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Title of Project:
Preparing systemic change agents for sustainable development: What skills and understanding do change agents need to develop?
A project submitted to Middlesex University in partial fulfilment of the requirements for the degree of Masters in Professional Studies
Jane Wilkinson M00341929 Module code: 4060
Institute of Work Based Learning
Middlesex University
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Summary

The research for this paper is based in Forum for the Future, a not-for-profit organisation that aims to pioneer and share practical approaches to system change for sustainability globally. This project takes the existing Masters in Leadership for Sustainable Development course and examines how it can be changed to meet current organisational goals through investigating:

- What features need to be included in a course that enables change agents to be ready to bring about change for sustainable development;
- 2. By what means expert practitioners in sustainability can contribute to course development.

The project considers how the course can be a central point of learning and knowledge transfer within Forum, to effectively prepare change agents to bring about change in their own context and second, it aims to consider the involvement of practitioners and learners in the co-development of the programme. The strengths of the current Masters programme that could be built on were identified: the product envisaged was a proposal for a learning programme to evolve in parallel with the organisation.

The approach was qualitative, using Appreciative Inquiry. Desk research included a two stage literature review along with semi-structured interviews and focus groups.

My findings were that whilst the current Masters programme has many strengths, the aim and target audience are no longer the best fit with Forum's strategy nor have the necessary elements to be able to scale up internationally. I discovered instead, the need for a learning programme for early career change agents in sustainability working in incumbent organisations who are keen to collaborate to create change and require support in workplace implementation. The skills set required through such a learning programme can be summarised as:

- Skills to understand one's own worldview and connect and communicate with others
- Skills to interpret and analyse the system and
- Skills to create innovation and design thinking

In trying to answer the question of how expert practitioners in sustainability can contribute to course development, my findings point to the need for a spirit of coenquiry: a flexible, modular design whereby stakeholders can pose real life challenges for participants to tackle together, along with a climate allowing stakeholders to be both learners and contributors at different times.

My aim is to gain the endorsement of Forum's Senior Management Team to market test, develop and pilot the proposed programme.

Glossary

Disruptive In relation to Innovation, a process by which a product or

service takes root initially in simple applications at the

bottom of a market and then relentlessly moves up market, eventually displacing established competitors. (Clayton

Christensen).

ESD Education for Sustainable Development

FE Further Education

Forum for the Future

HE Higher Education

MOOC Massive Open Online Course

Reflectivity Ability to consider events or situations outside of

oneself: solitarily, or with critical support

Reflexivity Finding strategies to question our own attitudes, thought

processes, values, assumptions, prejudices and habitual

actions, to strive to understand our complex roles in relation

to others

UNECE United Nations Economic Commission for Europe

Chapter 1 - Introduction

The organisation that is the basis for this research is a global non-profit with a mission to accelerate change to a more sustainable way of life. Forum was set up in 1996 by several leading environmentalists¹ who saw a real need to do things differently in their approach to change, (from the traditional advocacy and campaigning approach), namely to work at a strategic level alongside business and government to help them embed sustainability into their core strategies. Creating positive visions of what a sustainable future could look like was their main approach. A key element of Forum's strategy was the development of an exemplar cross-disciplinary Masters programme in Leadership for Sustainable Development, based on the principles of experiential learning. My role is Course Director for this MA programme, which is run in partnership with Middlesex University. Now approaching its twentieth anniversary, Forum is growing rapidly internationally with an organisational strategy centred on the change approach called systems innovation.

This research takes a fresh look at this learning programme in its context, examining how the programme could help achieve the organisational strategy and ensure change agents are ready to bring about change for sustainable development and be situated more centrally at the heart of organisational learning. The product envisaged is a learning programme designed to evolve in parallel with the organisation.

