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OPEN DEMOCRACY SUPPORTED BY GOVERNANCE BASED ON EXPANDED PRAGMATISM AND TESTING OUT IDEAS

Key words: Open systems, narratives, identity, matching, perceived needs, emotions

ABSTRACT

The paper is a resource for a demonstration workshop on prototype software designed with Aboriginal service users and providers. The research aims to narrow the gap between service outcomes and perceived needs. It relies on extracts and commentary on a forthcoming book in press entitled “User Centric Policy to Address Complex Needs” to be published by Nova Science. The policy potential to enhance democracy and governance within and across nation states is discussed. The proposed open democracy and open governance process supported by a prototype has the potential to address diverse cultural perspectives and complex needs. It is based on exploring ‘if-then’ scenarios. The software could provide a platform for e-democracy and e-governance, because it provides a means to balance *local individual needs* with *universal collective needs* in an ongoing cycles. The process and software could make participatory action research on policy affordable and effective.

1. INTRODUCTION

Wellbeing can be defined as social, cultural, political, economic and environmental sustainability (McIntyre-Mills 2006c, 2008a, b, c). The Public Health Advisory Committee, New Zealand, (2007) stresses that wellbeing “*is an idea whose time has come*”. The research aims to design and test out a process that could achieve a better match between service outcomes and perceived needs, based on the expertise of the service users and providers. The SA Aboriginal community initiated the research.

The Council of Australian Government’s meeting (10 Feb, 2006) emphasized the promotion of wellbeing through health, education and employment along with promotion of mental health. Wellbeing is an issue for all Australians, but Aboriginal Australians are arguably disadvantaged (Chesterman and Galligan 1997). Better processes to ensure social inclusion and participatory democracy could address wellbeing more effectively in the wake of the Rudd apology in February 2008. These issues of representation, accounting and accountability have been raised by Indigenous thinkers internationally (Gallhofer and Chew, 2000) and our holistic approach is in line with Australian Aboriginal understandings of health and wellbeing, but it has much wider relevance enhancing democracy and governance¹. The

¹ Simple categories	Complex, overlapping domains
Few variables	Many variables
Linear cause and effect	Multiple feedback loops guide selection of options
Experts analyze information and make decisions	Transdisciplinary and cross cultural decisions bearing in mind the consequences for different stakeholders

Systemic Governance Source: adapted from Banathy1996: 128,133, 2000

Ways to deepen democracy within and between nation states needs to be achieved through finding ways to enhance wellbeing and protect the global commons (McIntyre-Mills et al 2006a,b,c,2007a,b,c,2008a,b,c,d,e). Systemic governance is aimed at addressing conceptual and spatial boundaries by applying ‘a design of inquiring systems approach’ based on questioning and applying questions about *what is the case* and *what ought to be the*

integration of services, and consumer and community participation are key platforms of the South Australian Government’s “First Steps Forward” plan (arising from the Generational Health Review)².

2. BACKGROUND AND STATEMENT OF THE PROBLEM

In small homogenous democracies voting and discursive policy setting was possible. But as populations and nation states have grown people have had less opportunity to actively engage in shaping policy. Voting and ad hoc consultation is inadequate (Gore 2007). Ideas are lost en route, because of power differences and the ability of some to set the agenda at the expense of others. Socio-cybernetics systems (based on informatics research) could enable on going e-democracy and e-governance in large heterogeneous democracies by enabling ongoing matching of perceived needs and service outcomes. Steering from below, above and sideways requires management based on socio-cybernetics pathways. Networks are not necessarily democratic, but local and transnational agoras can be governed by logic that finds root ideas and weights commonly selected options (Christakis and Bausch, 2006). This requires hierarchical sequencing. Rhodes (2000) draws on the literature on governance³ and defines his approach to governance as being in response to the impact of New Public Management and ‘contracting out’ approach under Thatcher and Reagan. He argues that this is the background to divesting responsibility from the state. NPM and governance approaches based on policy networks are philosophically very different. NPM is economic rationalist in orientation, whereas a network approach to governance is informed by policy networks that are socially inclusive. The distinction is value based and it has implications for social and environmental sustainability. This is summed up in an extended table adapted from Kickert et al (1999) below:

	NPM	Governance in policy networks	Systemic Governance for Energy and water shortages
Problem	Cost effectiveness	Interdependence	
Main orientation	Intra-organisational	Interorganisational	Social and environmental sustainability
Main concern /Public Private dimension	Administrative control, business like	Facilitating co-governance/specific role for government	Carbon trading and negotiation across organisations and regions

