



EMES CONFERENCES

SELECTED PAPERS SERIES

3rd EMES International Research Conference on Social Enterprise
Roskilde (Denmark) - July 4-7, 2011

ADDRESSING SOCIETY'S MOST PRESSING PROBLEMS BY COMBINING THE HEROIC AND COLLECTIVE FORMS OF SOCIAL ENTREPRENEURSHIP

Sharon Zivkovic
University of South-Australia, Australia

Copyright © 2011 Sharon Zivkovic

Any portion of these materials is freely available for information and educational purposes, but cannot be re-published in any format that may entail fees or royalties without the express permission of the copyright holders.

ABOUT THE EMES CONFERENCES SELECTED PAPERS SERIES:

This series aims to ensure that selected papers from conferences in which EMES has been involved will be accessible to a larger community interested in the third sector and social enterprise.

EMES Conferences Selected Papers have not undergone any editing process.

All the papers of the series are available for download at www.emes.net.

ABSTRACT

This paper questions the ability of heroic models and collective models of social entrepreneurship to independently address society's most pressing problems. Firstly, the paper demonstrates the limitations of the heroic model by comparing the characteristics of heroic social entrepreneurs and their problem solving approach to the characteristics of complex social policy problems. Then the paper identifies limitations of the collective functional social entrepreneurship model by referring to a South Australian case study. The paper suggests while collective functional social entrepreneurship appears well suited to addressing complex social policy problems, findings from a research project investigating the impact of a South Australian innovation highlights three perceptual barriers that prevent collective functional social entrepreneurship from gaining traction in communities: the perception citizens do not understand the complexity of community issues, the perception governments do not listen to the ideas and views of citizens, and the perception governments cannot treat communities as complex adaptive systems. After describing the South Australian innovation, and the research project, the paper describes a model developed during the research project which enables collective functional social entrepreneurship to embed in communities by addressing the identified barriers. The model focuses on nine intervention points which exist in communities and at the interface of communities and government systems, and suggests characteristics for interventions at these points. Finally, the paper highlights how the model could provide the social entrepreneurship field with a unified approach for addressing society's most pressing problems by assisting individual social entrepreneurs and teams of social entrepreneurs to develop innovations that enable collective functional social entrepreneurship.

1. HEROIC SOCIAL ENTREPRENEURSHIP

Heroic social entrepreneurs are commonly characterised as remarkable individuals (Sen, 2007; Bornstein, 2007; Ashoka, 2007) that address society's most pressing social problems (Elkington and Hartigan, 2008; Leadbeater, 1997) by developing innovations that attack the underlying causes of problems (Dees and Anderson, 2003; Drayton, 2002; Dees, 1998). After proving their innovations work these individuals attempt to create significant social change by spreading their impact throughout society (Ashoka, 2007; Leviner et. al., 2006). To assist them in spreading their impact the heroic social entrepreneur develops a strong theory of change that specifies their innovation's cause and effect logic (Gutierrez and Tasse, 2007, p. 52) and the critical elements their innovation needs to reproduce in order to achieve their desired impact in a new context (Bradach, 2003, p. 21).

This paper questions the claim heroic social entrepreneurs can address society's most pressing problems as many of society's most pressing problems are wicked problems (Krawchulk, 2008, p. 69); a term first coined by Rittel and Webber (1973) to describe the complex social policy problems society's face. According to the Australian Public Service Commission (2007) wicked problems are difficult to define with different stakeholders having a different understanding of what the problem is. Wicked problems have many interdependencies, are multi-causal, and have conflicting goals. Due to their multi-causality and interdependency, wicked problems are often not stable and attempts to solve them can lead to unforeseen consequences as their behaviour and their contexts continually change. Wicked problems have no clear solution (Australian Public Service Commission, 2007); they cannot be solved, only tamed (Camillus, 2008, p. 99). Examples of wicked problems include terrorism, environmental degradation, poverty (Krawchulk, 2008, p. 69), ageing populations, energy security, affordable healthcare (Ho, 2008), river catchment management (Ison, et al. 2009, p. 4), climate change, obesity, indigenous disadvantage (Australian Public Service Commission, 2007), and place-based disadvantage (Social Inclusion Board, 2011, p. 45).

This paper argues the heroic social entrepreneur's problem solving approach of attacking the underlying causes of social problems is ineffective for addressing wicked problems given the underlying causes of wicked problems are difficult to define, not stable, and multiple. Applying the problem solving approach of the heroic social entrepreneur to a wicked problem may even result in unforeseen negative consequences due to the potential for wicked problems and their contexts to change when attempts are made to address them (Australian Public Service Commission, 2007). It is also suggested the theory of change approach used by heroic social entrepreneurs to spread their impact is not appropriate for wicked problems given it is not possible to specify the cause and effect logic and critical elements of an innovation to address a wicked problem in advance (Kania and Kramer, 2011, p. 38) as the context specific process of change (Westley et al., 2006) emerges through the interactions of diverse stakeholders (Australian Public Service Commission, 2007).

2. COLLECTIVE SOCIAL ENTREPRENEURSHIP

In contrast to the heroic social entrepreneurship model, collective social entrepreneurship requires multiple stakeholders to collaborate on the development and implementation of innovations (Roberts, 2006, p. 600). Collective social entrepreneurship generally takes two forms; team social entrepreneurship where a number of social entrepreneurs with similar characteristics to heroic social entrepreneurs join forces and work together to develop and implement an innovation, and functional social entrepreneurship which occurs without the

presence of a single entrepreneur but involves diverse stakeholders from different functional areas of expertise combining their intelligence and resources to develop an innovation and put it into practice (Roberts, 2006, p. 600).

The leadership approach of collective functional social entrepreneurship aligns to the approach promoted by complex systems leadership theories. Complex systems leadership theories consider leadership not to be held in a particular person but to be a process embedded in all of the interactions amongst agents in a system (McKelvey and Lichtenstein, 2007, p. 94).

Collective functional social entrepreneurship does not spread its impact through replication. Instead it scales its impact by spreading its reach; harnessing the intelligence and resources of more and more stakeholders and multiplying the number of collaborative experiments and innovations to address an issue in a given context (Leadbeater, 2006, p. 240). Innovations developed by these collaborations are not designed in advance; but rather they are developed in, and for, a specific community and emerge through the interactions amongst participants in these collaborations (Australian Public Service Commission, 2007). These innovations are context specific, and therefore the ability of these innovations to be successfully replicated in another context is extremely difficult, if not impossible (Taylor et al., 2002).

The collective functional social entrepreneurship approach appears well suited to the approach commonly recommended for addressing wicked problems. The Australian Public Service Commission (2007) suggests wicked problems should be addressed by bringing together multiple stakeholders, including citizens, who have different expertise to ensure the complexity and interconnectedness of the wicked problem is understood, possible solutions can collectively be identified, and any required behaviour change is understood, discussed, and owned by the people whose behaviour needs to change.

The 2004 State of the Future Report (Glenn & Gordon, 2004) promotes the need for such an approach when addressing complex community problems, stating: *'common platforms are needed that connect governments, corporations, NGOs, universities, and international organisations in collaborative decision making'*, and quotes the following statement from a speech by former UN Secretary-General Kofi Annan:

'The most creative agents of change may well be partnerships among governments, private businesses, non-profit organisations, scholars and concerned citizens such as you.'

In 1992 the United Nations Conference on Environment and Development recommended a collective functional approach be taken to address the wicked problem of unsustainable development. Chapter 28 section 3 of the Agenda 21 report adopted at this conference states (United Nations Department of Social and Economic Affairs, 1992):

'Each local authority should enter into a dialogue with its citizens, local organisations and private enterprises and adopt 'a local Agenda 21'. Through consultation and consensus-building, local authorities would learn from citizens and from local, civic, community, business and industrial organisations and acquire the information needed for formulating the best strategies.'