I have been in the role of Course Director since 2007. During that time, I have conducted research on projects into leadership for sustainability, principally with the education sector but also with business. My findings have contributed to evolving Forum's model of leadership for sustainability. At the time, the Masters programme was in the process of being reassessed to ensure it aligned with Forum's new strategic direction and new learning approaches and content developed accordingly. I was keen to conduct this research as part of my role to help ensure the course remained cutting edge and to share the learning both internally and externally. The results were also to inform the development of other flexible learning programmes for

¹ Paul Ekins, Sara Parkin and Jonathon Porritt.

different audiences, principally our business partners. By turning the project into a more formal research exercise for the MProf qualification it gave me the opportunity to deepen my professional learning and credibility, and, in turn, enhance my effectiveness in my day-to-day role. For example, I have been able to support students more effectively with their own research as well as incorporating the latest thinking on approaches to change into the course.

The Masters programme has the aim of building a core of sustainability champions who are prepared to take leadership roles in creating a more sustainable society. It has been successful in developing in graduates the core competencies to progress to senior positions in a range of organisations. In 2010 a successful review of the programme was conducted and, since then, Forum as an organisation, has conducted a strategic review. The course is, however, resource intensive with no economies of scale, and only 12 students (by necessity limited to those EU based), no HEFCE funding and a model that doesn't lend itself to scaling up in its present form.

Forum has nineteen years' experience of bringing about change. However, in spite of Forum's achievements and in spite of overwhelming scientific evidence, it is clear that the challenge of increasing people's well-being within environmental limits is as acute as ever. To have the kind of impact the organisation wants, Forum needs to tackle the systemic and interconnected causes of the great challenges of our age. To do this, Forum draws on systems theory – as set out by Meadows (2009:145) who observed that there are levers, or places within a complex system (such as a company, a city, an economy) where a "small shift in one thing can produce big changes in everything".

Forum believes that by understanding the dynamics of these systems, and then intervening at strategic tipping points, there will be a much better chance of transforming them to a new and more sustainable way of functioning. This is explained in Forum's strategy:

The ability to recognise the systemic and therefore hugely complex and interconnected causes of the great challenges of our age is essential if solutions are to be designed and implemented in good time and with sufficient effect.

Through these actions, Forum's work will reflect what it sees as the key characteristics of system innovation – **systemic** (combining behaviour, technology, policy and economy); **innovative** – finding new approaches or applications; **snowballing** – enabling scale/ tipping points; building capacity & **learning**.

Excerpt from an internal Forum for the Future document - draft strategic plan 2011:1

Forum has articulated its aim to be a global body that pioneers and shares practical approaches to system change for sustainability. The organisation has as its key purpose creating interventions that accelerate systemic change. Accordingly, it wants a wider resource of people leading system innovation across the organisation as a key step in creating a 'Learning Organisation', as described by Senge (1994:5):

The organisations that will truly excel in the future will be the organisations that discover how to tap into people's commitment and capacity to learn at all levels in the organisation.

The strategy for the Masters programme in Leadership for Sustainable Development endorsed by the Senior Management Team and as the foundation for this research, had four key aims:

- 1. To ensure it is creating future leaders who are change agents skilled in systems thinking and that the content is reviewed accordingly.
- 2. To ensure the programme becomes more central to and embedded in Forum's work and for there to be a better flow of learning between staff and students and vice versa.
- 3. To examine what elements of the programme can be used in training leaders within Forum's partner companies and
- 4. To examine how the design can be scaled up and rolled out internationally.

Forum is in the unusual position of being an organisation which comprises sustainability practitioners in addition to being a course provider. To optimize the effectiveness of both, the organisation thought it critical to embed learning from practitioners within the training offer.

I brought to the research 25 years' experience in people development and in experiential learning in different sectors. Moreover, I have considerable experience of thinking systemically, which was sparked by an undergraduate thesis in ecology. As Course Director for the programme, I have an in-depth knowledge of the existing Masters course including its strengths and weaknesses. I have a good breadth of understanding of how sustainability education is approached across the Higher Education sector, through research projects that I conducted for leadership bodies such as the Higher Education Academy, the National College for School Leadership (Wilkinson 2008), (Birney and Reed 2009) and the Centre for Excellence in Leadership (CEL 2007). From practitioner and action research into leadership qualities for sustainability in both the FE and Schools sectors, I brought experience in the design of qualitative research. Being a member of the judging panel for the annual sustainability in HE awards (Green Gown) as well as the UNESCO UK Decade for Education for Sustainable Development forum has enabled me to keep informed about the latest leadership for sustainability models and frameworks.