Table 1: Adapted from New Public Management versus Governance in Policy Networks Source: Kickert et al 1999:40

The concepts employed in the research are networks for systemic governance and accountability, based on considering ‘if then’ scenarios to build a sense of the implications for self, others and the environment. (Adapted from C.West Churchman 1982) and thus a sense of expanded pragmatism (see McIntyre-Mills et al 2006a, c).⁴ The change in policy

case with those who are to be affected by decisions. This is a form of critical heuristics based on the work of West Churchman (1979) and those influenced by his work, such as Werner Ulrich (1983) and Bela Banathy (1996

² The team comprises researchers from Flinders University and University of South Australia, SA Department of Health and Aboriginal NGO Aboriginal Forum Inc.

³ Rhodes summarises many definitions of governance as follows: “Corporate governance, New Public Sector Management, Good Governance, International interdependence, Socio-cybernetic system, new political economy and Governance as networks”.

⁴ Networks comprise nodes and relationships. The nodes can be people, ideas, organizations, for example. The relationships can be positive or negative and decisions can be based on considering ‘if then scenarios’. The relationships across the nodes and the composition of the nodes are equally important in studying networks.

direction that is needed is summed up by (Chambers 1997: 189) as the shift from: “Top down, blue print, measurement and standardization” to “bottom up, learning process, judgement and diversity.” He contrasts a “one size fits all approach” with a “basket of options approach”.

We have social, economic and environmental ‘melt down’ of global proportions. Current structures and processes that are used to support federalist and regionalist democracy and governance are too slow to address the complex challenges that we face and unless we respond quickly to the challenge to reduce our carbon emissions we will face a dismal future (Stern 2007)⁵. We need a change to the way in which we undertake governance and democracy. We need to have participation, because participation enhances a sense of attachment and commitment to the management of resources (Gore 2007).

2.1 The rationale for the research

The rationale for the research is twofold. Firstly, complex problems⁶ need to be addressed by means of responsive and participatory policy processes that are implemented by interagency responses. Secondly, interagency responses are difficult to manage effectively and need to be accountable to the people they serve and the organizations with whom they collaborate. As Fishkin and Laslett stressed (2003) it is vital to ensure accountability and control (see also Fishkin 2000) and this is possible through new forms of network governance that can enable: a) Designing from below through enabling people to ensure that the agenda is not controlled by others. b) Deliberating by considering ‘if then’ scenarios and the impact of their choices on their own lives, the lives of others and the environment. This is expanded pragmatism (McIntyre-Mills 2007, 2008a, c). Mapping pathways of choices to inform policy makers of people’s ideas. d) Updating the pathways as people register their choices.

3. RESEARCH APPROACH

The steps⁷ for undertaking the research are as follows:

1. Invitation to do action research
2. Listening actively
3. Identification of the area of concern with the participants.
4. An ethics approval process that involved all the partner organizations and the Aboriginal elders.
5. Developing relationships and trust based on past work identified as enjoyable.
6. Designing and developing a system of healing pathways or tracks based on the experiences of participants who were co-researchers.

Non linear logic is concerned about meanings, thick descriptions of perceptions, taking into account diversity spanning many variables and creating new emergent decisions.

⁵The central challenge is to find a way to balance individualism and collectivism and to consider the impact of the economic externalities: poverty and pollution on social, cultural, political, economic and environmental futures.

⁶ Social inclusion, homelessness, unemployment, gambling, family violence and drug misuse are facets of a complex, interrelated problem that requires a coordinated governance response across departments in the public, private and non-government sectors. However, current compartmentalized thinking in respect of some aspects of human services has led to disciplinary specializations. Service providers need to develop the capacity to work across disciplines and to understand better the nature of “joined up” social problems as they relate to social well-being and governance.

4. THE CHALLENGE

According to Roddick (ARC application 2004): “IT computing has rarely, if ever, been applied successfully to perceptions”, because it has not been responsive to a range of systemic dimensions and most importantly to values and emotions. Cornelius (1996: 138) stresses that weighting emotions has not really worked effectively, that is because it depends on who does the weighting and in what context. Our approach does not predict universal outcomes. We provide a decision making tool that responds and learns from both the users and the providers’ perceptions and weightings. But ultimately it is the service user who will make the decision based on what a service provider suggests within a specific context. We constructed a system together with our partner organizations using ethnographic narrative, systemic conversation and mapping verbally through storying or picturing that a) provides options, rather than single recommendations, b) learns from successes, and is c) user-friendly. Narratives are the means by which we make sense of our experiences. Our identities are shaped by many factors age, gender, level of education culture contribute to our life chances and how we see ourselves and are seen by others. The following questions were developed with co-researchers:

Socio-demographic details

- Name
- Age [asked at the end of the interview]
- Gender
- Schooling /qualifications [asked at the end of the interview]
- Type of employment [asked at the end of the interview]
- What does wellbeing mean to you? [This is asked so that the informant can talk discursively about health in a broad manner]

Please give some examples of times in the last day, week, year or recent past when you have not been well.

