"There are no passengers on this waka"
Leading in a complex world –understanding the 'why'.

Introduction and Purpose

This report explores the need for a shift in thinking about leadership to support tranformational change necessary for our schools to meet their students' needs as 21st Century learners. This follows the introduction of the Government's policy "Investing in Educational Success" (2015) – their framework for implementing radical change in education through the establishment of Communities of Schools. The original title for this sabbatical report was to be "Leading in a Community of Learners". However, my research and six months experience as a co-leader of the Porirua East Kāhui Ako the title is now *Leading in a complex world-understanding the 'why'*. The report also discusses a systems thinking approach to leadership and change drawing on the work of Peter Senge (The Fifth Dimension 1992). Jane Gilbert(2015) discusses how complex systems require a different approach to leadership and refers to the work of Dave Snowden (2007-the Cynefin Framework) in exploring organisational systems. Capra (2014, The Systems View of Life- A unifying vision) has developed a compelling argument for why social systems should model themselves on the many scientific and ecological systems that have sustained and re-developed or changed when necessary to ensure the continuation of life. And finally, in developing a model that builds on the positives of systems thinking through intentional networks such as Communities of Learning, I discuss the notion that ALL the participants in the 'system'must be fully committed to the 'why'. We must be prepared to challenge "top down" processes and engage in rigourous debate to explore deeper interactions between the elements within a system. It is likely that we will be better prepared to manage the threats to innovation and change from outside and within the system or network. Leadership in a COL is about being clear about the 'why' for our network, "knowing the network and knitting the network and involves all participants to be actively engaged". (2006, Krebs and Holley. *Building Smart Comunities through Network Weaving)*. "Networked organisations must be more open and more innovative, with a greater emphasis on working as 'we' not 'me' ".(2015 Wenmouth. *Networked leadership* . Paper prepared for the NZ Education Council). There is no one heroic leader because leadership is a collective endeavour and there can be no passengers on this 'waka'.

The Background to the Porirua East Kāhui Ako

In November 2015 the Porirua East Group of schools (PEG) formally registered an expression of interest in becoming a Community of Learning-Kāhui Ako. This group of principals from 12 schools had worked together for seven years to establish a vision for a collaborative approach to improving educational outcomes for students in the Porirua East area. Under the leadership of one principal we had worked together on initiatives to improve literacy in the East and also to moderate judgements for the National Standards that would not only support more accuracy but open the staffrooms to rigourous debate about learning. We had establised a 'what' (to do) to raise achievement in Porirua East. The

'what' was to improve literacy outcomes for students in the area and to develop consistency in 'how' to do that. The model was based on an improvement model and while pockets of good practice exist in many classrooms, for others the improvements were not sustained. Overall there was little improvement in education outcomes when measured by the National Standards across all pimary schools. While there has been increased number of secondray school students passing NCEA Level 2, the Porirua City Council Report on The Status of Children (2017) reported that 60% of 18 to 24 year olds are not curently in tertiary education, training or employment. The focus on working on one aspect of system change in our schools took us away from the most important challenge -the implementation of a transformational curriculum (NZ Curriculum 2007) to ensure our graduates were able to be successful citizens. We were still working in a 20th Century paradigm. As leaders we continue to default to leadership practices we have used for many years.

Following a series of meetings in 2015 the principals developed a vision for what a graduate of Porirua East schools should look like –this was to be the 'why' for our work and also our challenge. We referred to the work of Julia Aitkin (1995. *From Values and Beliefs to Principles and Practice*) and developed a graduate profile that consisted of

> **Voice** - the ability and confidence to express themselves and articulate their ideas and needs;
> **Agency** - the ability to make decisions and act on them to achieve success and/or reconsider direction when necessary; and
> **Identity** - knowing who they are as individuals, family and community members, being proud of their many cultures and using their strengths to be a positive influence in the world.

Our achievement challenge proposal to the Ministry of Education had this vision as its purpose. For our community of learners which includes Early Childhood, the challenge was no longer about meeting the requirements of a flawed system of measurement such as the National Standards or NCEA level 2 – it was about why we had to do things significantly differently for this generation of learners. In the past we had explored the 'what' (improve Literacy and maths results, increase NCEA level 2 results) and the 'how' (using the latest "current" methods, a raft of different intervention programmes, target setting) but not the 'why' for change in a way that would shift our thinking about leadership and learning. So the NZ Curriculum and the Early Childhood Curriculum (along with full participation of the ECE educators) had to be at the forefront of the achievement challenge. This did not meet the requirements of the IES policy - where the focus was still on setting and meeting targets for the National Standards. The PEG Achievement Challenge document was rejected at least three times before finally being accepted in Nov 2016. A new struggle then began with the appointment process for a leader.

