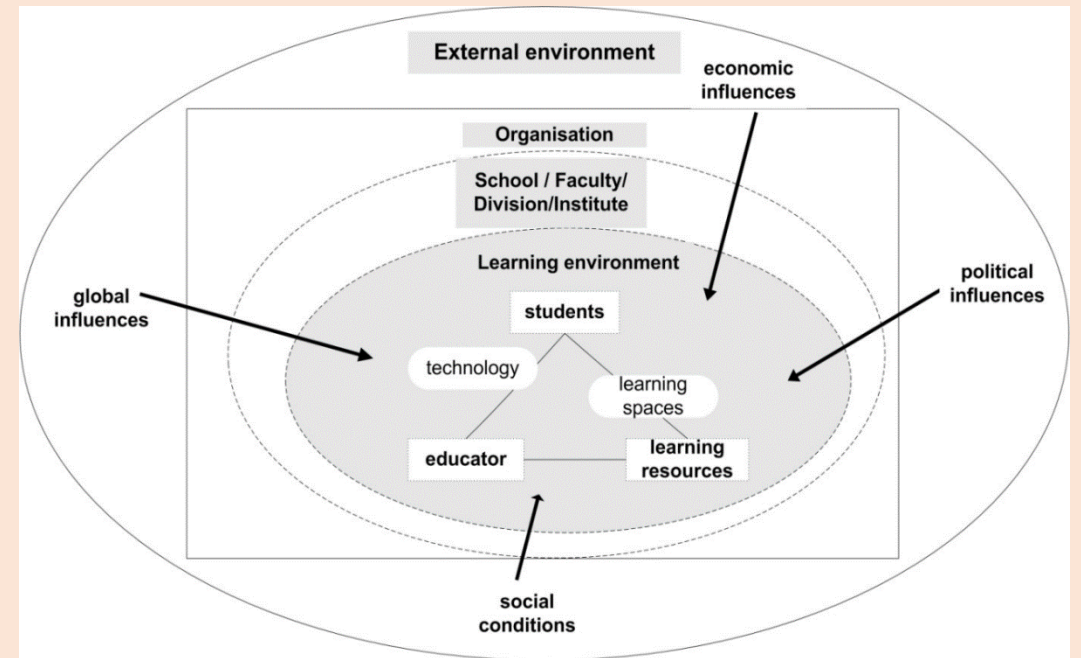




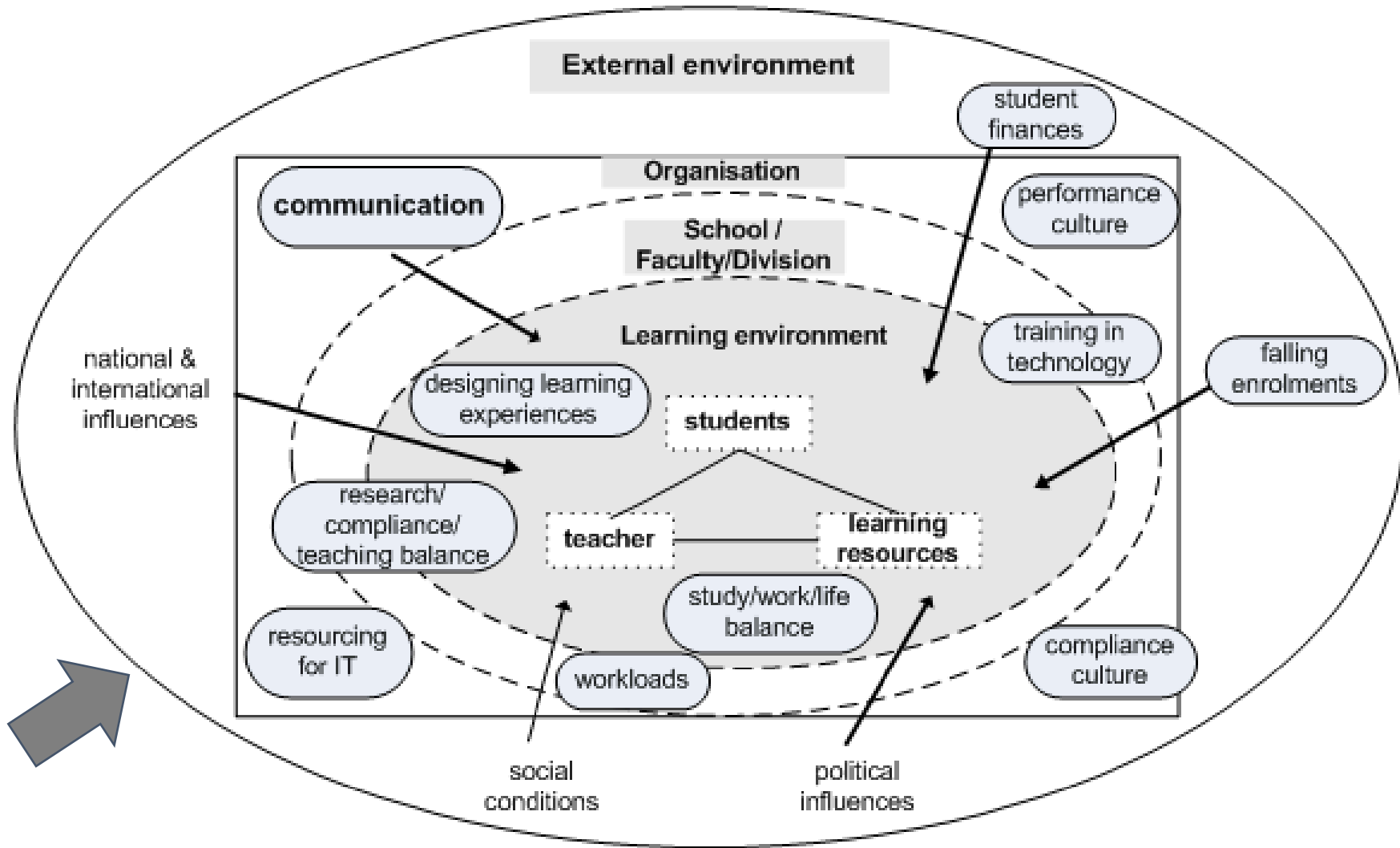
Tool 2: Sphere of Influence / Locus of Control Model of the learning environment (Source: Buchan, 2015)

ACTIVITY 1: Place yourself on the Sphere of Influence at your highest level of operation in your current role.