3. SOUTH AUSTRALIAN CASE STUDY

While a collective functional approach appears the most appropriate approach for addressing complex social policy problems, a recent South Australian research project investigating the impact and ways to increase the impact of the Community Capacity Builders (CCB) Community Leadership Program (CLP) identified perceptual barriers that prevent collective functional social entrepreneurship from gaining traction in a community. The CCB CLP has been designed to support collective functional social entrepreneurship by engaging ordinary citizens and the groups and organisations they interact with in the traditional work of governments.

CCB mission is to enable communities to manage change and development by building community capacity and creating a culture of active citizenship. For CCB active citizenship is more than 'playground participation' where *'participation takes place in isolation from the real public debate and decision-making processes'* (Mathijssen & Wildemeersch, 2007, p. 73). The CCB CLP takes a contemporary civic republican approach to citizenship. Civic republicanism considers *'to be a citizen, by definition, is to be active'* (Peterson, 2005, p. 10). The CLP fits within both of the two dominant modern republican models of instrumental republicanism and strong republicanism. Instrumental republicans consider active citizenship is required to address common goods that cannot be realised by governments alone (Honohan, 2002, p. 151). Strong republicans believe in addition to instrumental value, citizens gain intrinsic benefits from being politically active and realising common goods, such as interacting as equals, defining one's purpose, and self-realisation (Honohan, 2002).

CCB mission and the CCB CLP support the public sector reform agendas of the Australian, the United Kingdom, and the United States governments. A key principle of Australia's Declaration of Open Government is *'... collaborating with citizens on policy and service delivery to enhance the processes of government and improve the outcomes sought'* (Tanner, 2010). The aim of the United Kingdom's Big Society programme is *'... to give citizens, communities and local government the power and information they need to come together, solve the problems they face and build the Britain they want'* (Cabinet Office, 2010), and the focus of the Transparency and Open Government agenda in the United States is to *'... actively engage Americans in the work of their Government'* (Obama, 2009).

The CCB CLP contains design features which recognise addressing complex social policy problems requires a collaborative, holistic, and adaptive community-led approach. The CLP takes a post-heroic approach to community leadership; recognising leadership as a process embedded in all of the interactions between community stakeholders, and focuses on the development of collaborative, facilitative and entrepreneurial citizen leaders who are confident to collaborate with diverse stakeholders on developing new ideas for addressing complex community problems and to implement these ideas through experimental projects that harness their community's combined resources. To encourage participants to frame issues and opportunities from diverse perspectives the program integrates and embeds into a unique planning process concepts, tools and techniques from seven diverse perspectives on how to build the capacity of communities. These seven perspectives are: a health perspective; an education perspective; a welfare reform perspective; a business perspective, a sustainability perspective, a decision making perspective, and a collaborative planning perspective. To encourage participants to explore and embrace uncertainty, instead of coming onto the program with a fixed project idea, participants come onto the program with any broad community issue or opportunity of their choice which they take through the program's three stage exploratory process of: learning about the community, taking action in the community, and sustaining the development achieved. This planning process combines concepts, tools and techniques from

the common planning processes used by governments; community visioning, strategic planning, and project management. The program aims for participants to gain knowledge and skills in three target outcome areas: to form collaborative community capacity building projects, to bridge their projects and activities to the strategic plans of governments and governing bodies, and to participate in community governance processes such as community visioning and strategic planning processes.

The CCB CLP contains the key elements of education for sustainability; imagining a better future, systemic thinking, critical thinking and reflection, participation in decision making, and working in partnerships (Tilbury and Wortman, 2004, p. 11). During the program participants imagine a better future by exploring a range of community visioning models and techniques. They create a vision for the future for their issue or opportunity in collaboration with other community stakeholders and develop strategies and action plans to achieve preferred futures. Participants undertake systemic thinking by exploring communities as complex systems and by investigating the shift to integrated local area planning and networked governance. They explore the interrelationships between different perspectives for building community capacity and the need to balance human, social, economic and environmental impacts when making decisions and taking action. Critical thinking and reflection is encouraged by challenging participants existing ways of interpreting the world as they explore: issues and opportunities from the seven community capacity building perspectives, global strategic directions and trends, overseas models and initiatives, and the tendency for people to preserve their own beliefs and to focus on positions rather than interests. Participation in decision making is incorporated into the program by participants: exploring international participation frameworks, analysing methods and techniques for engaging with different types of stakeholders, and exploring the techniques and processes commonly used by governments for community engagement. The program has a strong focus on participants developing skills for working in partnerships with participants developing collaborative leadership skills, designing collaborative processes, and developing a collaborative project.

The education for sustainability literature argues education programs that contain these key elements will be transformational for both individuals and communities. They will be transformational for individuals as learners are enabled to become active participants and decision-makers in change processes (Tilbury and Wortman, 2004, p. 9) and they are transformational for communities as learners will be able to influence the groups, organisations and communities they interact with (Tilbury, 2007, p. 117).

CCB embraces the 'partnership' element of education for sustainability by delivering the CLP in partnership with a client government or governance body. The client partner is responsible for providing a community venue for the delivery of the program, each participant with a copy of their strategic plan to be used for learning strategic planning and investigating the possibility of bridging their activities and projects to the plan, project officer support to encourage relationships to be built between participants and the government or governance body rather than between participants and CCB, and participants with access to their library facilities, community directory and community information system for undertaking research. The program has a strong focus on participants gaining skills and knowledge to access and understand government information during and beyond their participation in the program.

CCB encourages customisation and local ownership of the program by encouraging the client partner to integrate the CLP with additional initiatives the client develops and to develop an overarching brand for the combined CCB CLP and their own initiatives. Examples of client developed initiatives include community visioning and planning forums, mentoring programs,

community leadership networks, additional workshops using local guest speakers, and site visits to local community initiatives and infrastructure.

The Community Leadership Program was piloted with the City of Onkaparinga from October 2006 to May 2007 under the banner of 'Leadership Onkaparinga'. Nineteen City of Onkaparinga residents completed the program's pilot. The City of Onkaparinga's evaluation of the pilot found 46% of respondents agreed, and 54% of respondents strongly agreed, their participation in the CCB CLP had provided them with the knowledge and skills to form collaborative community capacity building projects and to bridge their projects and activities to local, regional and state strategic plans (City of Onkaparinga, email, 27 July 2007). The evaluation also found 35% of respondents agreed, and 65% of respondents strongly agreed, their participation in the CCB CLP had provided them with the knowledge and skills to participate in whole of community visioning and planning processes (City of Onkaparinga, email, 27 July 2007).

4. THE RESEARCH PROJECT

At the completion of the CCB CLP pilot CCB had concerns the CLP was not contributing towards CCB mission. While the City of Onkaparinga's evaluation of the program's pilot demonstrated the program achieves its desired learning outcomes, and education for sustainability theory suggests the program's design would enable graduates to be active participants and decision makers in change processes and would enable graduates to influence others, CCB had no evidence that graduates would be able to put what they learn during the program into practice. CCB concern was reinforced by a European Commission research report which stated there is little evidence citizenship education programs have an impact on active citizenship practice (de Weerd et al., 2005, p. vii). Additionally, research into training in general highlights only 15 percent of people who receive new training can use it to produce valuable performance results and 80 percent or more of the impact of training is determined by a complex range of performance system factors which have nothing to do with the quality of the training or the characteristics of the learners (Brinkerhoff, 2006a, 2006b).

In order to determine, and increase the CLP's contribution towards CCB mission a research project was undertaken in partnership with the City of Onkaparinga to ascertain the impact of the CLP on graduates practice and their ability to influence others, to identify the enabling and blocking factors graduates experience when they attempt to put what they have learned into practice and attempt to influence others, and to determine ways to strengthen any enabling factors and dampen any blocking factors identified. Nineteen Leadership Onkaparinga graduates from three Leadership Onkaparinga programs participated in the research project. These graduates were interviewed biannually for 2 ½ years and transcripts of the interviews were coded using NVivo 8 software. At the end of the project a summary of the identified enabling and blocking factors was distributed to participating graduates and City of Onkaparinga staff, and a focus group was facilitated with graduates and City of Onkaparinga staff to generate ideas for strengthening the identified enabling factors and dampening the identified blocking factors.