In July 2016 while our Col was still arguing for the right to have the NZ Curriculum rather than the National Standards at the forefront of our Achievement Challenge, I applied for a sabbatical for term 2 2017 to research alternative theories on leadership and how they supported the Community of Learners model. After having a single leader model for PEG for so many years perhaps it was time to consider alternatives to the model.

In April 2017 when I started the research for this report, the leadership of our CoI was still undecided. One other principal and I had applied to be co-leaders twice (Nov 2016, March 2017). In May 2017 the oversight group, consisting of volunteer BOT members from across the area, were finally given permission to consider our application - a process that took nine months. Our application was finally approved by the Ministry. This tortuous process and the the first six months of the co-leadership of the PEG Kāhui Ako has led to some changes to the original research proposal. Three main themes have emerged from my readings and experience;

- Leaders in a complex education system must understand the system, and be open to new ways of working. Leading in complexity requires agreement on a direction- the "why" of our work.
- Our classrooms, schools and communities are ecological systems. Leadership in a community of learners requires an understanding and valuing of how all aspects of our organisations (schools) are linked and reliant on each other before sustainable change can take place
- Leadership is a collective endeavour. Successful, sustainable change will not happen unless everyone is commited to the endeavour and can understand the way in which the components of the system are all linked.

The complex world

> "Preparing today's young people to thrive in the uncertainty, complexity and rapid change of 'postnormality' will involve radically new thinking. Developing this thinking *across the system* requires new and different capacities *within* the system as well as new ways of thinking *about* the system-in system terms." (2015 Jane Gilbert. *Leading in collaborative,complex education systems*. Paper commissioned for the NZ Education Council)

In this article Gilbert explains that complexity thinking has been a strong theme in the work of the OECD and that this has influenced education policy work in New Zealand. In 2015 the Government released its "Investing in Education Success"(IES) Policy –an attempt to shift the education sector's thinking away from an individual to a collaborative approach to create a systems change. However, it excluded elements from the education framework that gives meaning to a system change. For example, the IES policy did not include Early Childhood centres in the clustering of schools or the Boards of Trustees of the schools involved - two key components of an education pathways system and community engagement. In addition the policy was introduced while keeping all the components of competition, out-dated leadership models and achievement ranking between schools through the public reporting of literacy and mathematics standards. It was unlikely to be successful." System change has to come from *within* the system, not from top down initiatives". (2015 Gilbert)

There is substantial research on leadership in managing complex organisations or systems. Dave Snowden (2007 Snowden and Boone) has developed a framework called the Cynefin Framework that explains the importance of deciding whether a situation is simple,

complicated , complex or chaotic before deciding what needs to happen. (http://cognitive-edge.com/) Cynefin is a Welsh word for "habitat or place" –It is the place of multiple belongings, cultural, religious, geographic, that profoundly influences who you are. - This framework explains 4 systems that we may operate in. Knowing what space we are in will determine what actions we might take.

https://www.youtube.com/watch?v=N7oz366X0-8&t=12s

In a *simple* or ordered system we are working with the knowns-patterns that occur, tried and true formulas-"best practice"

In *complicated* systems we are working with the "known unknowns" so will use data to analyse , debate . Experts may be brought in , formulae developed . Snowden calls this "good practice"

In the *complex* system there are no right answers- "we are working in the realm of the unknown unknowns". There are emergent behaviours . Nothing is repeatable or predictable. We have to understand the present. The system cannot be controlled but can be steered towrds a vision . We probe to check and maximise the quality of the elements in the system.
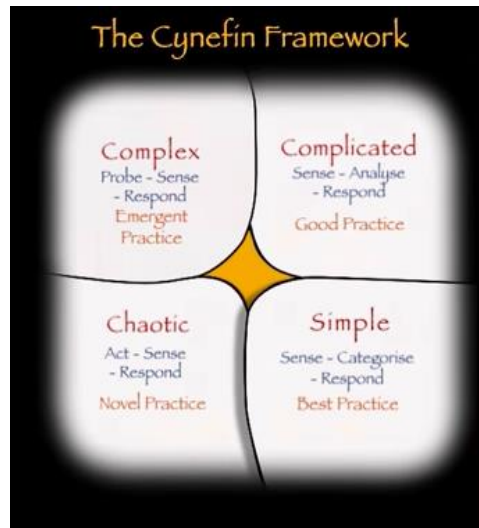