As an example of more recent work, during 2013, I conducted a review of a multinational company's leadership development programme looking at emerging trends in leadership development and making recommendations on the integration of sustainability into the structure, content and pedagogy of the programme. Through this and related work I have contributed to the development of Forum's models.

Through this project I hope to draw on expert knowledge to inform the development of a learning programme for change agents that is designed to evolve in parallel with the organisation.

Chapter 2

2.1 Research aim and objectives

As mentioned earlier, my research project aims to explore two key questions:

- 1. What features need to be included in a course that enables change agents to be ready to bring about change for sustainable development?
- 2. By what means can expert practitioners in sustainability contribute to course development?

The aim of my research is to enable graduates to contribute to bringing about systemic change in any setting. I aim to achieve this by drawing on a range of expert knowledge to inform the development of a course for change agents for sustainability. Findings will help enhance the design of the current course including creating conditions for scaling, along with flexible and cost effective learning approaches. I shall first consider the course as being a central point of learning and knowledge transfer in the organisation to effectively prepare change agents to bring about change in their own context. Second, to involve practitioners and learners in the co-development of the programme. The programme should take into account the learner's journey and ensure the gap between theory and application of knowledge is as close as possible and the role of and options for assessment explored. The product envisaged is a proposal for a learning programme designed to evolve in parallel with the organisation.

Currently, the course is managed and run separately from the organisation's key business, with limited explicit connections with staff learning and development (represented by Figure 1). In my view, a possible outcome of this research will be for the course to become central to the organisation and a discrete sub-system at its very heart, resulting in some of the ownership moving from the small management team of two to the wider organisation (Figure 2). As staff become more knowledgeable about system innovation, so the programme would both make use of and disseminate this learning, creating a reinforcing feedback loop. As Sterling (2001:43) states, education and learning need to be grounded in the qualities of relationship rather than product.

Bearing in mind that a holistic perspective is desirable when looking at a learning programme about how to create systemic change, an aspect that I feel needs addressing is the organisational structure within our small NGO of having three different siloed learning functions for students, staff and members of Forum's partner organisations. The three learning functions address many similar needs but without recognising the considerable overlap and potential for pooling knowledge and resources. A course for change agents could provide the central focus and resource for all three groups. The Masters course brings 'the outside in' in the form of knowledge and expertise which is not currently capitalised on. The course has the potential to be the central test bed for the identification of current issues and solutions that could inform staff learning and help them grow as change agents, thereby strengthening their role in advising Forum's partner organisations.

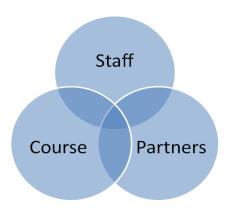


Figure 1 - Existing state

The Masters course is currently run separately from core organisational business; however there is some involvement with and flow of knowledge between the different stakeholders and the course. Staff give expert input in particular, through seminars, and students research and share their insights on the food and energy systems. Some partners provide work placements and learn themselves from the work students carry out for them.

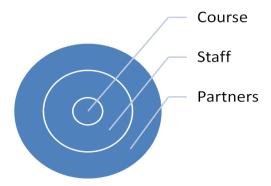


Figure 2 - Researcher's view of a possible future state

The existing course is very successful in equipping graduates for sustainability roles, evidenced by the ease with which they are employed post-course by leading businesses, NGOs and government departments (90% within three months of graduating in 2013). Examples from the 2013 cohort include the role of Sustainability Officer with Camden Council's Climate Change group, Researcher with the Government's Future Cities Catapult and consultants with private sector sustainability consultancies. The course meets its aims of giving a small cohort of high achieving graduates from any discipline the understanding, knowledge and experience (through experiential and reflective learning) thereby developing skills in leadership for sustainable development. In addition, it contributes to a 'virtuous circle' in that a sizable minority subsequently bring their new employer into partnership with Forum, contributing to the organisation's growth and strengthening links with the alumni in the process.