The most appropriate hypothesis/model for achieving the study's primary aim of determining how to increase the impact of the CCB CLP was then generated using the pragmatic process of inquiry approach of converting the elements of the original situation into the unified model (Dewey, 1938, p. 104) most likely to achieve the inquiry's aim (Eames, 1977, p. 69). In addition to the findings from the graduate interviews and focus group, elements of the original situation included background information for the study consisting of relevant government policies and insights from the development of the CCB CLP, and theoretical literature relevant to addressing

complex social policy problems. The unifying approach used to generate the model aligns with Corbin and Strauss's (1990, p. 13) grounded theory methodology which unifies an inquiry's coded categories around a core category that represents the central phenomenon that has emerged from a research study. Morrison (2008) and Lemke and Sabelli (2008) also support taking a unified approach, arguing that change is less effectively undertaken by focusing on one particular factor, variable or a single intervention. Instead change needs to be supported by multiple strategically coordinated interventions that impact on as many factors as possible to generate the momentum required in the new direction (Morrison, 2008; Lemke and Sabelli, 2008).

5. BARRIERS TO COLLECTIVE FUNCTIONAL SOCIAL ENTREPRENEURSHIP

Findings from the research project highlighted despite governments having reform agendas aimed at engaging citizens in the work of governments, a significant number of graduates experienced system blocking factors which prevented them from engaging. The findings also suggested graduates found it difficult to influence the groups and organisations they interact with.

The main analytical idea which converted elements of the inquiry's original situation into a unified model which was considered most likely to increase the CLP's contribution towards CCB mission was the need to change the nature of the interactions and the working relationships between graduates and governments, graduates and street level workers, and graduates and other community members. The combined analysis of the research findings, background information, and theoretical insights suggested two perceptions were obstructing the development of effective interactions and working relationships between these community stakeholders: the perception citizens do not understand the complexity of community issues, and the perception governments do not take into account the views and ideas of citizens when making decisions.

The existence of the citizens do not understand the complexity of community issues perception was implied during graduate interviews; four graduates stated they consider workers do not value the skills and knowledge of volunteers, and two graduates stated they consider workers only give community members tokenistic roles. The perception was also implied from an idea generated by graduates and City of Onkaparinga staff during the focus group; the group identified the need for paid workers to be made aware of the content of the CLP and of the benefits that can be achieved from working with Leadership Onkaparinga graduates. Background information and theoretical concepts which further informed this perception include the perception citizens have limited perspectives for decision making (Stoker, 2005), the reluctance of public servants to devolve responsibility to local communities because they perceive communities lack the capacity to exercise such responsibility (Australian Social Inclusion Board, 2011, p. 57), the recognition politicians use 'spin' because they consider citizens do not understand the complexity of issues (Wong, 2009), and the positivist policy scientist's perspective that policy science requires experts to analyse policies and make policy recommendations using sophisticated techniques (Wagle, 2000, p. 208).

The existence of the perception governments do not take into account the views and ideas of citizens was implied from graduates experiencing very few opportunities to participate in government decision making during the 2 ½ years of the interviewing. During interviews seven graduates stated they had not come across any opportunities to participate in government decision making, three graduates considered the opportunities they did come across were not at

a participation level they thought was worthwhile, and one graduate considered the opportunity to participate in government decision making was only for the elite. Background information and theoretical concepts which further informed this perception include: South Australian Councils recognising cynicism due to lack of influence as a key barrier to engaging citizens in decision making (Margaret Heylen Consulting, 2007, p. 8), the finding British citizens have disengaged from political participation due to feeling their views and interests are not taken sufficiently into account by the processes of political decision-making (Power Inquiry, 2006), Freire's pedagogy of the oppressed (Deans, 1999), and Wildemeersch and Vandenabeele's (2007, p. 25) concern that contemporary participation processes are new forms of persuasion and normalisation.

The literature explored during the research project uncovered the potential to improve the interactions and working relationships between community leaders, elected officials, street level workers and other community members by taking a complex adaptive systems approach when working with communities. Complex adaptive systems theory provides practical insights into how to strengthen communities to make them more adaptive in addressing complex social policy problems and has been recognised as an approach for addressing wicked problems (Klijn, 2008, p. 314; Australian Public Service Commission, 2007, p. 14; Bentley and Wilsdon, 2003, p. 26). According to complex adaptive systems theory, under certain conditions interactions between interdependent agents produce system level order (Lichtenstein and Plowman, 2009, p. 618) as agents interact and learn from each other, change their behaviour, and adapt and evolve to increase their robustness (Gillis, 2005, p. 10). Empirical research has shown large complex systems such as communities require enabling conditions to be created in order to maintain the coordination required for emergent self-organisation and adaptive capability (McKelvey and Lichtenstein, 2007).

Even though communities are complex adaptive systems (Catto and Parewick, 2008, p. 125), and the Australian Public Service Commissioner has expressed a desire for governments to gain a greater understanding of complexity (Briggs, 2009, p. 7), governments are reluctant to treat communities as complex adaptive systems (Mulgan, 2001, p. 1). This is due to a third perception identified in the literature which obstructs the development of effective interactions and working relationships between community stakeholders; the perception governments cannot treat communities as complex adaptive systems due to government needs which are more easily achieved when there are clear relationships between cause and effect. These needs include time pressures for making government policy, and the requirement of governments for simplicity, repetition, clarity, and accountability (Mulgan, 2001).

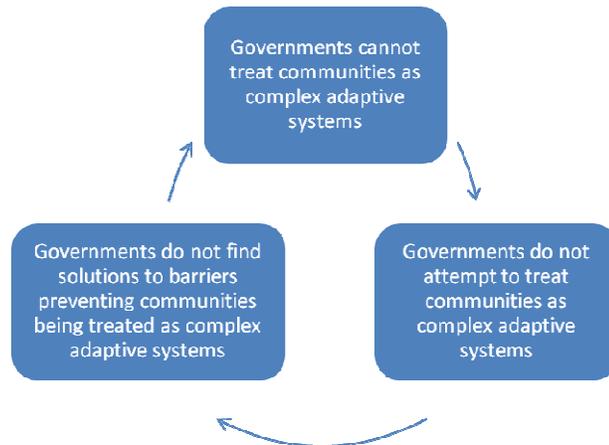
6. THE MODEL

The model generated using the pragmatic process of inquiry took as its starting point the need to improve the interactions and working relationships between graduates, governments, street level workers and other community members in order to increase the CLP's impact and the view the three identified perceptions are obstructing the development of effective interactions and working relationships between these community stakeholders. The model considers communities are trapped using out-dated community problem solving approaches which are not appropriate for addressing 21st century complex social policy problems because the three identified perceptions are generating self-fulfilling prophecy cycles.

The expectation that governments cannot treat communities as complex adaptive systems results in governments acting as if communities cannot be treated as complex adaptive systems.

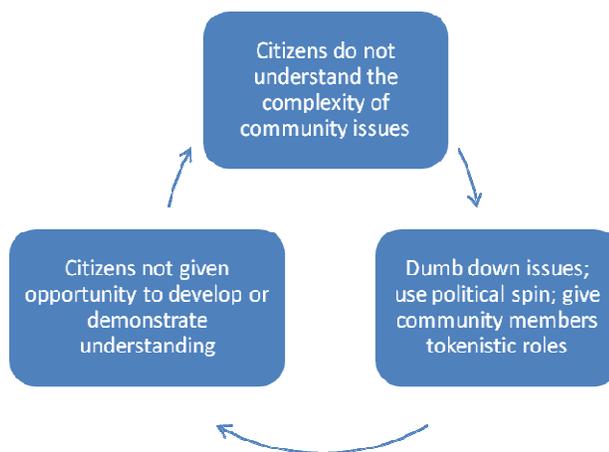
As highlighted in Figure 1, this action confirms the original perception as by not attempting to treat communities as complex adaptive systems governments do not find solutions to the identified barriers preventing them from treating communities as complex adaptive systems. The prophecy is therefore fulfilled as this lack of experimentation to find solutions to the identified barriers results in governments not being able to treat communities as complex adaptive systems.