In *chaotic* situations what is going on is totally new and unknowable. No relationship between cause and effect . Leaders need to stabilise the situation and try to move it into one of the other zones. (2015 Gilbert)

The implications for leading within a system is understanding where we are in our system. The wider education system (that provides policy and structure to our nationwide system) has operated in an ordered sytem – more often in the 'simple' quadrant- with some movement into the complicated sphere. We are still strongly strongly focusssed on "cause and effect" ways of operating-implementing programmes , measurements and targets, driving how we should operate. However for the new era of "postnormal" the unknowns of the 21st century there are no right answers and no ready made solutions. (2015 Gilbert).

Leading in the complex system requires new ways of thinking. In Porirua East we need to also think for ourselves. That starts with a vision or direction that we all agree on, understanding our context, maximising the quality of all the elements in the context and working with others to try new ideas, testing and redeveloping those ideas. In the past the aim for schools was to raise achievement. This is an outcome for our work not the vision. The vision is a statement of our beliefs in what is important in education and why we believe that. Julia Aitkin (1996), an Australian educationalist uses three circles that explain the importance of starting with the "values or beliefs" for what we do in schools at the centre. The second circle states the principles that will underpin actions and then to a third circle that states the practices to be implemented. "This approach can be represented visually as in Figure 1. At the heart of the process is the identification and clarification of the values and beliefs of the community. These then form the basis for developing a set of principles or guidelines which guide conduct or action". (Aitkin 1996 pg 3). Aitkin uses this

model to explain what can happen in classrooms and schools but it could apply equally to a Community of Learners.

Figure 1.
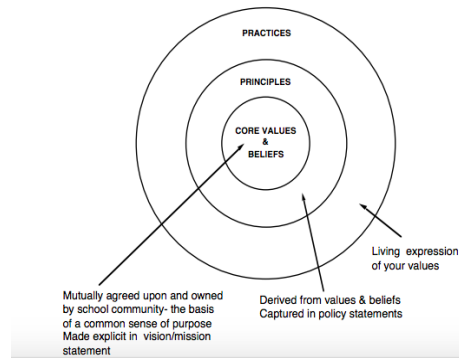
(Aitkin 1996 pg 4)

Simon Sinek (2009 . *Start with Why*) uses a similar model called the "golden circles" to explain how shifting the emphasis from what we do and how we do it in our organisations (schools) to why we do it, helps to focus our purpose and establish a vision that will inspire others.

https://www.ted.com/talks/simon_sinek_how_great_leaders_inspire_action

We all know what we have to do in our work. We mostly know how to do it and if we don't we can find out.
But the real issue is why do we do what we do? For too long we have focussed on the possible outcomes-the achievement results. The why should reflect the values of an organsiation-the participants. We need to be be clear about this purpose – it is what inspires us.

I started my teaching career in 1976 and so, have experienced four decades of working in the NZ education system, including five years in the two London schools. Forty years of debate and discussion about how well (or not) we meet the needs of our learners to ensure they can leave our schools to become successful citizens. When I started my teaching I read the works of Ivan Illich (Deschooling Society, 1970), Paulo Friere (Pedagogy of the Oppressed 1970) and John Holt (How Children Fail. 1969), radical theorists who challenged the systems of the time. In 2017 I am not convinced we have addressed the underlying causes or impact of oppression and inequity. The speed of technological change, the pressure of growing world population with diminishing resources, climate change has set challenges for the 21st Century that are both predictable and unpredictable. While many of our children come out of school as clever, innovative and entrepreneurial individuals who may contribute to our changing world, the question remains whether they have achieved that because of the quality of their schooling or because of their middle class family backing - which provides them with the financial support to have a variety of educational, social and sporting experiences outside of formal school experiences. We know that students in

lower socio-economic areas such as Porirua East are not accessing the same resources to participate equitably in NZ. Here we are not just dealing with rapid technological change but also levels of poverty that this country has not experienced since the 1930s. The failure of our economy, social systems and schools excludes a large section of our society who should be contributing to the generation of new ways of thinking and doing. Perhaps this is the actual 'why' underpinning our graduate profile of voice, agency and identity. We need a systems change in education to achieve equitable access to opportunities and resources for all New Zealanders.