1. External environment – outside your own institution
2. Organisation – whole of school/institution
3. School/faculty/division or department
4. Learning environment – classroom
5. I work across multiple levels, too difficult to separate



The Sphere of Influence in practice

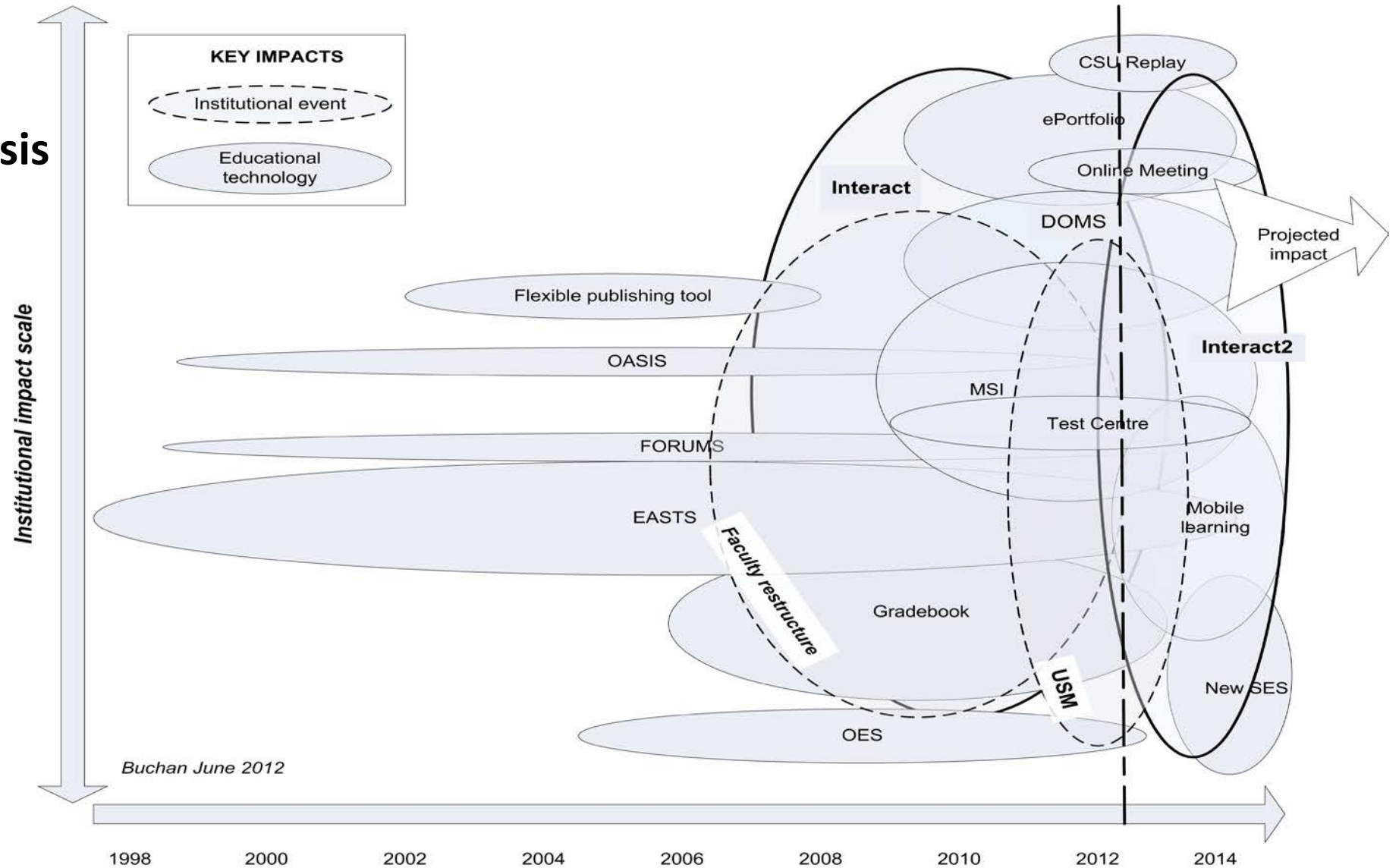


Step 3
**Analyse and describe the
institutional
environment**

- Tool 4: Para-analysis
- Tool 5: Adaptive Cycle Framework
- Tool 6: Understanding the adaptability of individuals