Figure 1: Self-fulfilling prophecy of governments cannot treat communities as complex adaptive systems



The expectation citizens do not understand the complexity of community issues results in the dumbing down of issues, governments using ‘spin’, and paid workers giving citizen leaders tokenistic roles. As shown in Figure 2, these actions by governments and paid workers not only reinforce the perception but also act as symptomatic solutions (Rogers, 2000, p. 53); they relieve the symptoms of citizens not understanding the complexity of community issues but do nothing to change the perception. Such symptomatic solutions make it harder for citizens to understand the complexity of community issues as policies and programs are not created to enable citizens to learn about the complexity of community issues, and they make it difficult for citizens to demonstrate their understanding of the complexity of community issues as they are not provided with opportunities to do so.

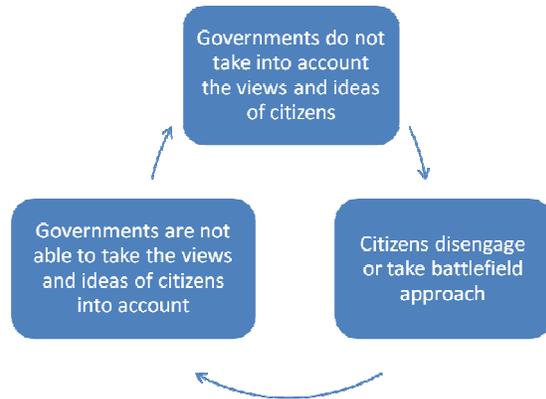
Figure 2: Self-fulfilling prophecy of citizens do not understand the complexity of community issues



The perception governments do not take into account the views and ideas of citizens often results in citizens disengaging from democracy (Power Inquiry, 2006) or citizens taking a battlefield approach because they believe this is the only way to influence public decision

making (Dobson, 2003). These actions confirm the original perception as disengagement results in governments not being able to hear the views and ideas of citizen, and a battlefield approach sees citizens holding onto fixed positions rather than expressing views and ideas. As shown in Figure 3, these actions reinforce the original expectation that governments do not take into account the views and ideas of citizens.

Figure 3: Self-fulfilling prophecy of governments do not take into account the views and ideas of citizens



The model developed from the research project proposes these three self-fulfilling prophecies are a dominant logic in many communities. Figure 4 shows this dominant logic as an attractor; a stable pattern adopted by community systems because of the norms, routines and objectives of the current dominant logic.

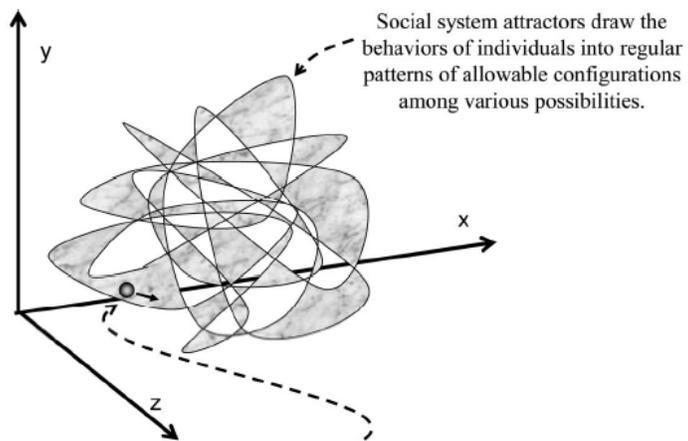


Figure 4: Social system attractor

One configuration is shown as the grey ball, rolling around within the attractor as events occur or individual choices are made.

Goldstein et al. (2010b, p. 104)

Goldstein (1994) considers self-fulfilling prophecy cycles can be broken by creating a disequilibrium state that attacks the two-way causality which maintains the self-fulfilling prophecies. The model developed from the research project takes this approach. In order to

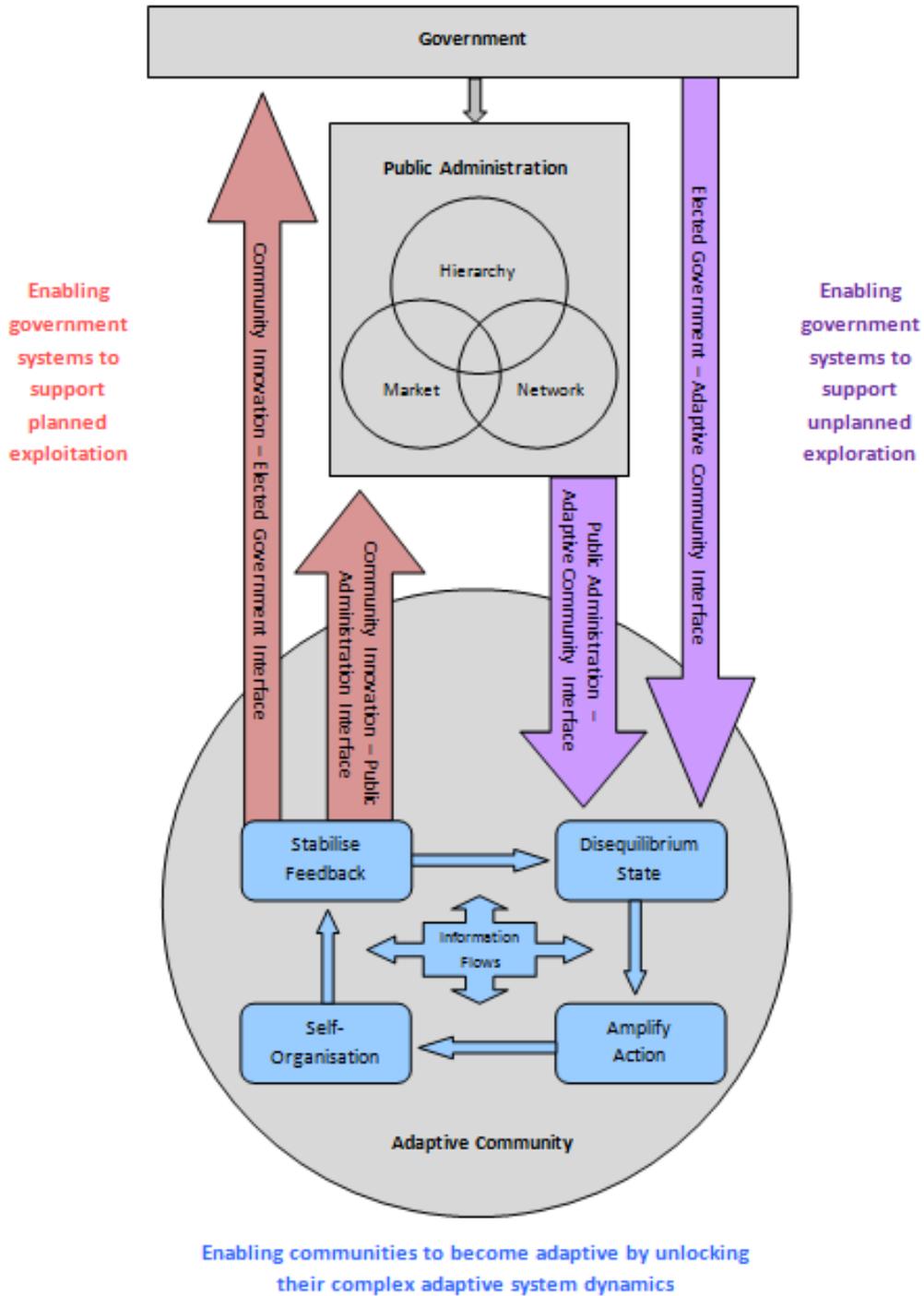
break the self-fulfilling prophecy of citizens do not understand the complexity of community issues, the model proposes opportunities need to be created for citizens to develop and demonstrate their understanding of the complexity of community issues, and barriers preventing citizens from gaining an understanding and demonstrating their understanding need to be removed. To break the self-fulfilling prophecy of governments do not take into account the views and ideas of citizens, mechanisms need to be created to enable governments to take the views and ideas of citizens into account, and barriers preventing governments from taking the views and ideas of citizens into account need to be removed. In order to break the self-fulfilling prophecy of governments can not treat communities as complex adaptive systems, the identified barriers preventing governments from treating communities as complex adaptive systems need to be addressed which requires governments to experiment with treating communities as complex adaptive systems.