Have you/your family/members of your network [specify and make sure that people are given the option to be vague about whether they are talking about themselves, their extended family – because it can shame people and it is culturally impolite to be too direct] experienced any of the following in the last day, week or year/recent past?:

What services/interventions did you access? Why? What was your experience? [The question is not designed to address only traditional health services- informants regards employment, education, supportive family and friends- life style and spirituality and culture as important]

What worked? What are the best stories of successful interventions? Why? How?

What interventions did not work and why?

What can you teach the service providers so that they can provide a better service outcome?

Please draw a picture with me of what makes you feel well and unwell and give suggestions how to make the situation better. [Rich picturing technique is used]

5. RESEARCH PROCESS

User centric design is based on telling narratives and exploring perceived ontologies. The next step is to analyze the discourses for patterns (Christakis and Bausch 2006 and Van Gigch 1991, 2003 on meta modelling). Making sense of perceptions is through identification of patterns and making meaning/sense of the patterns based on weighting the choices. The number of times particular themes were raised or particular service choices made equals a weighting. Having established that the challenge of addressing complex health, housing, alcohol related problems, we decided to establish the interrelated web of factors that support well being what works, why and how.

Typical narratives were developed on the basis of core factors identified by means of mind maps⁸. Because the stories were gathered over many years, it was possible to map out

⁸ The research was based on narratives collected over more than three years of participatory action research, during which stories were updated by participants who were part of the extended Neporendi network in the Southern

movement and variation in the stories of women. The notion of *'being'* and *'becoming'* (Deleuze and Guattari in Bogue 1989) is explored as it is central to transformation and emergence (Atkinson (2002)). The focus of the conversations was on what makes people well and how things could be done better.



Photo 1: Healing through art and weaving together the strands of experience 'Yarning' and respectful listening helps to make sense of experience (McIntyre-Mills 2007 b, 2008 c, d, e)

A participatory action research approach enables participants to tell narratives and engage in conversations leading to the design of a proforma by an informatics programmer to map the relationships across variables.

Each of the 50 *participant service users* contributed to the design of the knowledge base through their initial research conversations and the use of organic analogies (see McIntyre-Mills 2007b, 2008e)⁹. The analogy of healing through weaving together strands of experience is central and powerfully resonant to the Ngarrendjeri women, as are the analogies of pathways in the landscape of life and branches in the tree of life. The next steps were to discuss the mapping with the co-designers and to test out the ideas in a pilot study with the service providers to ascertain if the system enabled better outcomes to be achieved as far as the users are concerned.

Each of the 50 *participant service providers* contributed to the design of the knowledge base through their research conversations. The survivors against the odds stressed that a host of factors *together* made it possible for them to achieve transformation in their lives. The next step was to develop a proforma for the design of a knowledge base, based on the emergent themes to address solutions¹⁰. We tested the design by using a walk through of a computer program based on questions and ticking off factors from a map created by all the participants.

5.1 Matching responses to need

Based on an analysis of the data, wellbeing for service users can be described in terms of the following 6 typologies that will be used as typical scenarios in our computer program:

1. *'Being employed'* and *'able to help others'*, because their *'life is in balance'*
2. *'Rebuilding'*
3. *'Making a transition'* by using a combination of services

Region of Adelaide, South Australia. Mentoring and support by Aboriginal men and women was core to the research which was about building and establishing rapport and trust. As time past layers of story were shared whilst engaged in extended participatory action research.

⁹ Service users were encouraged to: identify with a) typical stories by comparing their own lives with the typical stories, by selecting the factors that characterize the story and identifying the factors that make their own story unique. These new factors are added to the map. b) factors that are relevant in their lives. If they mention a factor that is not there it will be added by positioning the new factor next to the closest factor already mapped. 1. explore the scenario of *'what if I were to make one small change in my life? What would the implications be for my life?'* 2. identify the turning points and the barriers and discuss how the patterns in their own lives are similar or different. 3. consider the impact that taking a step in a different direction will have on their lives.