Tool 4: Para-analysis



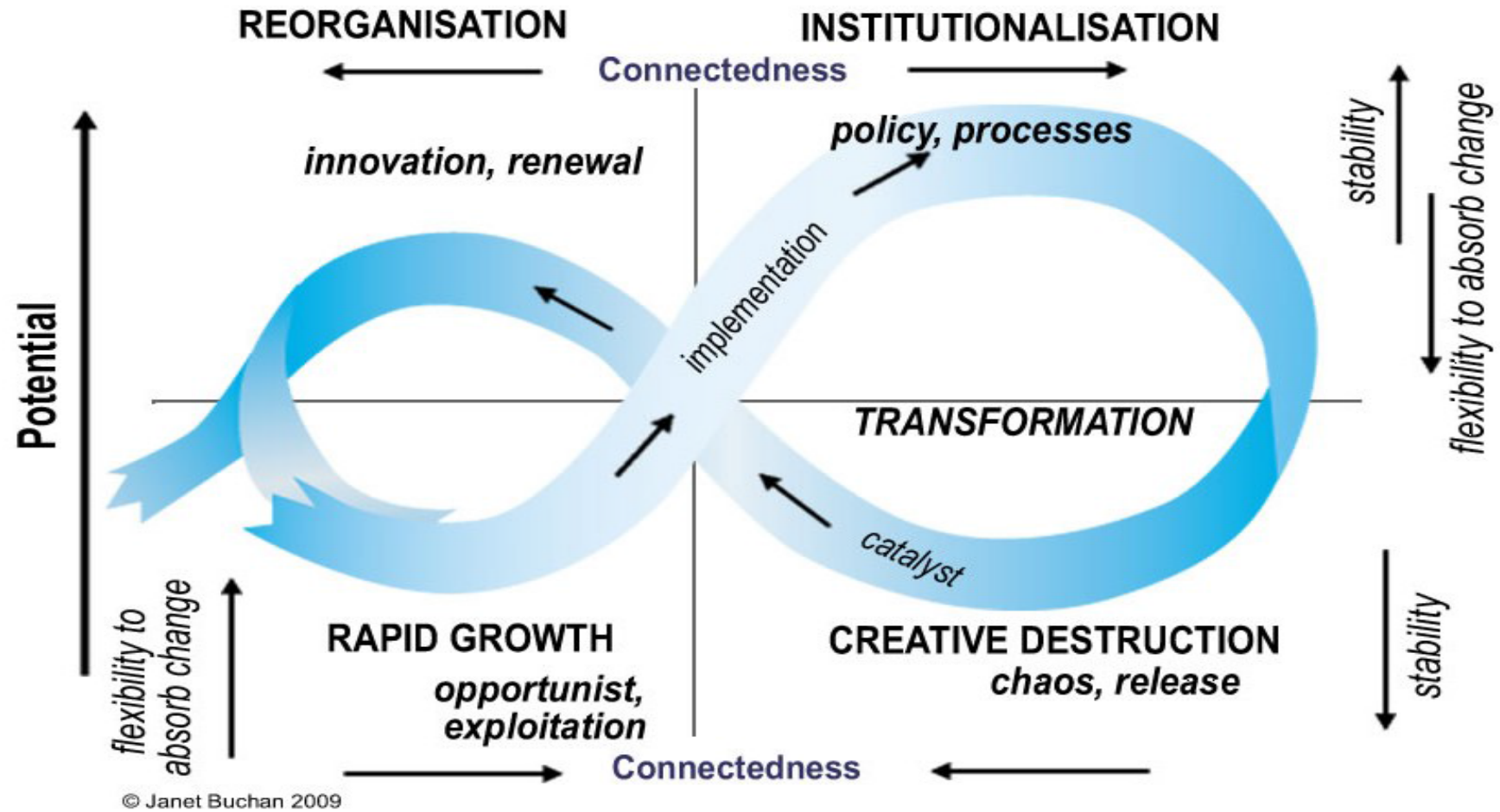
A para-analysis view of the impact of technology systems and institutional changes on academic staff (Source: Buchan, 2014, p. 155).

What do all these have in common?



(hold that thought)

Tool 5: Adaptive Cycle Framework



(Buchan, 2011)

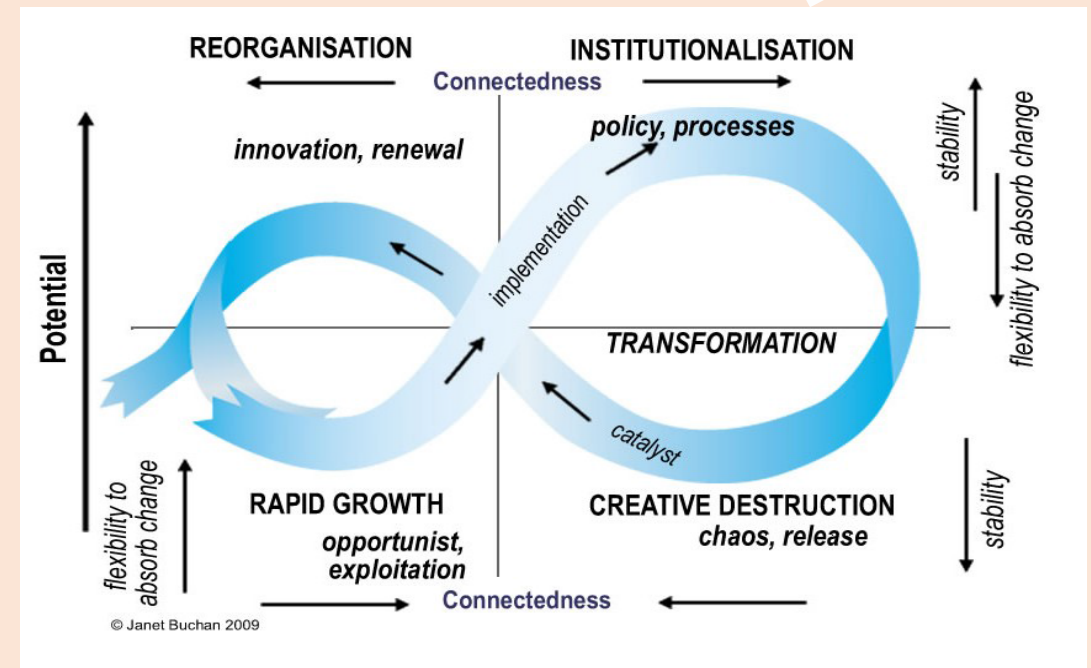
Features of the Adaptive Cycle phases

- **Institutionalisation.** Improved efficiencies in operations, long lasting relationships develop, ongoing development of processes, ongoing small-scale renewal and review and improvement of processes, building up of resources, centralised services have well developed processes and procedures.
- **Creative destruction.** Loss of normal connections, changes in interactions amongst stakeholders, inefficiencies in operations, loss of dependencies, changes in roles, freeing up of resources and people from old ways of doing things.
- **Reorganisation.** Innovation, trying new ways of doing things, trial and experimentation in day to day operations, sharing of ideas, questioning of status quo, pilots and trials of new technology, teams/communities of practice set up, inefficiencies, leadership emerges.
- **Rapid growth.** New processes and procedures developed, sharing of practice, acceptance of technology, improved efficiency, leadership cemented, creating and taking opportunities to make the most use of new technology and available support opportunities, forming new connections, interactions and dependencies, collaboration.

ACTIVITY 2: Where is your own organisation in relation to the 4 phases of the Adaptive Cycle? Think about a particular initiative or transformation event.