The model proposes the impact of the CCB CLP can be increased by making amendments to the CLP and developing new interventions that focus on breaking the cycles of the three identified self fulfilling prophecies. Duit and Galaz (2008, p. 319) and Moobela (2005, p. 35) suggest in order for governments to be able to take a complex adaptive systems approach to community problem solving government systems need to have the ability to balance unplanned exploration and planned exploitation. Given this insight, the model focuses on treating communities as complex adaptive systems, enabling the systems of governments and public administrations to address the perceived barriers of need for timeliness, simplicity, repetition, clarity, and accountability (Mulgan, 2001), and to balance unplanned exploration of solutions with communities and planned exploitation of community knowledge, ideas and innovations. The model further proposes if government systems undertake unplanned exploration and planned exploitation the self-fulfilling prophecies of governments not taking the views and ideas of citizens into account, and citizens do not understand the complexity of community issues will be broken, as by undertaking unplanned exploration and planned exploitation with communities government systems will be recognising the understanding citizens have of complex community issues and will be taking the views and ideas of citizens into account.

7. POINTS OF INTERVENTION

From a combined analysis of the research project's findings, background information, and the theoretical literature, the model identifies nine focus areas for the development and implementation of interventions which could break the self-fulfilling prophecies. Five of these intervention points focus on where interventions could be applied to enable communities to unlock their complex adaptive dynamics. These interventions points are at the point of creating a disequilibrium state, the point of amplifying action, the point of self-organisation, the point of stabilising feedback, and the point of information flows. Two intervention points were identified where interventions could be applied to assist government systems to undertake unplanned exploration of solutions with communities. These intervention points are at the interface between elected governments and adaptive communities, and at the interface between public administrations and adaptive communities. Two intervention points were identified where interventions could be applied to assist government systems to conduct planned exploitation of the knowledge, ideas and innovations that emerge from community-led activities. These intervention points are at the interface of adaptive community innovations and elected governments and at the interface of adaptive community innovations and public administrations. The nine intervention points are represented in Figure 5.

Figure 5: Model for enabling collective functional social entrepreneurship (9 intervention points)



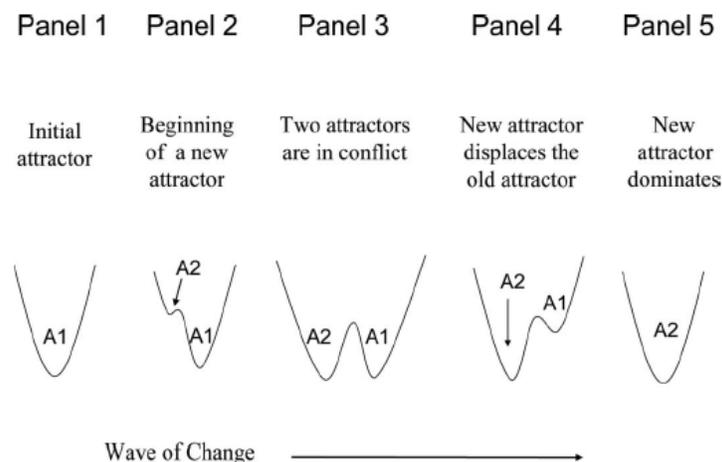
8. CHARACTERISTICS OF INTERVENTIONS

Through a combined analysis of the research project's findings, background information, and the theoretical literature, characteristics required of interventions at each of the nine intervention points were identified. The model proposes while collective functional social entrepreneurship,

and not heroic social entrepreneurs or collective team social entrepreneurship, is required for addressing complex social policy problems, the characteristics and problem solving approach of individual social entrepreneurs and teams of social entrepreneurs are ideal for developing theories of change for complicated innovations that target the identified intervention points. This view is supported by Westley et al. (2006) who consider complex problems require an adaptive approach; similar to raising a child, but complicated problems such as the proposed interventions at the intervention points require the creation of a blueprint that specifies the cause and effect relationships; a similar approach to sending a rocket to the moon.

Interventions at the point of creating a disequilibrium state aim to disrupt the current way of working in communities by breaking the two way causality of the identified self-fulfilling prophecies. The creation of a disequilibrium state can be thought of as the first stage in the transition a community goes through as it moves towards a new way of working. This stage is illustrated at Panel 2 in Figure 6. The need for creating a disequilibrium state cannot be overemphasised because it is only when a system is in this state that interactions between interdependent agents can produce a new system level order (Lichtenstein and Plowman, 2009, p. 618). At the point of a disequilibrium state the pull of the original attractor; the current way of working, is weakened which enables small changes to the system through actions or events to create substantive change because the actions and events are able to amplify quickly through the system via the increased interdependent interconnections between system members and positive feedback dynamics (Lichtenstein and Plowman, 2009, p. 621). Interventions that create a disequilibrium state have the following characteristics: interventions that highlight the need to organise communities differently and cultivate a passion for action (Goldstein et al., 2010a, p. 53; Lichtenstein and Plowman, 2009, p. 618); interventions which manage initial starting conditions (Snowden and Boone, 2007, p. 6); interventions which specify goals in advance (Surie and Hazy, 2006, p. 17); interventions which establish appropriate boundaries (Snowden and Boone, 2007, p. 6; Goldstein, 1994, p. 49); and interventions which embrace uncertainty, surface conflict and create controversy (Lichtenstein and Plowman, 2009, p. 621).

Figure 6: Transition to new attractor



Goldstein et al. (2010b, p. 62)

Interventions at the point of amplifying actions aim to enable the community system to further overcome the equilibrium seeking tendencies of the three self-fulfilling prophecies and move closer towards the new way of working. This stage is illustrated at Panel 3 in Figure 6. At the point of amplifying actions interventions are required to enable communities to develop and

implement collaborative experiments by creatively combining their community's collective intelligence and resources. Characteristics of these interventions include: interventions that enable safe fail experimentation (Snowden, 2008); interventions that enable rich interactions in relational spaces (Lichtenstein and Plowman, 2009); interventions that support collective action (Lichtenstein and Plowman, 2009); interventions that partition the system (Surie and Hazy, 2006, p. 18); interventions that establish network linkages; and interventions that frame issues to match diverse perspectives (Uhl-Bien et al., 2008, p. 206).

The aim of interventions at the point of self-organisation is to enable community system members and their resources to recombine into new patterns of interaction and working arrangements that improve the functioning and performance of the community system (Lichtenstein and Plowman, 2009, p. 620) and displace the old way of working. This stage is illustrated at Panel 4 in Figure 6. Characteristics of interventions at this point include: interventions that create correlation through language and symbols (Lichtenstein and Plowman, 2009; Surie and Hazy, 2006, p. 17); interventions that encourage individuals to accept positions as role models for the change effort (Lichtenstein and Plowman, 2009); interventions that enable periodic information exchanges between partitioned subsystems (Surie and Hazy, 2006, p. 17); and interventions which enable resources and capabilities to recombine (Lichtenstein and Plowman, 2009).