4. 'Keeping it together' after leaving a violent situation and trying to control drug and alcohol misuse – use cigarettes extensively
5. 'Making the break' from an unsatisfactory way of life
6. 'Not coping' and unable to leave or repeatedly returning to a violent situation.

We modelled a series of overlapping spirals spanning holistic, integrated service delivery to fragmented and compartmentalised delivery of services as end points. Those who are most in need require the most integrated services and the most participation in decision making. Those who are least in need require the least integrated services and are able to draw together services for themselves and act as facilitators for others, volunteers in service delivery or act as service providers for others. The challenge is to map the turning points for the a) better or b) worse that lead to changes in life and to c) identify the barriers from the point of view of both service providers and users.

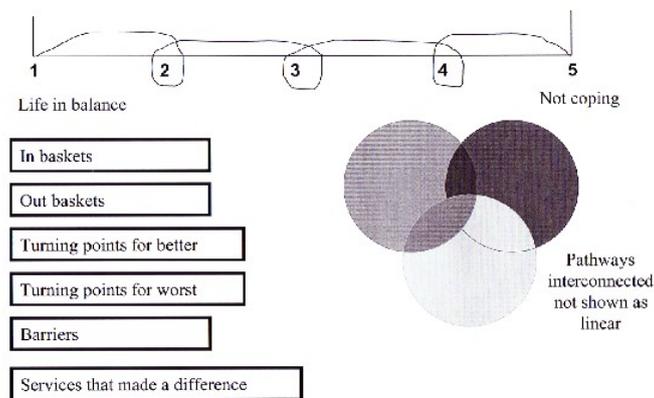
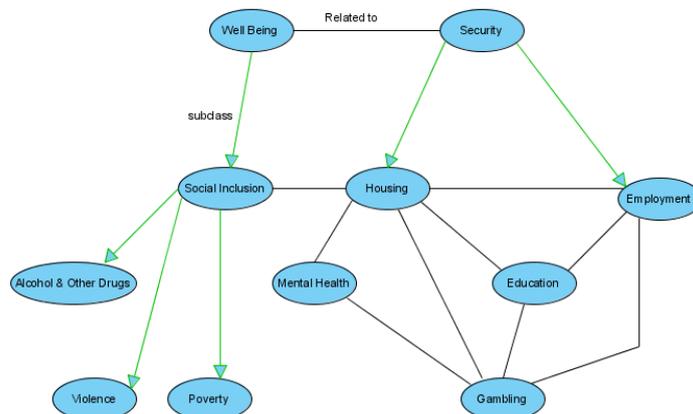


Figure -2. *Healing Pathways in McIntyre-Mills et al 2006:287.*

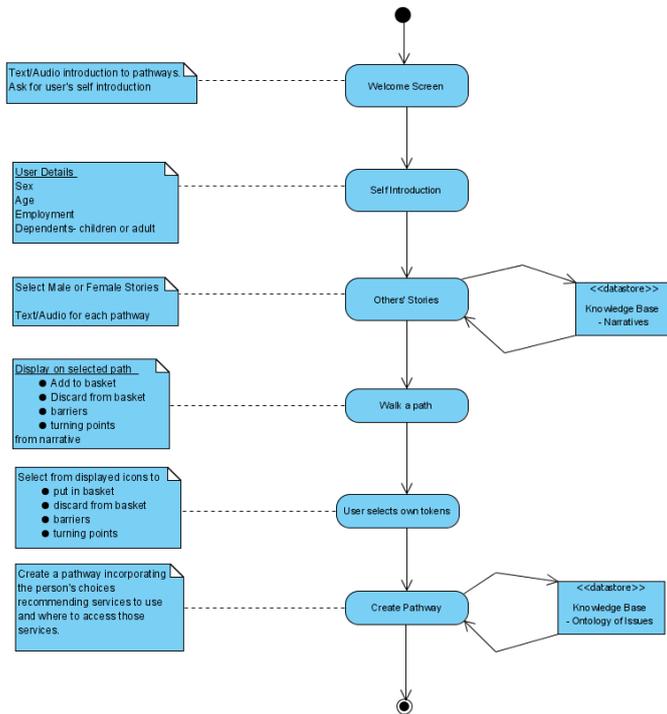
The data organised within the proformas highlighted the themes and the relationships between them (Figure 2). Further analysis and organization into an ontology of issues will fully describe these themes and provide the structure for discovering “pathways” for the individual



(Figure 3 and 4).

Figure 3. Graphical structure of issues and their inter-relationships (De Vries in McIntyre-Mills et al 2006: 295).