- 1. Institutionalisation** – stable phase
- 2. Creative Destruction** – chaos and release phase
- 3. Reorganisation** – innovation & renewal
- 4. Rapid Growth** – opportunist, implementation



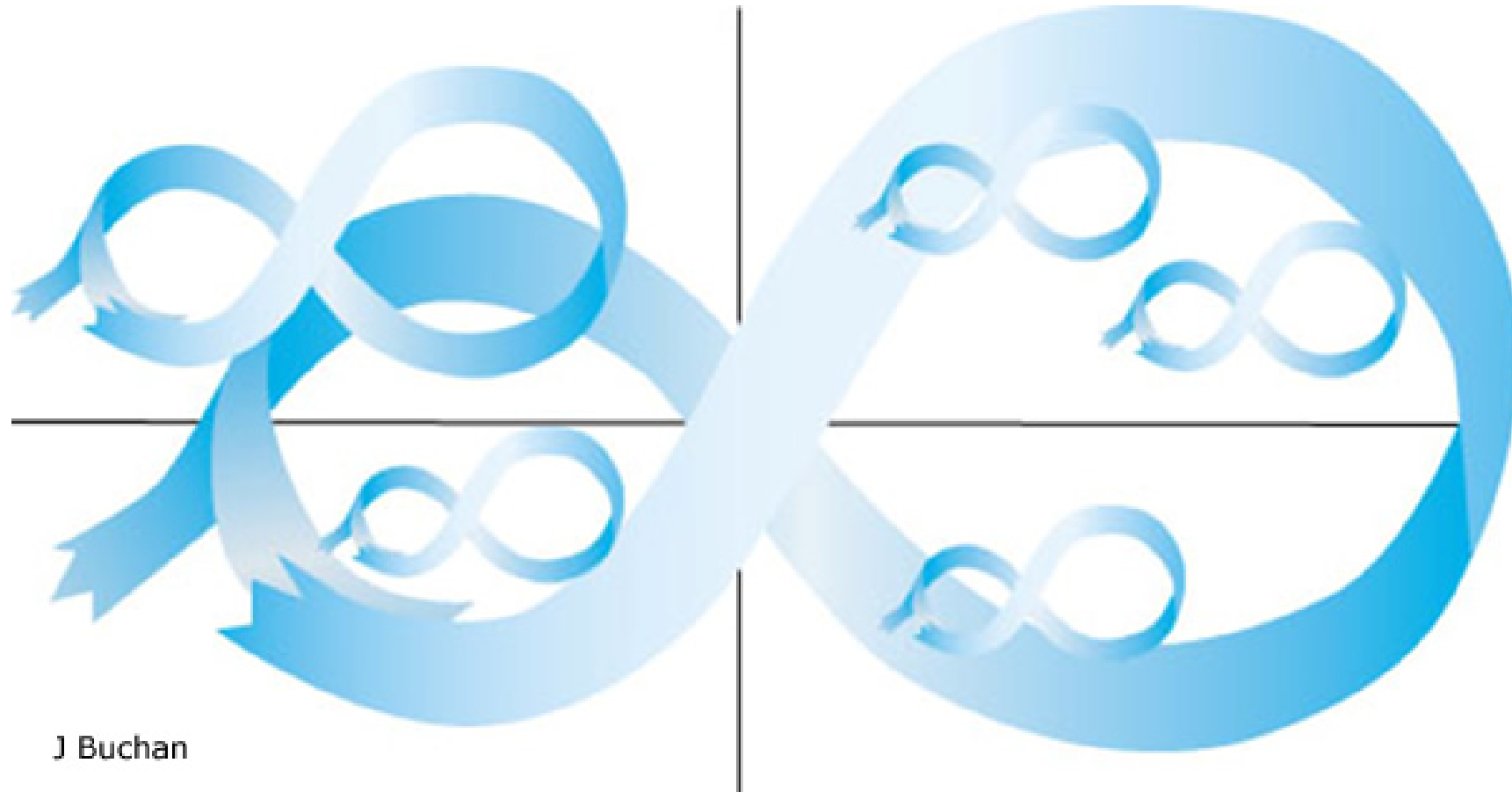
ACTIVITY 3: Where do you fit best into the Adaptive cycle phases?

1. **Institutionalisation** – Oriented to process, growth and creating stable structures
2. **Creative Destruction** – Precipitating disturbances, chaos and breaking up of the system
3. **Reorganisation** – Innovation, embracing change & renewal
4. **Rapid Growth** – Setting up systems & processes, taking opportunities





Multiple speeds of adaptive cycles in a system



Tool 6: Understanding the adaptability of individuals

Personal capacity to adapt to change is a conscious choice.

Summarising a Ph.D. thesis in a single sentence

Feelings about change/ acceptance of/attitude to change

Respondent 1:

Change is such a broad area. It depends on how well the change is conducted and whether the change is something which I agree with. I think that is the bottom line. When we have things imposed on us, which invariably happens...I am not good at adapting.

Respondent 2:

Even if I do not agree with the reason, if at least I understand where it is coming from...I think the changes which are most difficult to deal with are those that are just dropped [on you] that you don't know why, that you don't appreciate where they are going with it or what the next steps are.

The ability of individuals to adapt to change in general

Respondent 3:

My ability to adapt to [change] I suppose is interesting in that I am more often than not the agent of change not the recipient. So my adaptation to that, one would hope, is okay because I am more often than not the cause.

Respondent 4:

I have [written down] average for me. I could have almost underlined poor, but I think that would be a bit unfair to me actually, to underline poor, because I think I often initially have some resistance in my mind to change in general but I am aware of that and I work through it.

The ability and capacity of individuals to adapt to technological change

Respondent 5: My adapting to new technology is excellent if I have to but poor if I don't. It depends whether it is in my area or not.”

Respondent 6: I like to create new challenges for myself, students needed a change so we gave [the new approach to teaching] a go to do something different. We know it may not work perfectly but it was a good learning experience so embracing change in order to develop your own learning is a really good thing.



Adaptability

Capacity of the individual to absorb innovation and change

Innate capacity or ability to do the specific job

Communication

Have a range of strategies for dealing with waves of change (Are you a barnacle or cork?)