Interventions at the point of stabilising feedback aim to stabilise the community system at the new way of working; at the new attractor, by institutionalising the emergent change. This stage is illustrated at Panel 5 in Figure 6. Interventions which stabilise community systems have the following characteristics: interventions that integrate local constraints (Lichtenstein and Plowman, 2009, p. 625); interventions which provide a multiple perspective context and system structure; interventions that enable problem representations to anchor in the community; and interventions that enable emergent outcomes to be monitored (Surie and Hazy, 2006).

The point of information flows occurs throughout the transition process. The aim of interventions at this point is to enable communities to use information for organised solutions (Goldstein, et al., 2010a, p. 53). Characteristics of interventions which encourage and enable information flows include: interventions which assist system members to keep informed and knowledgeable of forces influencing their community system (Uhl-Bien et al., 2008); interventions which assist in the connection, dissemination and processing of information (Uhl-Bien et al., 2008, p. 206; Surie and Hazy, 2006, p. 18); interventions which enable connectivity between people who have different perspectives on community issues; and interventions which retain and reuse knowledge and ideas generated through interactions (Surie and Hazy, 2006, p. 18).

The characteristics identified as required for interventions that enable governments to support unplanned exploration with communities and planned exploitation of community knowledge, ideas and innovations have been informed by a diverse range of theories. These theories include: the concepts of seeds of emergence (Uhl-Bien et al. 2008, p. 208; Snowden 2008) and creating ecologies of innovation (Surie and Hazy, 2006, p. 17) from complex systems leadership theories; the concept of soft power from international relations theory (Nye, 2004); and the concepts of street-level bureaucracy (Lipsky, 1980) and metagovernance (Jessop, 1998) from public administration theory.

Interventions are required at the point of the interface between public administrations and adaptive communities to enable people working in the public sector or who have been contracted to deliver public services to support unplanned exploration in communities. Characteristics of these interventions include: interventions which assist public administrators to

frame policies in a manner which enables community adaption of policies; interventions which remove information differences to enable citizen ideas and views to align to the challenges being addressed by governments; interventions that encourage, and assist, street level workers to take into account the ideas and views of citizens; and interventions which enable public administrators to develop metagovernance strategies that incorporate unplanned exploration of solutions with adaptive communities.

Interventions at the point of the interface between elected governments and adaptive communities aim to enable elected members of governments to support unplanned exploration in their electorates or for their area of portfolio or committee responsibility. Characteristics of these interventions include: interventions which assist elected members to frame policies in a manner which enables community adaption of policies; interventions that encourage, and assist, elected members to take into account the ideas and views of citizens; and interventions which enable elected members to develop metagovernance strategies that incorporate unplanned exploration of solutions with adaptive communities.

At the point of the interface between adaptive community innovations and elected governments interventions are required to enable elected members to exploit the knowledge, ideas, and innovations generated by communities. Characteristics of these interventions include: interventions that encourage, and assist, elected members to exploit the ideas and views of citizens; and interventions which enable elected members to develop metagovernance strategies that incorporate planned exploitation of solutions from adaptive communities.

Interventions at the point of the interface between community innovations and public administrations aim to enable people working in the public sector or who have been contracted to deliver public services to exploit community knowledge, ideas, and innovations. Characteristics of these interventions include: interventions that encourage, and assist, street level workers to exploit the ideas and views of citizens; interventions which bridge community-led activities and projects to the strategic plans of governments; interventions which enable governments to gather, retain and reuse community knowledge and ideas in other contexts; and interventions which enable public administrators to develop metagovernance strategies that incorporate planned exploitation of solutions from adaptive communities.

9. A NEW MODEL FOR SOCIAL ENTREPRENEURSHIP

The model described in this paper has been used as a diagnostic tool by CCB to identify what characteristics, and how characteristics of the CLP are contributing towards CCB mission. In addition, the model has assisted CCB to identify where to make amendments to the CLP to increase the program's impact, and has assisted CCB to identify the intervention points CCB should focus on when developing future innovations and the characteristics these innovations will require. Given the model's demonstrated utility, it is proposed that this model has broader value than just its significance for CCB.

The model's potential to unify the social entrepreneurship field around the objective of addressing complex social policy problems by combining the strengths and addressing the weaknesses of the heroic and collective social entrepreneurship models has been demonstrated in this paper. The paper highlights while collective functional social entrepreneurship is most suited to creating the adaptive capacity required for communities to address complex social policy problems it has the weakness of being blocked by the three identified self-fulfilling prophecies, and while the heroic and collective team social entrepreneurship models do not have the capability to address complex social policy problems they do have the capability to

address the weakness of the collective social entrepreneurship model by developing theories of change for complicated interventions at the nine intervention points.

It is posited the model described in this paper is a new model of social entrepreneurship as it is bounded by the three domains of social entrepreneurship; it has a sociality domain, a market domain, and an innovation domain (Nicholls and Cho, 2008, p. xii). The model's sociality domain focuses on addressing complex social policy problems in a manner which increases public value. Public value represents what citizens most value, which has been identified as better outcomes, benefits from services, and trust in the elected officials and public servants of government (Kelly et al., 2002). The model's market domain goes beyond addressing market failure as it addresses public value failure. The model concentrates on collective goods/wants which are not addressed by the price system of markets or by the public sector working alone. Public value failure occurs when *'neither the market nor public sector provide goods and services required to achieve public values'* (Bozeman and Sarewitz, 2011, p.16) and when *'core public values are skirted because of flaws in policy-making processes'* (Bozeman, 2002, p. 151). The model's innovation domain consists of two sub-domains; a non-replicable innovation sub-domain and a replicable innovation sub-domain. Within the non-replicable sub-domain diverse collectives of community stakeholders bring into existence context specific non-replicable social innovations that address complex social policy problems by combining their community's collective intelligence, capabilities and resources. Within the replicable sub-domain individual social entrepreneurs and teams of social entrepreneurs develop replicable complicated social innovations that incorporate the identified characteristics required for the nine intervention points. The model suggests these complicated replicable social innovations developed by individual social entrepreneurs and teams of social entrepreneurs are required in order to create the environment for collective functional social entrepreneurship to embed in communities.

Bornstein and Davis (2010, p. xx) differentiate between 'Social Entrepreneurship 1.0' which focuses on individual heroic social entrepreneurs, 'Social Entrepreneurship 2.0' which focuses on creating institutions to bring about social change, and 'Social Entrepreneurship 3.0' which recognises social change requires a whole ecosystem consisting of the potential of all people and their interactions. This paper proposes a new model of social entrepreneurship; a Social Entrepreneurship 4.0, which recognises in addition to a whole ecosystem being required to address complex social policy problems, individual social entrepreneurs and teams of social entrepreneurs have a critical role to play in addressing society's most pressing problems by developing innovations that enable communities to unlock their complex adaptive system dynamics and enable government systems to support unplanned exploration and planned exploitation.

CONCLUSION

This paper posits a Social Entrepreneurship 4.0 Model for addressing complex social policy problems. The Social Entrepreneurship 4.0 Model provides a new perspective on social entrepreneurship by drawing attention to collective functional social entrepreneurship's need for interventions that unlock the adaptive dynamics of communities and interventions that manage the interface between communities and government systems. The Social Entrepreneurship 4.0 Model outlines how individual social entrepreneurs and teams of social entrepreneurs can influence five intervention points to unlock the complex adaptive system dynamics of communities, two intervention points to enable government systems to undertake unplanned exploration in communities, and two intervention points to enable government systems to undertake planned exploitation of community knowledge, ideas and innovations.

The Social Entrepreneurship 4.0 Model is supported by evidence from a South Australian research project that investigated how to increase the impact of an innovation that was designed to enable collective functional social entrepreneurship. The required characteristics for interventions at each of the nine intervention points identified in this paper are supported by findings from this research project, relevant government policies, and insights from theoretical literature relevant to addressing complex social policy problems.