The interface will be designed as detailed in Figure 4 below:



The sequence of processing is illustrated in Figure 5 below:

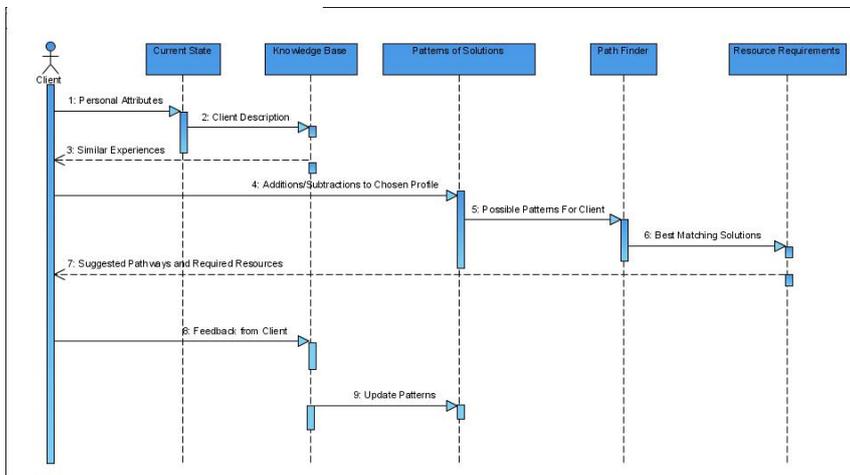


Figure 5: Activity diagram for Pathway Creation (De Vries, 2006 in McIntyre-Mills et al 2006:297)

These patterns are drawn from analysing the stories of women and men. Wellbeing can be seen as a function of the following, as detailed in Figure 6:

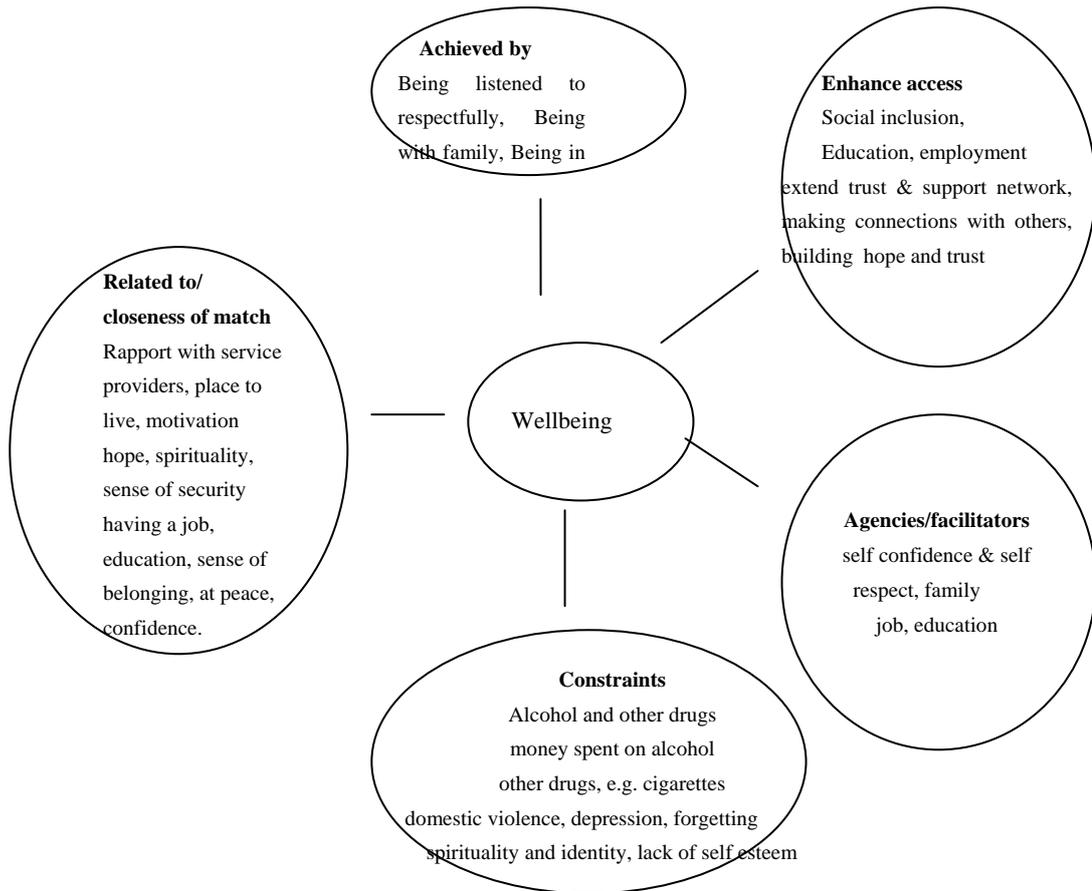


Figure 6: Map for the proforma

Combinations of 5 axial factors appear important:

- **Home safety** (and being free of violence)
- **Health** (physical and mental health – appearance , energy)
- **Purpose** (Formal Employment or preparation for employment /profession employment/CDEP / training /education)
- **Connection/belonging** (people and place), volunteering, community leadership and cultural spirituality
- **Self respect and confidence**, feeling good about oneself which is linked with being able to access services, work, study, maintain a stable home for children.

The inference from the analysis of the data so far is that by providing a combination of safe housing, meeting basic physical needs then accessing education and employment become possible. To overcome barriers in accessing services, it is vital that service providers in mainstream and specific services are welcoming to ensure that the confidence of service users is built. The role played by holistic or (one –stop shop outreach) is important in this context as it enables rapport and relationships to be formed. Also a quickly negotiated pathway to ensure that the above mentioned axial themes are addressed effectively and efficiently would enable better outcomes. Once a preliminary analysis of the data was undertaken a series of iterative workshops were held to explore the map of factors with the participants using the following answer sheet:

computer program updates as different users contribute and this was achieved by positioning the factors (that the service users perceive to be important) as synonyms in response to contextual scenarios.¹² We will test the program to establish if it enables:

- Greater self knowledge and learning from others¹³
- Better decisions, based on pattern recognition that could also help to make sense of the trauma and losses they have experienced
- Participating in an active, constructive way in designing alternatives.

Being ‘shamed’ by service providers was discussed as being one of the greatest barriers (on this see Atkinson, 2002) to healing as it creates a sense of victim hood and leads to mistrust. The data show multiple non linear relationships across:

- Domestic violence, a lack of confidence, social exclusion and the use of alcohol and other drugs.
- Lack of confidence (and prior experiences as children) leads to women accepting DV or putting up with it for the sake of their own children.
- The value of women leaving a violent home base as a first step towards achieving wellbeing
- Socio-economic disadvantage causes discrimination in accessing rental housing.
- A sense of security provided by a home base from which to get a job, training or education.
- A safe home, a sense of connection with a supportive wider community supports stable relationships.

5.3 Outcomes for the service providers

- More effective matches of services to perceived need.
- Better able to combine services to meet complex needs.
- This has implications for governance – people at the receiving end of the decision can test out ideas and so this makes the rhetoric of subsidiarity a reality – good for democracy and for science.
- It provides a generic tool for governance and has implications for e-governance.

The resulting ‘flow-on’ effects of adopting an holistic and systemic approach (Roche & McDonald, 2001) for promoting intergenerational health and well-being will: a) achieve better role modeling across men and women of all age groups and b) lead to greater control over life chances.

6. CONCLUSION

The process of participatory democracy is supported by prototype software that has the potential to a) generate evidence based on the user’s perceptions of what works, why and how. b) encourage people to *think about the implications* of their choices for themselves, the environment and future generations and c) enable service providers to understand *why* people

that they perceive to be valuable for the ‘in baskets’, items that need to be discarded. They will identify the turning points they have experienced for the better and the worse and the barriers (De Crespigny et al 2002) they have experienced.

¹² The first Nvivo maps were developed iteratively for discussion with the male and female service users and Aboriginal service providers who formed part of the reference group and later with a wider group of non Aboriginal commentators at a workshop. The aim is to find the shortest pathway approach to achieving wellbeing outcomes. But the pathways are based on the perceived lived experiences of the service users as to what constitutes successful, integrated outcomes.

¹³ It is anticipated that the process will enable better matches, thus enhancing “cognitive capability, namely perceiving, imagining and thinking (Nussbaum 1995: 77).

perceive some choices are better than others. The findings to date demonstrate the importance of linking service users and providers and the role that ongoing communication can play in shaping policy. As Aristotle argued, being involved in dialogue on policy matters and applying the dialectical process in one's community is one of the ways to ensure a fulfilling life (Irwin, 1985) and Christakis and Bausch (2006) on 'providing 'the requisite variety' to test out ideas on how to address complex problems). The research supports the idea that wellbeing is 'what is valued' and necessarily includes basic needs of safety, housing, employment/ education or training.