Develop a range of professional skills

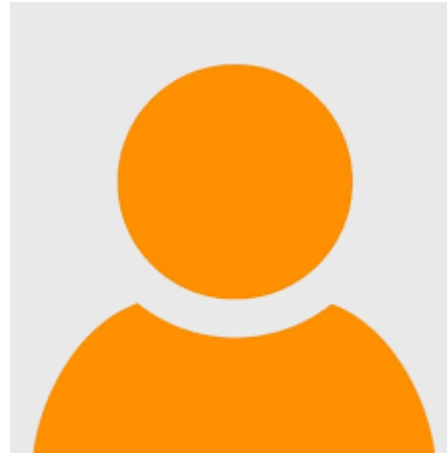
Self-awareness of personal capacity

Try to understand the change and your position in it

Confront issues at the last minute

Collaborative approach towards ownership and buy-in

Control the change by understanding & recognising the change



Step 4
Determine the resilience
outcomes for the
institution and
individuals

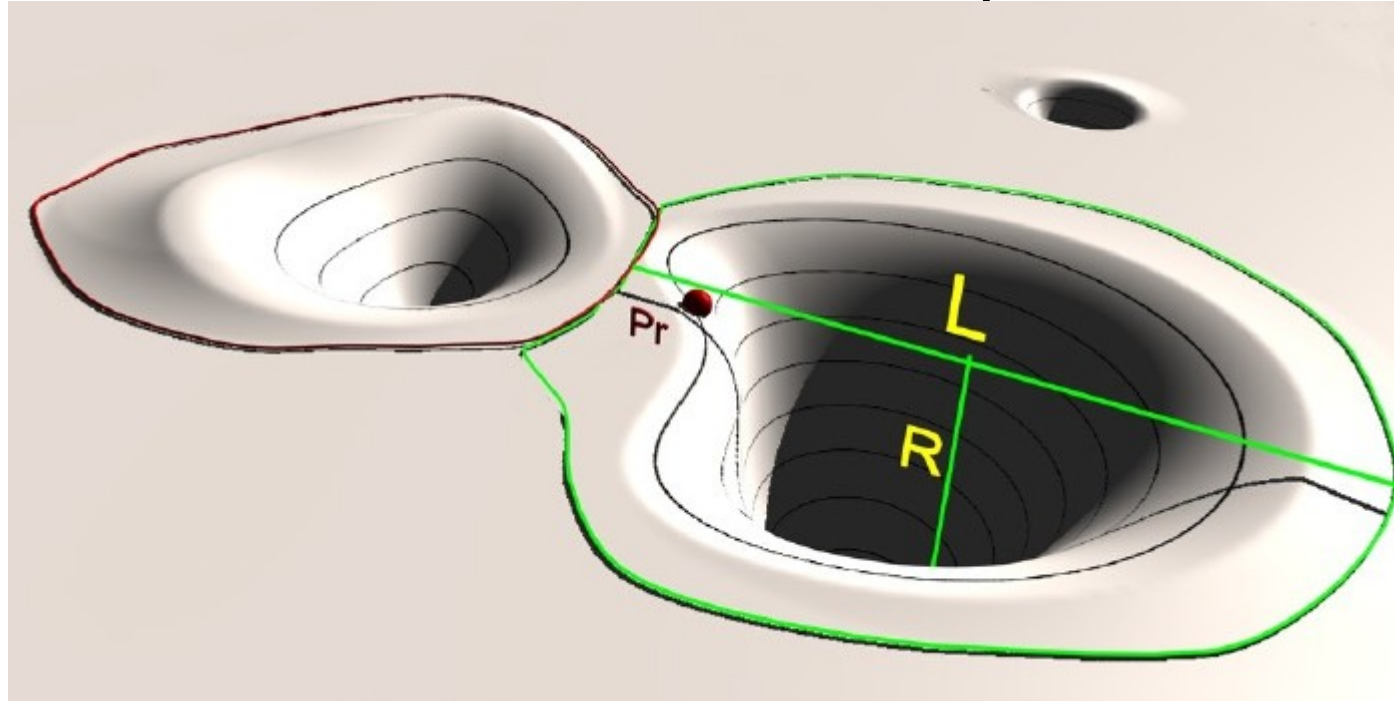
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Tool 7: Ball in the Basin Model for determining Resilience and Transformability



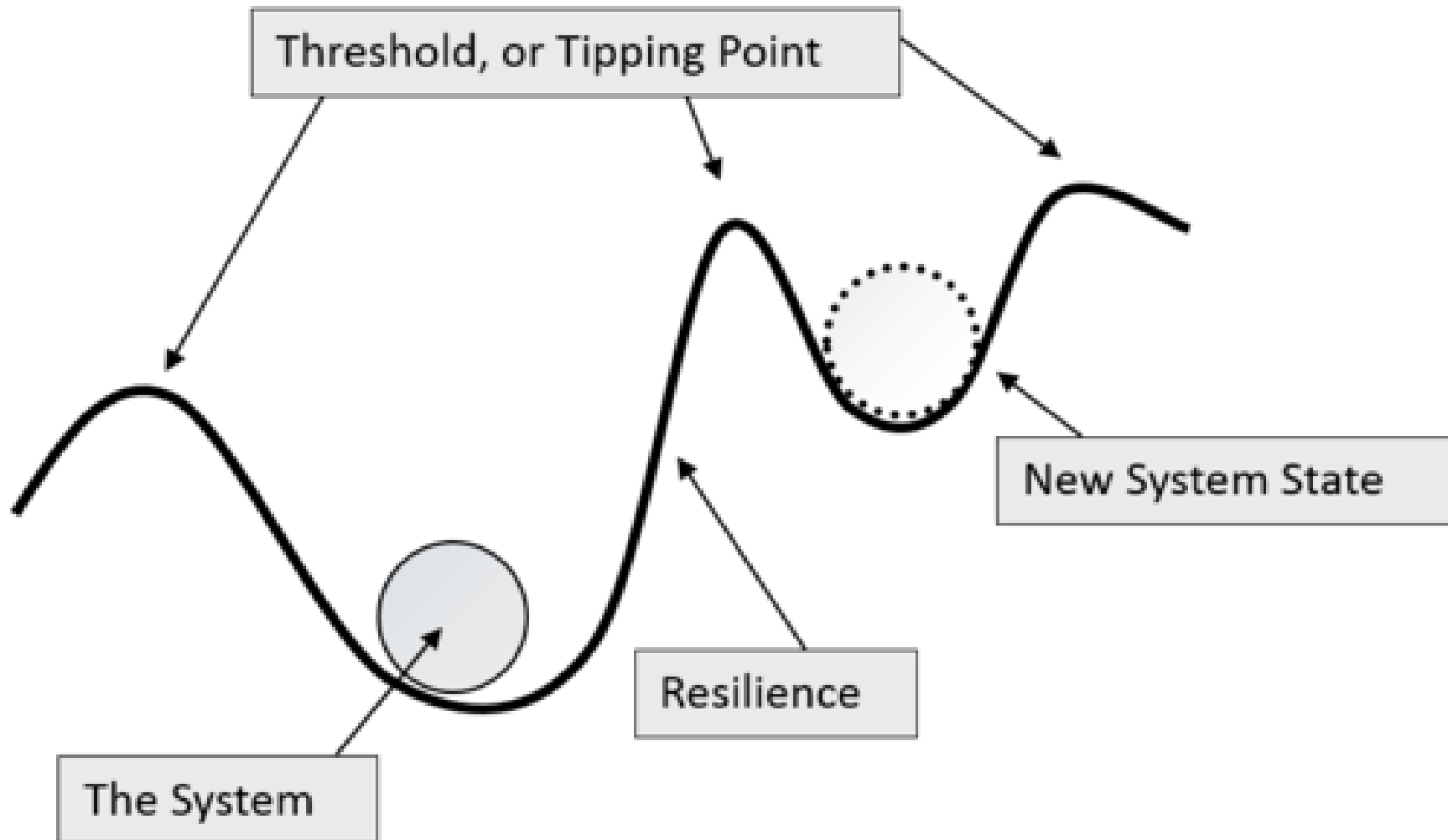
Stability landscape with two basins of attraction showing the current position of the **system** (red dot).