A limitation of the Social Entrepreneurship 4.0 Model is it has only been applied to a single case study. In order to understand the model's potential in assisting individual and collective forms of social entrepreneurship to address complex social policy problems further testing of the model is required with more case studies. It is therefore proposed a further research project be undertaken to test the Social Entrepreneurship 4.0 Model as a diagnostic tool for a number of collective functional social entrepreneurship cases and for diagnosing a number of innovations developed by individual social entrepreneurs and teams of social entrepreneurs for the purpose of enabling and supporting collective functional social entrepreneurship.

REFERENCES

- Ashoka (2007), *2007 Summary of Results*, Ashoka, Arlington.
- Australian Public Service Commission (2007), *Tackling Wicked Problems: A Public Policy Perspective*, Australian Public Service Commission, Canberra.
- Australian Social Inclusion Board (2011), *Governance Models for Location Based Initiatives*, Department of Prime Minister and Cabinet, Canberra.
- Bentley, T. & Wilsdon, J. (2003), 'Introduction: The Adaptive State', in T. Bentley and J. Wilsdon (eds), *The Adaptive State: Strategies for personalizing the public realm*, Demos, London, pp. 13-36.
- Bornstein, D. (2007), *How to change the world: Social entrepreneurs and the power of new ideas*, Oxford University Press, New York.
- Bornstein, D., & Davis, S. (2010). *Social entrepreneurship: What everyone needs to know*, Oxford University Press, New York.
- Bozeman, B. (2002), 'Public-Value Failure. When Efficient Markets May not Do', *Public Administration Review*, vol. 62, no. 2, pp. 145–161.
- Bozeman, B. & Sarewitz, D. (2011), 'Public Value Mapping and Science Policy Evaluation', *Minerva*, vol. 49, no. 1, pp. 1-23.
- Bradach, J.L. (2003), 'Going to Scale: The Challenge of Replicating Social Programs', *Stanford Social Innovation Review*, vol. 1, Spring 2003, pp. 18-25, viewed 8 June 2008, <http://www.ssireview.org/images/articles/2003SP_feature_bradach.pdf>
- Briggs, L (2009), 'All Those Who Stand and Wait: Putting citizens at the centre', *Public Policy*, vol. 4, no. 1, pp. 1-11.
- Brinkerhoff, RO. (2006 a), 'Increasing impact of training investments: an evaluation strategy for building organizational capacity', *Industrial and Commercial Training*, vol. 38, no. 6, pp. 302-307.
- Brinkerhoff, R.O. (2006 b), *Telling Training's Stories: Evaluation Made Simple, Credible, and Effective*, Berrett-Koehler Publishers, San Francisco.
- Cabinet Office (2010), *Government puts Big Society at heart of public sector reform*, Cabinet Office Press Release: CAB 059-10, 18 May 2010, viewed 15 July, 2010, <http://www.cabinetoffice.gov.uk/newsroom/news_releases/2010/100518-news-big-society-launch.aspx>
- Camillus, J.C. (2008) 'Strategy as a Wicked Problem', *Harvard Business Review*, vol. 86, no. 5, pp. 99-106.
- Catto, N.R. & Parewick, K. (2008), 'Hazard and vulnerability assessment and adaptive planning: mutual and multilateral community – researcher communication, Artic Canada', in D.G.E. Liverman, C.P.G. Pereira & B. Marker (eds), *Communicating Environmental Geoscience*, Geological Society, London, pp. 123-140.
- Corbin, J. & Strauss, A. (1990), 'Grounded Theory Research: Procedures, Canons, and Evaluative Criteria', *Qualitative Sociology*, vol. 13, no. 1, pp. 3-21.
- Deans, T. (1999), 'Service-learning in two keys: Paulo Freire's critical pedagogy in relation to John Dewey's pragmatism', *Michigan Journal of Community Service Learning*, vol. 6, pp. 15-29.
- Dees, J.G. (1998), *The Meaning of Social Entrepreneurship*, Draft Report for the Kauffman Centre for Entrepreneurial Leadership, Stanford University, Palo Alto.
- Dees, J.G. & Anderson, B.B. (2003), 'Sector bending: blurring the lines between nonprofit and for-profit', *Society*, vol. 40, no. 4, pp. 16-27.
- de Weerd, M., Gemmeke, M., Rigter, J, and van Rij, C. (2005), *Indicators for Monitoring Active Citizenship and Citizenship Education*, Research Report for the European Commission, Regioplan, Amsterdam.
- Dewey, J. (1938), *Logic: The Theory of Inquiry*, Henry Holt and Co., New York.
- Dobson C (2003) *The Citizen's Handbook: A guide to building community in Vancouver*, Vancouver Citizen's Committee, Vancouver, viewed 24 March 2003, <<http://www.vcn.bc.ca/citizens-handbook/>>

- Drayton, W. (2002), 'The Citizen Sector: Becoming as entrepreneurial and competitive as business', *California Management Review*, vol. 44, no. 3, pp. 120-132.
- Duit, A. & Galaz, V. (2008) 'Governance and Complexity: Emerging Issues for Governance Theory', *Governance: An International Journal of Policy, Administration, and Institutions*, vol. 21, no. 3, pp. 311-335.
- Eames, S. M. (1977). *Pragmatic naturalism: An introduction*, SIU Press, Carbondale.
- Elkington, J & Hartigan, P. (2008), *The Power of Unreasonable People*, Harvard Business Press: Boston.
- Gillis, N. (2005), 'Adaptive vs. Prescriptive Policymaking: Community Empowerment through the Framework of Complexity Science', in N. Gillis & S. Southey, S. (eds), *New Strategies for Development: A Community Dialogue for Meeting the Millennium Development Goals*, Fordham University Press, Bronx, pp. 8-18.
- Glenn, J.C. & Gordon T.J (2004), *2004 State of the Future*, American Council for the United Nations University, Washington.
- Goldstein, J. (1994), *The Unshackled Organization: Facing the challenge of unpredictability through spontaneous reorganization*, Productivity Press, Portland.
- Goldstein, J., Hazy, J.K., & Lichtenstein, B.B. (2010a), *Complexity and the Nexus of Leadership: Leveraging Nonlinear Science to Create Ecologies of Innovation*, Palgrave Macmillan, New York.
- Goldstein, J., Hazy, J.K. & Silberstang, J. (2010b) 'A Complexity Science Model of Social Innovation in Social Enterprise', *Journal of Social Entrepreneurship*, vol. 1, no. 1, pp. 101-125.
- Gutierrez, M. and Tasse, T. (2007), 'Leading with Theory: Using a Theory of Change Approach for Leadership Development Evaluations', in K. Hammum, J.W. Martineau & C. Reinelt (eds) *The Handbook of Leadership Development*, Jossey-Bass, San Francisco, pp. 48-70.
- Ho, P. (2008), 'Governance at the Leading Edge: Black Swans, Wild Cards and Wicked Problems', *Ethos*, vol. 4, pp. 74-79.
- Honohan, I. (2002), *Civic Republicanism*, Routledge, London.
- Ison, R.L., Russell, D.B. & Wallis, P. (2009), *Adaptive water governance and systemic thinking for future NRM – action research to build MDBA capability*, Monash Sustainability Report 09/4, Monash University, Clayton.
- Jessop, B. (1998), 'The Rise of Governance and the Risks of Failure: the Case of Economic Development', *International Social Science Journal*, vol. 50, no. 155, pp. 29-45.
- Kania, J. and Kramer, M. (2011) 'Collective Impact', *Stanford Social Innovation Review*, Winter 2011, pp. 35-41.
- Kelly, G., Mulgan, G., Muers, S. (2002), *Creating Public Value: An analytical Framework for public services reform*, Strategy Unit discussion paper, Cabinet Office, London.
- Klijn, E (2008), 'Complexity Theory and Public Administration: What's New: Key concepts in complexity theory compared to their counterparts in public administration research', *Public Management Review*, vol. 10, no. 3, pp. 299-317.
- Krawchuk, F. T. (2008), 'Collaborative Strategic Planning and Action: A New Approach', *Parameters*. Carlisle, PA: Summer 2008. vol. 38, no. 2, pp: 67-78, viewed 28 August 2009, <http://www.proquest.com/>
- Leadbeater, C. (1997), *The Rise of the social entrepreneur*, DEMOS, London
- Leadbeater, C. (2006), 'The Socially Entrepreneurial City', in A. Nicholls (ed.), *Social Entrepreneurship: New Models of Sustainable Social Change*, Paperback edition, Oxford University Press, Oxford.
- Lemke, J.L. & Sabelli, N.H. (2008) 'Complex Systems and Educational Change: Towards a new research agenda', in M. Mason (ed.), *Complexity Theory and the Philosophy of Education*, Blackwell Publishing. Sussex. pp. 112-123.
- Leviner, N., Crutchfield, L.R. & Wells, D. (2006), 'Understanding the Impact of Social Entrepreneurs: Ashoka's Answer to the Challenge of Measuring Effectiveness' in R. Mosher-Williams (ed.), *Research on Social Entrepreneurship: Understanding and Contributing to an Emerging Field*, ARNOVA Occasional Paper Series, vol. 1, no. 3, pp. 89-104.