6.1 Future development of prototype

The current version of the software allows its users to record their current state of "Haves" and "Needs", what actions must be taken "In" and "Out", and perceived Turning Points and Barriers that have an affect on progress. These data are stored in a knowledge base as patterns of behaviour and resource requirements. The structure of the knowledge base is an extended relational database that includes a *mesodata* (de Vries 2006; de Vries, Rice & Roddick 2004; de Vries & Roddick 2004; Roddick, Hornsby & de Vries 2003) layer in which the complex domains of requirements and resources are modelled in a way that captures the inter-relationships of the attribute values and the strength of those relationships, so that rather than all domains being represented in tabular format they can be represented and stored in structures that more closely resemble their existence in the "real world". In this work, as the issues are so inter-related the data are stored in a weighted graph mesodatatype which not only stores the attribute values but also, their perceived similarities as well as their perceived importance to participants.

Based on these relationships, statistical analysis and data mining (Wahlstrom et al. 2008) routines can be carried out over the domains to provide evidence of what the issues are and which resources are required to solve the issues. The analysis goes beyond standard statistical reporting as associations, clusters and strengths of inter-relatedness are also quantified enabling policy makers to analyse contributing factors and consequences to issues that are faced and thus fine tune and evolve their policies to what is required.

The mesodata layer facilitates data capture as it allows a greater variety of terms to be captured within the database as it builds an ontology or taxonomy (dependent on system requirements). Such a model means that synonyms and related terms can all be recorded rather than selecting from a constrained predefined list as is normally the case. This in turn empowers people to say in their own words what they really mean to say rather than having to choose another's words. Analysis can then be generalised or specialised on these terms dependent upon the situation.

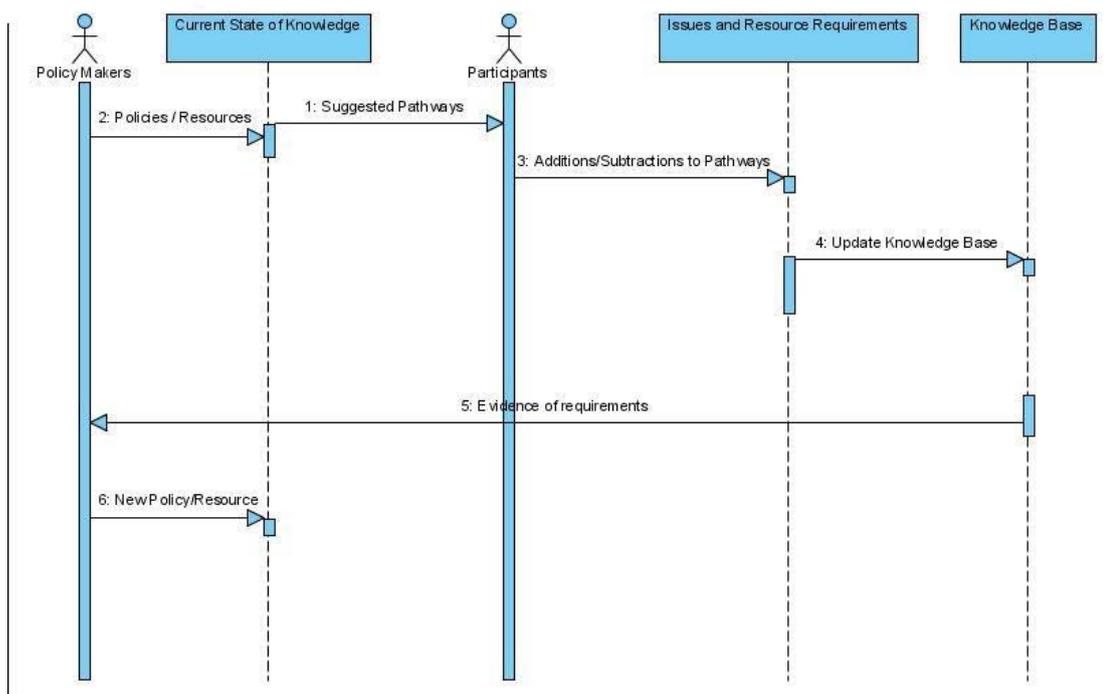


Figure 8: Evolving Knowledgebase of Issues and Resource Requirements

Convergent user centric design for wellbeing aims to:

- *Address the complex needs* of the service users by narrowing the gap between perceived needs and wellbeing outcomes;
- *Test out the extent* to which the software achieves a better integration of services to maximize provider effectiveness¹⁴;
- *Provide better user outcomes* to complex social health problems; and
- Assist with *evidence based policy development* through mining the data across organizations.