2.2 Desk Research

In keeping with a holistic perspective, I drew on a range of disciplines to frame my research. The following areas are of relevance to me and my position and initial desk research was planned in order to inform the primary research agenda and to assess to what extent the current course reflects contemporary thinking. I would then revisit pertinent literature later, in the light of my findings. By planning a two stage literature review, I believe that I am better able to address the fact that the topic was a fast developing area of study, in both business and academia, and that Forum as an organisation had only just started developing its own thinking about systems innovation at the time:

- 1. Systems Thinking and Systems Innovation
- 2. Leadership /change agent capabilities and learning
- Transformative pedagogy linked to Education for Sustainable Development (ESD)
- 4. Curriculum frameworks

2.2.1 Systems Thinking

Meadows (2009:11) describes systems as made up of three parts: Elements, Interconnections and Purpose. In the context of a course, she describes elements as comprising the likes of staff, students, buildings and books. Interconnections consist of the communication of knowledge and standards for admission, for example. Purpose includes both the espoused purpose, the course aim, but also individuals' purposes in participating.

In looking at leverage points for creating systemic change, Meadows (2009:164) proposes a scale of effectiveness with one of the most effective being changing the mind-set or paradigm (such as the goals and rules) out of which the system arises. The most effective of all is the concept of 'transcending paradigms', the ability to let go of paradigms, acknowledging their limitations in an infinitely complex world and achieve instead what Buddhists term 'enlightenment'. In thinking about how this translates into what learners need to know, Jucker's view (2002) is that learners need to have enough reflective distance to understand how the whole system works, correlating with Sterling's transformative or epistemic learning (see figure 5 below).

Therefore, taking a living systems perspective to design means incorporating features such as self-organisation, interdependence, adaptability, appreciating complexity, strengthening networks and building resilience. There is challenge in designing effective pedagogy to give learners sufficient 'reflective distance'.

2.2.2 Leadership/change agent capabilities and learning

There is extensive literature on organisational change and leadership and a growing number of models focusing on developing sustainable organisations. Senge is among the most prominent of commentators. The following table shows three models from the business world, which demonstrate that there are some agreed

steps around creating and sharing a vision, mobilizing coalitions, and embedding and aligning through culture change.

Kotter (1995:1) Eight stages	Willard (2009) Seven Steps	Doppelt (2010:106) Seven Levers
Develop a sense of urgency	Wake up and decide	Alter the mind-set
Create a guiding coalition	Inspire shared vision	Rearrange the parts of the system
Develop a vision and strategy	Assess current realities	Alter the goals of the system with vision and guiding principles
Communicate the change vision	Develop strategies	Restructure the rules of engagement
Empower broad based action	Build the case	Shift information flows to support goals
Generate short term wins	Mobilise commitment	Correct the feedback loops – rewarding learning and innovation
Communicate gains and produce more change	Embed and align	Adjust the parameters – align policies and procedures
Anchor approaches in the culture		

Figure 3 - Sustainability change models compiled by Strachan (2014)

A key question underpinning course design is understanding what leaders and change agents need to be able to do in order to bring about change. Forum as an organisation supports Kotter's view (1995:60) that

"Leading is a process or system or relationship aimed at producing change to bring about a new reality".

Forum espoused four characteristics of leadership for sustainability, distilled from its own research:

- look further to identify and understand future trends and issues to prepare for new challenges and opportunities
- engage widely to understand how everything is connected, to respond to a wide range of issues, perspectives and stakeholder concerns

- adopt systems thinking to understand a problem or situation in terms of the whole system. See cause and effect as circular and connected, rather than simply linear and fragmented
- be authentic embrace meaning; and harness personal values and beliefs in sustainable development to achieve the greatest impact.

Figure 4 - (Forum for the Future Leadership Document 2011)

2.2.3 Transformative Pedagogy linked to ESD

Commentators such as Sterling argue that traditional approaches to teaching and learning have not equipped people to question and think critically, resulting in the perpetuation of world views that are amplifying unsustainable practices. If we are to change to a sustainable footing then education needs to equip people to recognise and challenge the existing paradigm. Transformative learning is defined as learning that helps brings this about, as Morrell and O'Connor (2002:17) describe:

"To create a deep structural shift in the basic premises of thought, feelings and actions. It is a shift of consciousness that dramatically and permanently alters our way of being in the world. Such a shift involves our understanding of ourselves and our self-location: our relationships with other humans and with the natural world".

