The presentation this afternoon will provide an opportunity to engage with some of the insights emerging from a research study I am currently undertaking as part of the Doctoral programme at ACU.

The purpose of the research is to understand how system leaders build system capacity – in this research this is being undertaken by exploring the experiences of system leaders in a particular system initiated project.

As part of the presentation I’m hoping there will be an opportunity make connections with your own experiences and perspectives.

The research I am undertaking invites a view of education systems as complex and adaptive and system capacity building as a complex and emergent process – this invites an alternative perspective to what is generally found within the educational reform literature – this perspective opens up possibilities for other ways of thinking, working and being within education systems that transcend the existing regulatory and mechanistic structures and mindsets of educational reform (Harris, 2010).

Before moving on – important to clarify what I mean by system – whole of the education system that is the central offices/regional offices – bureaucracy and the schools that is the whole of system.

System leaders - those within the schools and within the bureaucracy (office structure) who are able to positively influence and enable a culture of learning within their educational context.
In summary the literature suggests that while educational reform has been a priority for many years few countries have been successful in improving their education systems as a whole (Fullan, 2011; Harris, 2010) or aligning their reform efforts to the moral purpose of deep and sustained learning for all students (Hargreaves & Shirley, 2009).

What is now evident within the more recent literature focused on educational reform is a shift of focus – to a whole of system focus – that is not only a focus on schools but also the bureaucratic /organisations structures that support these schools – so we are seeing studies such as the one reported on by the McKinsey com- ‘How the world’s most improved school systems keep getting better’- as one example of where attention is given to the whole of the system as the way in which to achieve educational reform.
While a whole of system focus represents an important shift in understanding the scope of education reform and is identified as a key driver in developing system capacity to improve student performance, there is a view expressed within the literature that suggests the understanding of a whole of system focus is limited (Hargreaves & Shirley, 2009; Harris, 2010) because it is constructed within a existing regulatory and mechanistic view of education systems – and therefore will not be sufficient to re-orientate educational reform to achieve deep and sustained learning for students or indeed learning for all within the system.
‘When input quality is low, the production system must have tight processes in order to deliver a quality output’

(the education system as a lean operating machine)

(Mourshed, Chijioke, & Barber, 2010, p. 52).

This view of the education system and system capacity building is understood from the perspective of an organisational paradigm - that understands the system as a rational and linear based structure designed to ensure organisational stability, efficiency and predictable performance. This view of education systems is often embodied in the metaphor of the machine- and is still prevalent construct for education systems today.

The research I am currently undertaking invites an alternative view of education systems - education systems as complex and adaptive and an exploration of system capacity building as a complex and emergent process - thereby opening up possibilities for other ways of thinking, working and being within education systems that transcend these existing regulatory and mechanistic structures and mindsets of educational reform (Harris, 2010).
I will now move on to present a summary of some of the key characteristics of CAS when understood in the context of social systems like education systems.

Underpinning an understanding of complex adaptive systems is a focus on the whole system and the dynamic interconnections and relationships within the system that is generative of new ideas and ways of working – that is they have emergent properties and patterns (new & unexpected ideas, learning, adaptability) – this gives the system a self-organising capacity - a system that is open to possibilities, is able to keep connected and is able to sustain itself.

Therefore in understanding education systems as complex adaptive system what might be important in encouraging these emergent properties?

**Networks of dynamic and non-linear interaction** - exchanging information, taking action & constantly interacting through a network of feedback loops – amplifying qualities important to the system – these generate a great scope of possibilities for the system. ‘seeds of change’ (this can be both stimulating and be a provocation)

**Agency and Interdependence** – the ability to initiate and create ways of working – the freedom to choose and think in relation to how to progress in relation to self, the collective and contributing to the work of the system, (multi level learning). Also refers to the opportunities for interactions across and within groups – people and their ideas & worldviews interacting with each other – many people are engaged in interpreting the work of the system (not just a few)

**Diversity within the system** – of ideas, worldview, experiences, skills it enhances interactions and learning as people need to work through differences or consider alternate views in ways that enable new ideas and innovate responses to emerge. Important that diversity can be expressed and engaged in ways that progress the work/learning of the system.