The creation of user centric software for e-democracy and e-governance could be used for a range of purposes to enhance participation, facilitate case management and to generate evidence based policy. We need to enable people to become engaged and mobilised. In large diverse democracies it makes sense to ensure that policies are guided by those who are to be affected by them. Discursive or deliberative democracy (see Dryzek 1990,2000) and other forms of direct local participation or voting on issues need to be considered as completing aggregative democracy¹⁵ which remains ‘the best worst choice option’ (to use Churchill’s phrase)¹⁶ and to find ways to enable it to become more accountable to those who are excluded from the protection of citizenship rights. Systems thinking can become oppressive if it seeks

¹⁴ Case work and therapeutic outcomes could be enhanced through better triage and matching processes

¹⁵ The United States, Britain and Australia are democracies, but “whose reality counts” (Chambers 1997)- the reality of Indigenous people and first citizens, the reality of refugees who wish to become citizens- or the reality of the ordinary people who live with political realities over which they have little control?

¹⁶ Florini (2003) emphasised the importance of combining both centralised steering from above (in the interests of the global commons) and steering from below in the interests of holding the elites in business and the state to account and in the interests of mobilising an interest and concern about public issues. She does not favour leaving democracy in the hands of ‘philosopher kings’, she believes in democracy as the best worst option and cites Winston Churchill (2003: 209). Participation beyond voting in elections is supported in her vision. She cites the Aarhus convention and regional federalism as the way forward. She believes that networks that are more transparent and accountable will be part of our digital future. But she is concerned about bridging the digital divide. That is the challenge to ensure that we do not have the digital haves living in domed, safe environments whilst the rest face the worst that environmental degradation has to offer.

answers without openness to the liberative potential of questioning and an appreciation of complexity. Slippage between *being powerful* and *defining one's thinking and practice as democratic and right* is frequent and underpins oppression in the name of social justice.

“Violent tactics and strategies rely on polarization and dualistic thinking and require us to divide ourselves into the good and the bad, assume neat, rigid little categories ...Non-violence allows for the complexity inherent in our struggles and requires a reasonable acceptance of diversity and an appreciation for our common ground...” (McAllister (1999: 18).”

Wellbeing is dynamic and inter-relational. Being engaged in the matching process is all important to public policy making processes. Power and disadvantage can limit options (Foucault, 1980) and determine ‘habitus’ or way of seeing (Bourdieu 1977), but the potential for change remains. Our human ability to think about our thinking and make connections is our best hope for our personal and collective wellbeing (Bogue, 1989, Greenfield in McIntyre-Mills 2006c, 2007d, Flannery¹⁷ 2008). The open democracy and governance approach cannot be adequately summed up as a static binary table¹⁸. The argument has been developed elsewhere (McIntyre-Mills 2005, 2006a, b, c, 2008 a, b, c, d, e) but is outlined below:

Assumptions about	Molar policy and politics	Molecular policy and politics
Matter	Fixed	Fluid
Time	Linear and compartmentalized	Feedback and feed forward
Conceptual Space	Compartmentalized	Systemic
Emotion	The hubris of the boundary maker	The humility of the boundary worker
Values	Sacred and profane based on veil of ignorance and idealism	Values tested in terms of consequences for the generation and the next. Expanded pragmatism is emergent and open to testing.
Perceptions and Problem appreciation (see Vickers)	Bounded and differentiated Shaped by power, profit and loss in economic terms	Intersectoral based on ‘unfolding’ values and ‘sweeping in’ in (see West Churchman) Shaped by desire (see Deleuze and Guattari), care taking the web in intergenerational terms
Identity and meaning	Fixed and rooted in space	Fluid and responsive
Process for problem solving and problem definition	Conflict – working within boundaries- ‘Either or’ thinking Self versus other proving a case at the other’s expense	Co-creation through working with boundaries ‘Both and’ thinking Self-other and the environment are a systemic web of co-determination
International relations	Nationalism, winner takes all and unfettered markets	Transnationalism and co-determination

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¹⁷ Flannery (who was interviewed on the 22 September on the ABC by Andrew Denton in the ABC program ‘Enough Rope’¹⁷) ‘our best hope’ to avoid scenarios of doom is through our ‘human intelligence’.

¹⁸ Table based on a review of Deleuze and Guattari (in Bogue 1989, Haraway(1991), West Churchman (1971, 1979a,b1982), Ulrich (1983), Vickers (1968,1983) , McAllister (1999), Midgley (2000), Murray (et al 2007) and Kickert 1999, Held et al 1999,2005 Held 2004, Foucault (1980), Bourdieu(1977) and Geertz (1973)

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