Sterling (based on Bateson, 1972) explains this in terms of taking people from the norm of first order learning, which is about how to do things better, through questioning of purpose and assumptions to critically examining the learner's assumptions and value base, leading to a shift in consciousness. This intentional journey can help learners to understand their own worldview, thereby transforming their perspective, bringing about epistemic change.

Order of Learning	Leads to
1 st order change Cognitive	Effectiveness and Efficiency
2 nd order change Meta-Cognitive	Examining and changing assumptions
3 rd order change Epistemic	Paradigm change

Figure 5 - Sterling (2011:25)

Rogers (2004), cited in Sterling (2011:26), suggests that learning can involve four additional dimensions to the traditional cognitive dimension, the intellect (seen as the core of teaching). These are a more visceral knowing involving the emotions; an existential knowing which is brought about through a questioning and reassessment of an individual's values and ways of living; an empowerment dimension, which, involves a sense of renewed direction and commitment; and an action dimension, which, "if the questions raised by the first four dimensions have been resolved, involves the development of informed choices at personal, social and political levels".

Constructing a course that uses all these dimensions provides a challenge to the course designer. It throws up questions of time and ethics, how far explicit commitment is needed from the learner and what unintended effects the change might have on their career post course.

If pedagogy is to be transformative, Sterling (2001:56) proposes that all these learning dimensions need to be brought into play for learners to have the capacity to be creative in imagining a different future:

"It engages the whole person and embraces in addition ambiguity, emergence, uncertainty and questions".

In designing transformative learning, the United Nations Economic Commission for Europe Steering Committee on Education for Sustainable Development Expert Group drew up recommendations for policy makers on competencies for educators in ESD which they based on knowledge, skills and attitudes in the following areas:

A holistic approach which seeks integrative thinking, inclusivity and dealing with complexities

Envisioning change which explores alternative futures, learns from the past and inspires engagement in the present

Achieving transformation which serves to change the way people learn and the systems that support learning. Educators who are able to change their own practice as critical reflective practitioners

Figure 6 - UNECE ESD (2011)

An example of course design embodying transformative learning is given by Marshall, Coleman and Reason (2011). Their research with leaders who have implemented change as a result of undergoing a transformative Masters course, gave rise to the distillation of course design principles:

- Grounding the course in the discipline of action research as a foundation
 for the course design and pedagogy introduces students to a method for
 questioning purpose and assumptions that is both appropriate for tackling
 complex challenges and one that lends itself to workplace settings. In
 addition, it supports natural curiosity and puts the control of learning firmly
 in the hands of the learner.
- Second person action research in which all participants work together in an inquiry group as co-researchers and co-subjects. The inquiry group works together though cycles of action and reflection developing their understanding and practice by engaging in what Heron and Reason (2008:1) call an 'extended epistemology' in which the different ways of knowing - experiential, presentational, propositional and practical - are respected.
- Seeking to cultivate an 'attitude of inquiry' in both the format of the course and the way in which it works with expert and other forms of knowledge.
- Creating an environment of participatory, collaborative learning
- Aligning assessment practices with the course aims and approach to ensure congruity.

2.2.4 Curriculum frameworks

Biggs, cited in Fry, Ketteridge and Marshall (2008), sets out five curriculum components, (see below). The aspects around climate are of particular interest to me in the light of this research because it incorporates the more subtle but important aspects that are crucial for a spirit of co-enquiry to work. For example, how governance is structured and how teaching and learning and assessment practices contribute to an atmosphere of collaborative learning.

1. Curriculum taught

- 2. Teaching methods and strategies used to facilitate learning
- 3. Assessment processes and methods of reporting results
- 4. Climate created in interacting with students
- 5. Institutional climate, the rules and procedures required to follow

The UNECE framework setting out the three key areas, in my view, provides a potentially useful way to consider knowledge, skills and attitudes.