**Balance of disruption and coherence** – where there is sufficient space and openness for disruption to allow for possibilities – disruption can come from the diversity within the group, a constraint, new opportunity that is pursued or changes in the environment of part of the system. Within this experience that is also a balance where there is sufficient coherence to orient people and their actions often centered around a collective purpose and commitment

This could also be described as the tension of order and un-order – where the space of un-order is where the seeds of new patterns and new ways of thinking can emerge

These characteristic are important in enabling emergent properties ‘...this is a key capacity necessary for organisations, like education systems, to be adaptive, innovative and flexible in response to challenging and complex environments’ (Capra 2006, Wheatley 2009....)
An understanding of education system as complex adaptive system offers an **alternative focus for leadership**

**Disrupting existing patterns within organisations** – encourages open discussion about issues, where options raised, draw on diverse perspectives, creating and allowing for tension, uncertainty considered – re shape or disrupt existing structures/boundaries—experimenting, seeding change

**Creating connections**—opportunities for connections and interactions of mutual influence, dynamic and nonlinear connections between individuals and collectives and the system as a whole. Connecting people and ideas allowing information to flow – feedback loops. Amplifying new learning – what do we need to pay attention to that will expand the system’s capacity to learn.
Connections focused on relationships, trust and meaningful work

**Engaging in sense making behaviours**– bring attention to what matters or what may go unnoticed – sorting out what to pay attention to particular when the environment is changing and new ideas are emerging .creates shared purpose through dialogue – connects and shapes an evolving sense of purpose about the work of they system

**Embodying an ethic of care** – focusing on the human potential within individual, groups and the system – creating environments for this to emerge and to be focused on actions of deep purpose and meaning.

Leadership within CAS is not focused on directing change or controlling future outcomes, but rather enabling and allowing future outcomes to emerge from within the system (Plowman et al 2007 Uhl-Bien Marion 2001).
Exploring the experience of system leaders

- How do system leaders develop system capacity to enable sustained engagement with moral purpose?

I have taken this perspective of education systems as CAS and these understandings of leadership as a way of addressing this research question focusing my study.

I will now present main themes identified in the data that respond to this question –

[Use slides 5&6 above as HO and as we move into the four themes what connections can be made between the experiences of system leaders and CAS. Points of discussion]
How do system leaders develop system capacity to enable sustained engagement with moral purpose? One of the actions identified is system leaders creating diverse opportunities for dialogue that focused on the meaning of their work.
How do system leaders develop system capacity to enable sustained engagement with moral purpose? One of the actions identified is system leaders…embraced (experienced) diversity, difference and disruption in expanded and connected contexts for working and learning.
How do system leaders develop system capacity to enable sustained engagement with moral purpose? One of the actions identified is system leaders created and sustained a dynamic and connected sense of ‘systemness’.
Reconceptualising and enacting what it means to be a leader and a learner

4b. This has been an experience of engaging in actions that build trust and relationships.
- This involved leaders taking risks, and exploring and testing hunches and ideas.

4c. This has been an experience of grappling with alternative understandings of leadership within dynamic/complex environments.
- This involved leaders exploring alternative perspectives to leadership.

This has meant people experiencing shifts in their identity as a leader.

4a. This has been an experience of uncertainty and allowing clarity and meaning to emerge from this.
- This meant trusting that the relationships and the struggling together would bring clarity and meaning.

This means there is a collective responsibility for leading and a belief everyone’s perspective is necessary to enabling the work of the system.

This provoked conversations that shifted attention from tasks to questions of purpose and deep understanding about our work.

The means understanding leadership as the interconnectedness between people that nourishes the commitment to our work.

-How do system leaders develop system capacity to enable sustained engagement with moral purpose? One of the actions identified is system leaders……..reconceptualising and enacting what it means to be a learner and a leader.
Summary of the four themes (if needed and there isn’t time to touch on each one)

Creating diverse opportunities for dialogue that focused on the meaning of their work
This has been an experience of exploration, problem solving and knowledge creation where new ideas emerged
It has also been an experience of grappling with enacting the purpose of their work through a process of understanding self and others.
And it has been an experience of influencing the context and understanding how to work in the context

Embracing diversity, difference and disruption in expanded and connected contexts for working and learning
This has been an experience of connecting to others and their ideas in multiple ways across the system
This has also been an experience of provocation

Creating and sustaining a dynamic and connected sense of ‘systemness’
This has been an experience of designing for system learning
This has been an experience of grappling with the challenge of enabling sustainable learning across the system
This has been an experience of engaging with system frameworks that capture system purpose and provoke dialogue and debate

Reconceptualising and enacting what it means to be a leader and a learner
This has been an experience of uncertainty and allowing clarity and meaning to emerge from this
This has been an experience of engaging in actions that build trust and relationships
The has been an experience of grappling with alternative understandings of leadership within complex and dynamic environments
• How might this alternative perspective of education systems as complex adaptive systems contribute to our understanding of how system leaders enable system capacity building?

A question could be used to focus a discussion – if time permits
Contact:
jaylou.c@gmail.com
jcollins@ceomelb.catholic.edu.au