A systems view

Organisation change and development theory is not new . But what is interesting is how the theories on systems changed from the early 1990s to the recent theories espoused by Snowden and Capra are linked and provide a compelling argument for a radical shift in how we lead change.

Peter Senge (1990 The Fifth Dimension) spent many years writing and speaking on the place of systems thinking in organisations. In 2016 he facilitated master class at the World Educational leadership Summit in Singapore on creating schools for the future, not the past for ALL students. His definition of a system includes, "webs of interdependance" – "people working together at their best" and his starting point for a system is the question of whether there is a guiding philosophy - the why." He discusses the need to appreciate the complexity of the systems. Within our schools and, now learning communities, we have a structure. This structure is a web of interconnectedness. Senge uses the analogy of the iceberg to explain this. The tip of the iceberg is what is seen on the surface of the water. These are the events we witness (eg the sinking of the Titanic). What sits just below the water is a pattern of events which may contribute to the big events above the surface. But what really forms the structure of the iceberg, below the surface, are the patterns and behaviours, the artifacts and the models that shape the overall behaviours of people in our organisation. Knowing the system is essential to understanding how to lead and function in the system. Conventional thinking is not likely to support new ways of looking at change and the demands of new ways of working.

System thinking challenges conventional thinking in these ways:

Conventional Thinking	Systems Thinking
The connection between problems and their causes is obvious and easy to trace	The relationship between problems and their causes is indirect and not obvious
Others, either within or outside our organisation are to blame for our problems and must be the ones to change	We unwittingly create our own problems and have significant control or influnece solving them through changing our own behaviour
A policy designed to achieve short term success will also assure long term success	Most quick fixes have unintended consequences: they make no differnece or make make matters worse in the long run
In order to optimise the whole, we must opitimise the parts	In order to optimise the whole, we must improve relationships among the parts

Agressively tackle many independent initiatives simutaneously	*Only a few coordinated changes sustained over time will produce large systems change.*

David Stroh 2013
Bridgeway partners presentation
https://www.youtube.com/watch?v=cvuA27McG6k

Systems theory is further explored by Capra and Luisi (2014) particularly in the relationship between nonlinear scienific phenomena which have generated new and powerful theoritical models that have improved our understanding of many key characteristics of life. This is the subject of their book, "The System View of Life-A unifying Vision".

> "The new scientific understanding of life at all levels of living systems-organisms, social systems, and ecosystems-is based on a perception of reality that has profound implications not only for science and philosophy, but also for politics, business, healthcare, education and many other areas of everyday life"
> Lecture 8 notes Capra Course 2017

Capra draws from his work in science and philospohy to explain how taking a systemic view of organisations helps to maximise the an organisation's creative potential, learning capabilities and capabilities of change. Every human organsiation has a dual nature. It is a social institution designed for a particular purpose and also a community pf people who self organise to build relationships in informal networks of communications. "The aliveness of an organisation-its flexibility, creative potential and learning ability-resides in these informal networks, also known as "Communities of Practice".(2017 Lecture 9 notes, Capra Course)

In similar fashion to the Cynefin Framework, Capra explains that change is likely to occur when leaders understand the interplay between the organisation's formal designed structures and the informal emergent structures of novel practice. To understand change processes in organisation the phenomenon of emergence is critical. Capra discusses a new kind of systemic leadership, which consists in facilitating the emergence of novelty. "facilitating emergence means creating conditions rather than giving directions, and it also means using power of authority to empower others . Leaders who facilitate emergence need to be aware of the detailed dynamics of all stages of the process." (Lecture 9 notes 2017)

Leadership is being redefined for our complex world. Leaders are no longer "the people at the top"-the bosses who direct others. It is not about the role. The verb to lead comes from an indo/european root word - *leith* which means "to step ahead". (1990 Senge).
 Educational leadership can perhaps be best described as "the reciprocal process that enables participants in an educational community to construct meaning that leads to a shared purpose of schooling" (2002. Lambert, Walker, Zimmerman, Cooper. *The Constructivist Leader. 2nd Edition*.)

Leadership - The collective endeavour

Whara taku toa i te toa takatahi
Engari it te toa takatini

My success is not mine alone: It was not the individual success but the success of a collective.