	Holistic approach – integrative thinking and practice	Envisioning change – past, present and future	Achieving transformation – people, pedagogy and education systems
The educator understands			
The educator is able to do			
The educator works with others in ways that			
The educator is someone who is			

Figure 7 - UNECE framework for educators

Having looked at more detailed frameworks for the learning programme design, I settled on the key categories in the Middlesex University programme specification framework since:

- it is based on standard university practice
- it is readily understandable to the Senior Management Team
- it enables a straightforward comparison with the current course (see Appendix 1).

Since it does not include the Climate elements (points 4 and 5 above) these will be added, taking into account Houle's assertion (1996:29) that 'educators should

involve learners in as many aspects of their education as possible and in the creation of a climate in which they can most fruitfully learn'.

Examining the existing course in the light of the literature, I note that Forum's course matches some of the key design principles of transformative learning. However, there is a need for deliberative design and thought about the learner's journey through the different learning levels. In addition, I wanted to discover how the course could reflect more of Sterling's 'ambiguity, emergence, uncertainty and questions' as well as students' self-organisation and how the problem with formalised assessment might be addressed. It is a challenge since traditional assessment can run counter to creating an environment of participatory, collaborative learning.

In keeping with the principles of transformative learning, I am interested in how individuals can develop the level of reflexivity to be able to transcend paradigms through a relatively short learning programme, especially given their prior educational experiences. Also, in understanding what type of collaborative skills, approaches and tools are needed in order to be successful in carrying out overtly visionary work along with the level of understanding required.

Conclusion

In this chapter I have set out my research aims and by means of a review of knowledge and information have distilled some principles of transformative learning as a focus for my research design. I have also identified curriculum elements that are key to mapping my findings against.

Chapter 3 - Methodology

As already stated, my research project explores the two key questions:

- 1. What features need to be included in a course that enables change agents to be ready to bring about change for sustainable development?
- 2. By what means can expert practitioners in sustainability contribute to course development?

My overall approach was constructivist and participative leading to the choice of a qualitative approach, which uses the tenets of Appreciative Inquiry to maximise the human and social capital of our students at Forum.

3.1 Purpose

Placing a learning programme at the heart of Forum will involve organisational change. I subscribe to the view that organisations are socially constructed realities and that through the act of enquiry we can create the social realities we are trying to understand. Cooperrider, Whitney and Stavros (2008:438) propose that social construction is the idea that a social system creates or determines its own reality. In this way, through deliberate, joint enquiry at Forum into a new learning programme it will start to become a reality.

3.2 Conceptual Framework and Approach

The dominant paradigm in which I am working is a systems one with the perspective of a 'deep ecologist', Naess, cited in Capra (1997:7). My professional work in preparing change agents is rooted in a constructionist and participatory paradigm. My worldview is also shaped by my values including the importance of stewardship, intergenerational equity, community and relationships over the individual, along with the power of hope and belief. These were developed through growing up on a Hebridean farm at the centre of the crofting community, studying ecology and experiencing traditional cultures through working in international development.

3.3 Sustainability

The outcomes from this research have sustainability at their core. These can be considered by referring to Forum's Five Capitals model of sustainability². This is a

² http://www.forumforthefuture.org/project/five-capitals/overview

tool that takes the economic concept of financial capital, which requires safeguarding in order to secure the interest or flows from it, and extends it to four other 'capitals', namely natural (environment), human, social and manufactured. All five capitals being safeguarded or enhanced is an indication of sustainability. This tool can be used to assess how any initiative or strategy is contributing to sustainability or not. The proposed course can be evaluated using it in three ways: first in the light of the course design and operation; second in the purpose of the course and its learning outcomes; and third through wider dissemination. The course will be designed to maximise the human and social capital of its students and contribute to natural capital in maximising the use of technology, as opposed to carbon-intensive travel. The purpose of the course is to equip students to bring about sustainability in society by innovating in ways that will enhance, rather than deplete, all five capitals.

3.4 Methodological approach

The Appreciative Inquiry approach is a way of examining social systems such as organisations, that involves individuals inquiring together to discover examples of what works really well in order to imagine key features of the future organisation. Since those involved are engaged in designing their own future state, planned change occurs without the use of incentives or coercion. As an example the energy company BP used the approach for involving staff in the relocation of their UK headquarters with an imperative to reduce costs.