Three aspects of resilience: L = latitude, R = resistance, Pr = precariousness

(Walker & Salt, 2006; Image source: <http://www.ecologyandsociety.org/vol13/iss1/art1/figure1.html>)

The systems approach





(Image source: <http://www.conservationofchange.org/resilience/>)

Step 5
Identify and plan
actions

- Tool 8: Create your Dream Team
- Tool 9: SCOPE - A guide to Institutional System Variables

Tool 8: Create your *Dream Team*.



(Image source: <http://images.clipartpanda.com/meeting-notes-icon-Meeting3.jpg>)



Tool 9: SCOPE - a guide to Institutional System Variables



- S** Strategy, policy and planning
- C** Connectedness
- O** Organisational structures
- O** Operations, processes and procedures
- P** People/roles
- E** Educational technology



SCOOPPE - Institutional System Variables

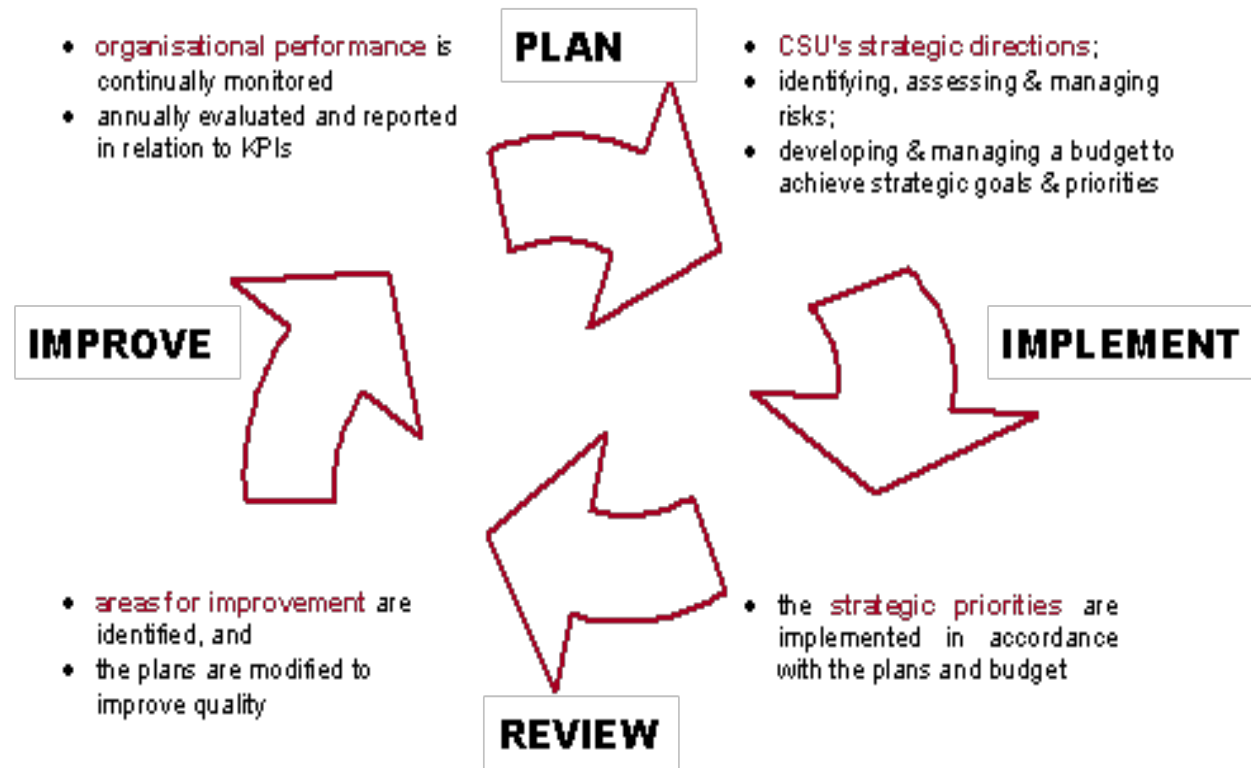
- *Variable 1 Strategy, policy and planning* – Has an initiating function to drive and guide processes and operations.
- *Variable 2 Connectedness* – Feedbacks are determined by the connectedness between components in the system. Connectedness encompasses interactions, relationships, dependencies and interdependencies between people and structures in the system.
- *Variable 3 Organisational structures* – Formal structures include those institutional groupings of staff who have a common purpose or role (formal HR and informal communities of practice). Groupings include functional communities of practice which work together towards a common purpose: project teams working across human resources boundaries, committees and working parties. Structures include physical resources and infrastructure.
- *Variable 4 Operations, processes and procedures* – Includes formal institutional procedures. Collaborative development of processes and procedures helps to build resilience.
- *Variable 5 People/roles* – This includes who, how many, what formal roles and activities they have, informal activities they undertake, individual capabilities and connectedness. Adaptability of people/individuals is an essential quality.
- *Variable 6 Educational technology* – Educational technology has a distinct cause and effect role in a system and plays a role in a number of variables. It facilitates connectedness (interactions, relationships, dependencies); it can be a stimulus for change in operations and processes, and enables and stimulates change in people.