(Whakatauki from Mason Durie 's article *"Educational Leadership for Tomorrow"*. Prepared for the New Zealand Educational Council 2015

"Collaborative leadership recognises the power of collective impact" (Durie 2015). The challenge for communities of learning is reaching an agreed understanding of what collaboration involves. It is much more that exchanging or pooling ideas even with the development of trust or rigorously debating. It involves building a commitment to moving ahead *together.*

The challenge for Porirua East Kāhui Ako and possibly for most communities of learning is the letting go of the baggage of 20 years of neo liberal policies; competition; belief that improvement is a linear process; low expectations; and fear of being seen as failures. The concept of single leader with a band of followers will not initiate the type of change required for the 21st century. Leadership is in the processes among all participants in the community rather than the skills and dispositions of a single person appointed to the role. The source of leadership begins in the reciprocal connections of people working together . Reciprocal processes that will enable participants in a community to co-construct meanings.

Lambert (2002. Lambert et al. *The Constructivist leader. Second Edition*) talks about the constructivist leader addressing the need for sense-making and coherance. This concept of constructivism is no different to the ideas that underlie constructivist learning. Adults and children learn through a process of meaning, knowledge construction, inquiry, participation and reflection. She argues also that the term transformational leadership is paternalistic because it situates responsibility for the growth of others in a designated leader. In Porirua East we chose to not have a single designated leader, opting for co-leadership as a first step away from the usual paternalistic, hierachical model. This is more likely to support the development of constructivist leadership which can be situated in the patterns of relationships amongst participants. For Porirua East this is a challenge. In the last ten years only three of the 11 schools have not had a Ministry of Education intervention of some kind arising out of concerns for the academic and/or social well being of students. In addition, in the last two years there have been 5 new principals appointed. For many, it is hard to look outside of the immediate issues confronting their schools to seeing the big picture for the needs of the Porirua East Community. The negative perception of our schools by the wider community is still a possible threat to how we can move forward. Intervention not reinvention still drives the thinking of many participants in the community as a whole.

We need to see everything as a 'whole' and consider all the elements in the 'whole'. In PEG, for example, our vision for Voice, Agency and Identity was developed initially as a vision for our graduates but to be a successful community of learners we need that vision to apply to ALL the relationships in the community (board members, parents and whānau) and in our

workplaces, including support staff, caretakers, cleaners, many of whom are members of Porirua East community and whose children attend our schools. Respect for their roles in the community of learning needs to include fair and equitable systems such as the opportunity for representation, fair pay and conditions of work. Our collective impact as a Kāhui Ako shouldn't isolate components. Ideally our board leaders will also see their role as an essential part of the interconnectedness of the PE schools and students.

Board representatives have chosen to be leaders in the Porirua East area and they have an essential role in contributing to the complex system that is our Kāhui Ako. They are key players in a decentralised education system and like principals and teachers they need to understand complexity and be prepared to challenge policy and "top down" requirements when those policies may not work effectively for our community of learners. The IES policy was a deeply flawed, one-size fits all policy for the country which did not include them in the big picture of radical educational change. It is puzzling that their advocacy council, New Zealand School Trustees Association was, at best, powerless in the process or, at worse, colluded in the process to exclude the community representatives. Their inability to represent boards took away Porirua East Board members' right to a Voice, Agency and Identity for themselves and the people in their own community. Success in the Porirua East community will emerge from all participants taking advantage of the opportunities that we still have to continue understanding the complexity of our environment. Improved connectivity can be created through "*knowing the network* and *knitting the network"* (2002 Krebs and Holley)

Using the example of a how to build a successful community through the emergence of a successful business ecosystem in an Ohio Appalachian region, Krebs and Holley (*Building Smart Communities through Network Weaving* 2002-2006), contributes to the work of complexists and sytems thinkers already cited in this report. Firstly knowing your network, getting the big picture, learning about the connections, identifying what leadership looks like in the network , identifying the alliances, the innovators and the mentors, the critics and the cynics. They then discuss how to "knit the network"by mapping its development through four stages. They refer to the leader as a "weaver".

1) *Scattered Fragments*
2) *Single hub and spoke*
3) *Multi-hub Small-world network*
4) *Core/periphery.*

(Krebs and Holley pg 5)

Stage one is a community where there is no active leader taking responsibility for building a network. There may be some connections between groups or organsaitions but these develop slowly and may not sustain if someone leaves.