- Lichtenstein, B.B. & Plowman, D.A. (2009), 'The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels', *The Leadership Quarterly*, vol. 20, no. 4, pp. 617-630.
- Lipsky, M. (1980), *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*, Russell Sage Foundation, New York.
- Margaret Heylen Consulting (2007), *Community Engagement: Snapshot of Councils*, Local Government Association of South Australia, Adelaide.
- Mathijssen, C. & Wildmeersch, D. (2007), 'Participatory Practices in Community Services for the Unemployed Poor: Policy Implications', *Public Voices*, vol. 10, no. 1, pp. 63-78.
- McKelvey, B. & Lichtenstein, B. (2007), 'Leadership in the Four Stages of Emergence', in J. Hazy, J. Goldstein, & B. Lichtenstein (eds), *Complex Systems Leadership Theory*, ISCE Press, Boston.
- Moobela, C. (2005), 'From worst slum to best example of regeneration: Complexity in the regeneration of Hulme – Manchester', *International Journal of Emergence, Coherence and Organisations*, vol. 7, no. 1, pp 2-10.
- Morrison, K. (2008), 'Educational Philosophy and the Challenge of Complexity Theory', in M. Mason, (ed) *Complexity Theory and the Philosophy of Education*, Blackwell Publishing, Sussex, pp. 16-31.
- Mulgan, G. (2001), 'Systems Thinking and the Practice of Government', *Systemist*, no. 23, pp. 22-28
- Nicholls, A. and Cho, A.H. (2008), 'Social Entrepreneurship: The Structuration of a Field', in A. Nicholls (ed.), *Social Entrepreneurship: New Models of Sustainable Social Change*, Paperback edition, Oxford University Press, Oxford, pp. 233-46.
- Nye, J.S. (2004), *Soft Power: The Means to Success in World Politics*, Public Affairs, New York.
- Obama, B. H. (2009), *Transparency and open government*, Presidential Memorandum for the Heads of Executive Departments and Agencies, Capitol Building, Washington, viewed September 23 2009, <www.whitehouse.gov/the_press_office/TransparencyandOpenGovernment/>.
- Peterson, A. (2005), 'Education for Active Citizenship and the 14-19 Curriculum: Essential Issues and the Implications for the Initial Teachers Education of Citizenship Teachers', *International Journal of Citizenship and Teacher Education*, Conference July 2005 Proceedings, viewed May 22 2009, <http://www.citized.info/pdf/ejournal/conf_2005/008.pdf>
- Power Inquiry (2006), *Power to the People: the report of Power: An independent Inquiry into Britain's Democracy*, The Power Inquiry, London.
- Rittel, H.W.J. & Webber, M.M. (1973), 'Dilemmas in a general theory of planning', *Policy Sciences*, vol. 4, pp. 155-169.
- Roberts, N.C. (2006), 'Public entrepreneurship as social creativity', *World Futures: the Journal of General Evolution*, vol. 62, no. 8, pp. 595-609.
- Rogers, P. J. (2000) 'Causal Models in Program Theory Evaluation', in A. Petrosino, P. J. Rogers, T. A. Huebner & T. A. Hacsí (eds) *Program Theory in Evaluation: Challenges and Opportunities: New Directions for Evaluation*, No 87, . Jossey-Bass, San Francisco, pp. 47–56.
- Sen, P. (2007), 'Ashoka's big idea: Transforming the world through social entrepreneurship', *Futures*, vol. 39, pp. 534-553.
- Snowden, D. (2008), 'Project management and system design from a complexity perspective', paper presented KM World 2008, San Jose McEnery Convention Center, San Jose, September 23 - 25, 2008.
- Snowden, D. J. & Boone, M. E. (2007), 'A leader's framework for decision making', *Harvard Business Review*, vol. 85, no. 11, pp. 69–76.
- Stoker, G. (2005) 'New Localism, Participation and Networked Community Governance', paper presented at the 6th Global Forum on Reinventing Government Toward Participatory and Transparent Governance, Seoul, May 24-27 2005.
- Surie, G. & Hazy, J.K. (2006), 'Generative leadership: Nurturing innovation in complex systems', *Emergence: Complexity & Organization*, vol. 8, no. 4, pp. 13-26.

- Tanner, L. (2010), 'Declaration of Open Government', *Australian Government Department of Finance and Deregulation*, AGIMO Blog, 16 July 2010, viewed 17 July 2010, <<http://agimo.govspace.gov.au/2010/07/16/declaration-of-open-government/>>
- Taylor, M.A., Dees, G., & Emerson, J. (2002), 'The Question of Scale: Finding an Appropriate Strategy for Building on Your Success', in J.G. Dees, J. Emerson, & P. Economy (eds), *Strategic Tools for Social Entrepreneurs: Enhancing the Performance of Your Enterprising Nonprofit*, John Wiley & Sons Inc, New York.
- Tilbury, D. (2007), 'Learning Based Change for Sustainability' in A.E.J. Wals (ed.), *Social learning: towards a sustainable world*, Wageningen Academic Publishers, Wageningen, pp. 117-132.
- Tilbury, D. & Wortman, D. (2004) *Engaging People in Sustainability*, Commission on Education and Communication, IUCN, Gland and Cambridge.
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2008), 'Complexity Leadership Theory', in M. Uhl-Bien, & R. Marion (eds), *Complexity Leadership: Part 1: Conceptual Foundations*, Information Age Publishing, Charlotte.
- United Nations Department of Social and Economic Affairs (1992), *Agenda 21*, viewed 7 June 2005, <<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter28.htm>>
- Wagenaar, H. (2004), 'Local Governance, Complexity and Democratic Participation: How citizens and public officials harness the complexities of neighbourhood decline', paper presented at the Conference on Democratic Network Governance, Centre for Democratic Network Governance, Roskilde University, Roskilde, October 20-21, 2004.
- Wagle, U. (2000), 'The Policy Science of Democracy: The Issues of Methodology and Citizen Participation', *Policy Sciences*, vol. 33, no. 2, pp. 207-223.
- Westley, F., Zimmerman, B., & Patton, M.Q. (2007), *Getting to Maybe: How the World Is Changed*, Vintage Canada, Toronto.
- Wildemeersch, D. & Vandenabeele, J. (2007), 'Relocating social learning as a democratic practice', in R. van der Veen, D. Wildemeersch, Youngblood, J. & Marsick, V. (eds), *Democratic practices as learning opportunities*, Sense Publishers, Rotterdam.
- Wong, P. (2009), *Q&A Adventures in Democracy: Beyond Spin*, transcript television program, ABC Television, 21 May 2009, viewed 11 June 2009, <<http://www.abc.net.au/tv/qanda/txt/s2570963.htm>>