Step 6
Carry out the
action plan

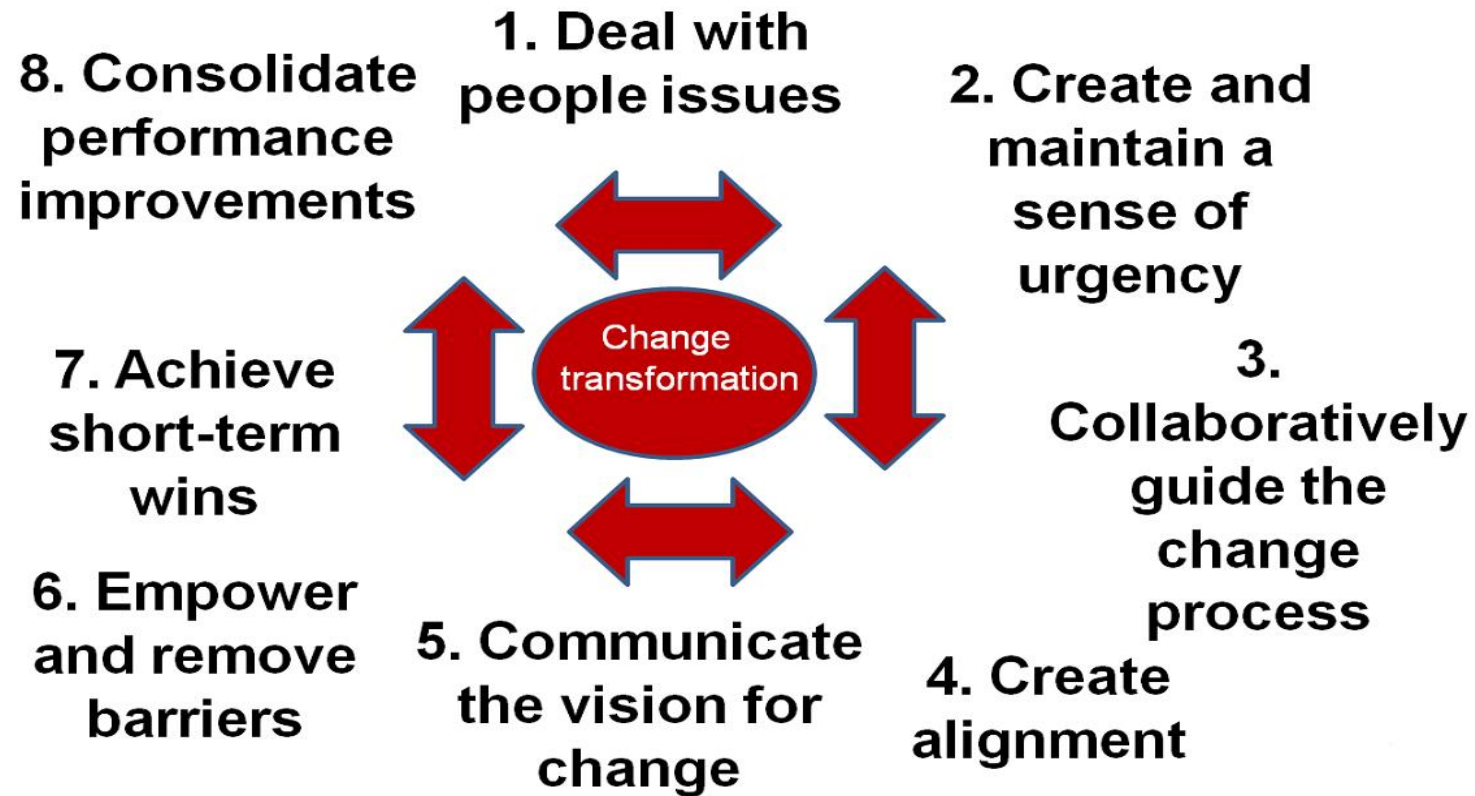
- Tool 10: Continuous improvement
- Tool 11: Change management

- Tool 10: Continuous improvement

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•Tool 11: Change management



Kotter's 8 Dimensions of Change

([Buchan & Uys, 2010](#) after [Kotter & Cohen, 2002](#))