Stage two develops when one person takes on a leadership (or network weaving role). That person may have the energy or vision , social skills to connect with diverse individuals and groups and start information flowing from one to another. In his article "*Networked leadership"* 2015 paper prepared for the NZ Education Council, Derek Wenmouth refers to this as "leadership *of* the network"(pg 2). The network is an organisational structure that is

managed by one person. Traditional or hierachial forms of leadership are evident in this model. Collaboration is seen as sharing or delegation, but ultimately one person holds all responsibility for the actions and decisions. This was the PEG network from 2007 -2016.   It is also model prescribed by the IES policy which also included a financial payments going to the person in this leadership role to reward and hold them accountable. It is widely known as not being appropriate for the future.(2015 Wenmouth). Krebs and Holley detail how this model, while essential in the early stage of the development of a network, argue that 'weaver' needs to become more of a facilitator to strengthen the ties and grow leadership within the network.

Stage 3 In this stage multi-hubs may form with more than one leader /weaver. There is the risk of competition within the network and in the Porirua East are this has been the case at various times during the 1990s and early 2000s. During that time the network as a whole ceased to exist but small networks developed. Wenmouth (2015) refers to this as "leadership *in* the network"(pg 2). In this scenario leadership can exist within the network through distribution and opportunities for individuals to take on responsibility for tasks or projects. In 2017 Porirua East is at risk of developing multi-hubs again as principals don't always see the whole picture but just the picture for their small hub or project. Unless the ties are tightened by interconnectedness and the multiplicity of solutions and ideas are still linked to the 'why' we are working as a total network, the PEG Kāhui Ako will have a short life span. This is our challenge.

Stage 4 is an end goal for a vibrant, sustainable network – the core /periphery model. The network core contains key leaders who may include a variety of people- teachers, board members, community members, and principals who have strong ties and who understand that the network is something to belong to and participate in rather than something that can be owned or managed. Wenmouth calls it "leadership *as* the network"(pg3). This model recognises that the landscape of a network is constantly evolving and new information, new personnel and new resources enter the picture. This is the periphery and is open and porous. The network leadership (the core) is both distributed and democratic. It is relational, collective and emergent. Everyone in it assumes responsibility for the success of the network because everyone in it understands the 'why' and is fully committed to a collective approach to facilitating change.

Leadership as a collective endeavour relies on the understanding that our schools and now our community of schools are eco-systems and that leadership is not a role within those systems but is a collective sense of purpose to "step ahead". So too for the teacher in a classroom which is also an eco-system. In this eco-system she needs to know what the system is and how it functions - its strengths and vulnerabilities and how to facilitate change collaboratively by engaging students' diverse perspectives and enabling their creativity and questions to determine their learning pathways. So too is the parent and community member who has a perspective that is worthy and needs to be heard. Leadership exists everywhere and at all levels in our Kāhui Ako. Once a leader has chosen to be on the 'waka', to be part of 'core', then that is a choice also for being relational and collaborative. And because change is nonlinear, it will never be an easy journey. So there can be no room for passengers on the 'waka'.

The Draft Leadership Strategy

In December 2017 the NZ Education Council released a draft of its leadership strategy for the teaching profession of Aotearoa New Zealand. The document contains many ideas statements that reinforce much of what is contained this report. In the context and background pages the council includes reference to the "unprecedented levels of disruption and change"(pg 7)-complexity. It refers also to our professionals being regarded as "adaptable, responsive to innovative policies and practices, relationally and culturally adept and committed to diverity and social justice" (pg 7). In contrast, Sarah Bolton (2017) states in the introduction of her paper "Educational Equity in New Zealand: Success, Challenges and Opportunities" that the vision of "all children having access to a high quality education that prepares them for success later in life, no matter their ethnicity, where they live or how much money their parents make is not yet a reality in New Zealand. While the country's education system performs well overall, large equity gaps still remain for Māori, Pasifika and low – SES students" (pg 3). The seriousness and depth of this challenge for leadership is not emphasised enough in the Education Council's draft.

The document refers to community ecosystems and networks as its 4th theme and makes suggestions for what needs to happen in this space. Having this as a "theme" and not "The Theme" is compartmentalising "the whole". Perhaps a rethinking of the 'why' for a leadership strategy needs to remind all those involved in our education system (the whole) that the failure of the education system to meet the diverse needs of all students is **everyone's** failure from government, to the Ministry of Education through to high and low decile secondary and primary schools and early childhood centres. Bolton (2017) makes clear recommnedations for how to address in inequity through "practices in schools, how resources are allocated and the design of the education system"(pg 30). Leadership as a collective endeavor includes the whole context of NZ.