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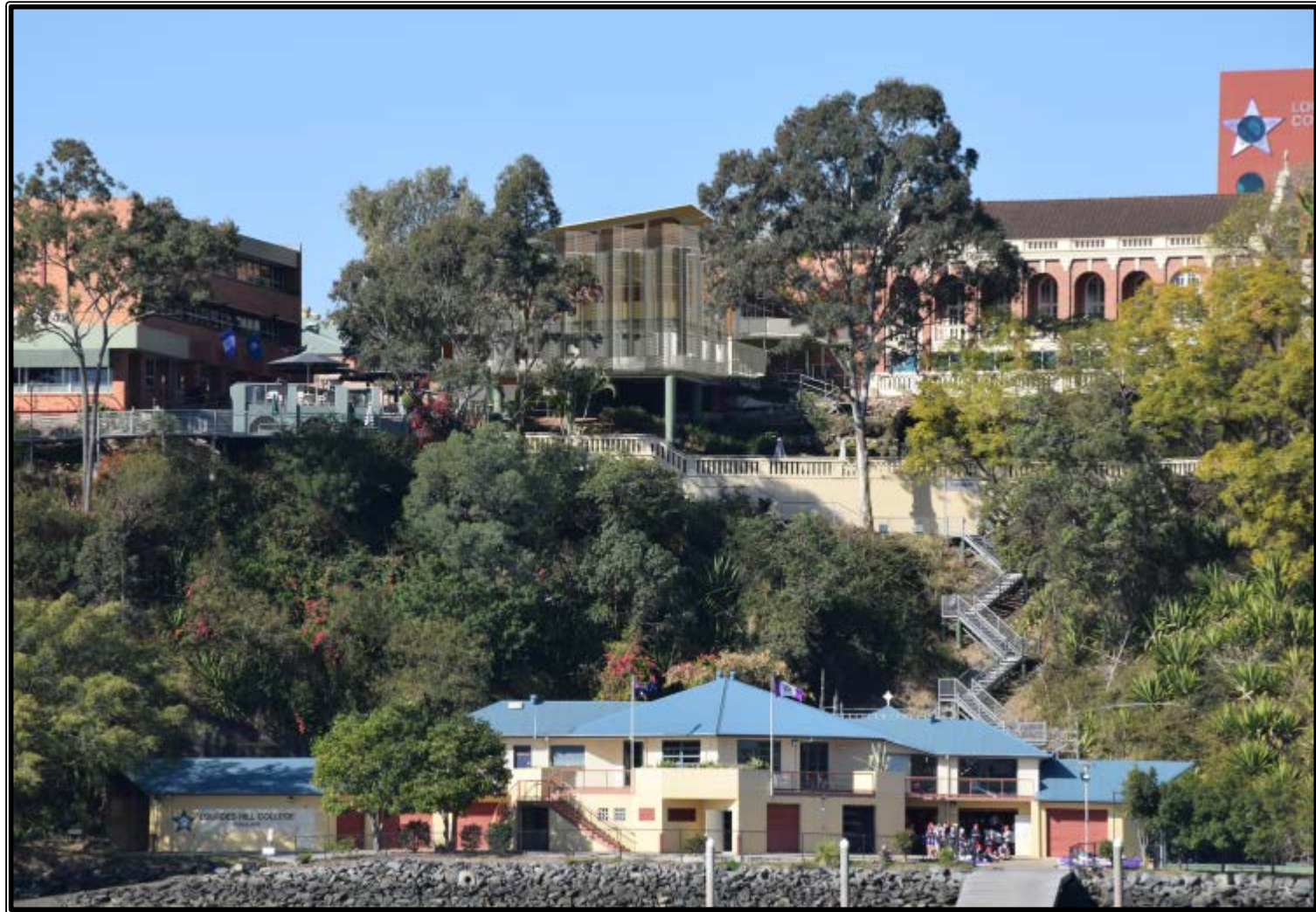
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Postscript

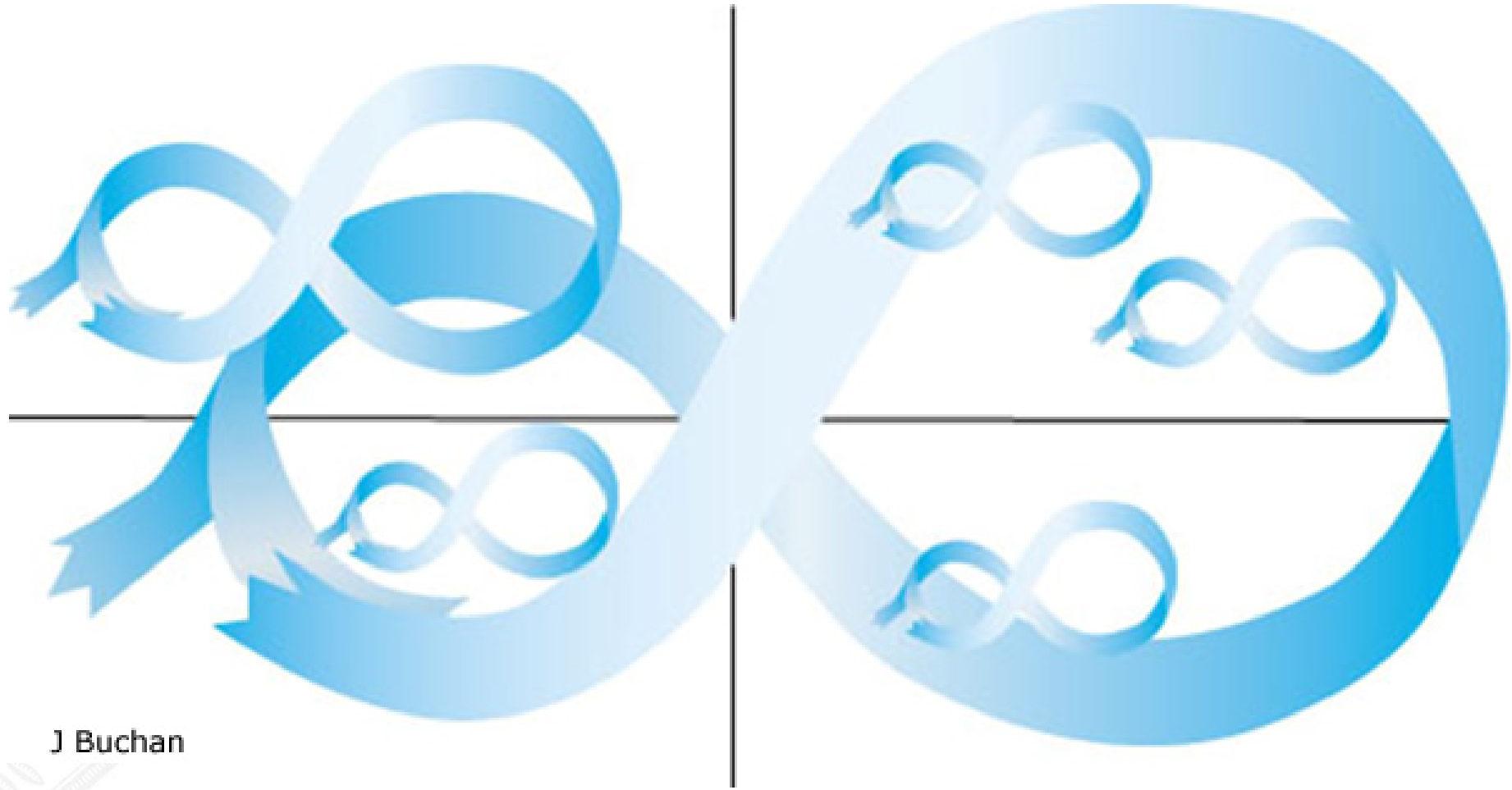


Lourdes Hill College Learning Futures Project



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A School of Good Samaritan Education

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