Conclusion

This research started out to be a inquiry into what shifts in thinking about leadership would be necessary for successful development of Communities of Learning. I had intended to interview leaders of other Col but found from the MOE website that the majority of early adopters of the IES policy had single leaders and their achievement challenges were written in a way that reflected an improvement model such as lifting writing or maths achievement. Porirua East had worked in this way for some years (2007-2015) and in doing so had neglected the real challenges of the 21st Century education pedagogy by failing to put the New Zealand Curriculum up front. Conversations with leaders from these COL were unlikely to provide information about transformational change. So this report has become more of a literature review on leadership in a complex world. I have made reference to the development of the Porirua East Kāhui Ako because in its development stages it has provided an authentic context for the ideas in the reserach I have used.
In this report I have tried to link three main themes about leadership in a complex world to theorists who refer to organisational systems, the role of systems thinking, knowing your

system (eco-system) and co-constructing meaning within that to build relationships for change.

The themes relate to knowing the "why" for our work, understanding the complex systems we work in and building relationships so leadership can be a collective endeavour. These themes are not the full story but they provide a framework. What is exciting about the literature was the overwhelming case for a major shift in thinking about leadership and how we lead for the future.

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References

Aitkin, Julia (1996) *From Values and Beliefs to Principles and Practices.* Seminar Series No. 54, Incorporated Association of Registered Teachers of Victoria 1996

Betts F (1992) *How Systems Thinking Applies to Education.* From Educational Leadership. Nov 1992 Vol 50 Number 3. Improving School Quality pages 38-41. http://www.ascd.org

Bolstead, R, Gilbert J., McDowall, S, Bull A. Boyd, S &Hipkins, R (2012) *Supporting future-oriented learning and teaching – a New Zealnd Perspective.* New Zealand Council for Education Research 2012.

Bolton Sarah, W. (2017) *Educational Equity in New Zealnd: Successes, Challenges and Opportunities*. Published by Fulbright New Zealand. August 2017

Capra F & Luisi P (2014) *The Systems View of Life. A unifying vision.* Cambridge University Press 2014

Durie M (2015) *Educational Leadership for Tomorrow.* Paper prepared for the NZ Education Council. Wellington NZ

Education Council New Zealand (2017) . *Leadership Strategy. The leadership strategy for the teaching profession of Aotearoa New Zealand.* Draft . Pub by Education Council Wellington.

Eckman E (2006) *Co-principals: Characteristics of Dual Leadership.* From leadership and Policy in Schools. Vol 5,No 2 July 2006. Pgs 89-107. Taylor and Francis Routledge.

Garvey Berger J, (2012) *Changing on the Job. Developing Leaders for a complex world.* Stanford University Press 2012

Gilbert J (2015) *Leading in Collaborative, Complex Education Systems.* Paper prepared for the NZ Education Council . Wellington NZ

Krebs, V and Holley J (2002-2006) *Building Smart Communities through Network Weaving.*
 http://www.orgnet.com/BuildingNetworks.pdf

Lambert (et al) (2002) *The Constructivist leader. 2nd Edition*. Teachers College Press, New York 2002

Porirua City Council (2017) *Staus Report on Children and Young People.* PCC 2017.

Senge, P (1990) *The Fifth Discipline.The art and practice of the learning organisation*
  Doubleday USA 1990

Senge, P (2016) *Creating Schools for the Future, Not the Past for ALL Students.* Paper presented at the Master Class at the World Leadership Summit 2016, Singapore

Snowden, D and Boone, M (2007) *A leader's Framework for Decision-Making.* Harvard Business Review 85(11)

Stroh D L (2015) *Systems Thinking for Social Change.* Chelsea Green Publishing USA. https://www.youtube.com/watch?v=cvuA27McG6k

Wenmouth D (2015) *Networked Leadership.* Paper Prepared for the NZ Education Council . Wellington NZ

Wielkiewicz R. M and Stelzner S.P (2005) *An Ecological persepctive on leadership Theory, Research, and Practice.*From Review of General Psychology 2005. Vol 9, No 4. 326-341. Education Publishing Foundation.