I chose the Appreciative Inquiry approach because it met the following criteria:

- Forum uses a constructivist stance in helping people to change, in that it
 helps people create their own compelling vision of a sustainable future. It
 takes a systems perspective with action research the preferred method of
 enquiry.
- To match Forum's organisational mission of creating positive visions of a sustainable future (reflected in our values). There is synergy with this approach in what Forum is trying to achieve as an organisation as well as the ethos of the existing Masters course. Given the opportunity to approach course development from a systems perspective through identifying and

- involving the key stakeholders in the change process, collaborative inquiry seemed an effective way to involve them in shaping the future course.
- I was looking for a practical change process. Getting people to enquire together into the best example of what they want more of creates its own momentum for change. Appreciative Inquiry is also about 'wholes', which translates to getting the whole system involved in imagining a preferred future and 'getting all voices in the system into the room' (Watkins and Mohr 2001:76).

Given the organisational context, action research would have been the most familiar methodology I could have adopted. However, considering the relatively short time frame, the desire for organisational change and the recognition of the power of building on the positive, I was keen to explore alternatives to 'pure' action research. A criticism of traditional action research is that it can focus too much attention on problem identification and thereby be counterproductive (Cooperrider, and Cooperrider & Sekerka, in Watkins, Mohr and Kelly 2011). I considered using qualitative techniques such as semi-structured interviews and focus groups in a stand-alone way; however, these techniques were limited because they do not provide the overarching narrative of a future focus.

Appreciative Inquiry has been described by Cooperrider and Witney (2005:2) as a methodology that takes the idea of the social construction of reality to its positive extreme. They describe it as "a philosophy of knowing, a normative stance, and a methodology for managing change and as an approach to leadership and human development". It involves systematic discovery of the essence of a living system when it is at its most effective. The approach involves asking the key questions that strengthen a system's capacity to enhance its potential.

Appreciative Inquiry has five principles underpinning it (Seel 2008:3-4):

1. The constructionist principle. Constructionism is an approach to human science and practice which replaces the individual with the relationship as the focus of knowledge, and thus is built around a keen appreciation of the power of language and discourse of all types to create our sense of reality – our sense of the true, the good, and the possible. Cooperrider and Whitney (2005:15) suggest that what people focus on becomes their reality and that

- the language people use creates their reality. Positive language will encourage people to construct a positive future.
- 2. **The positive principle.** Focussing on the positive can lead to effective organisational change.
- 3. **The simultaneity principle.** Enquiry and change are seen as happening together without the need for a diagnosis phase. The change is seen as starting as soon as the appreciative interviews begin.
- 4. **The poetic principle.** Appreciative Inquiry sees organisations tap into the power of story-telling and encourages the sharing of positive stories, believing that this will in itself change the way people think and act.
- 5. The anticipatory principle. Images of the future can affect the way we behave in the present. For example, if we have a desirable image of the future we are likely to behave in ways that will bring it about. "A vivid imagination compels the whole body to obey it". (Aristotle, cited in Cooperrider and Whitney, 2005:17)

The Appreciative Inquiry methodology typically has four phases, summarised below.

- Discover designed to appreciate the best of the current situation. This is
 done through an interviewing process to catalogue the signature strengths.
 This could also be for a specific capacity or process and in the case of the
 Masters would be experience of the Masters course itself, of being an
 effective change agent or of a peak learning experience.
- 2. Dream/Imagine is usually done in large groups where a cross section of the organisation is encouraged to imagine and co-create the future. Common aspirations are drawn out and a symbol can be created to represent this aspiration. Working in small groups, participants are encouraged to put as much flesh as possible on their visions. These are then creatively presented to the rest of the group and worked on further in small groups to develop specific proposals within a certain category.
- 3. **Design/Innovate** will result in concrete proposals for the organisation's social architecture in the form of design principles.

4. **Destiny/Deliver** implementation. Involves people with different competencies and skills aligned and working on linked projects

3.5 Data Collection

The methods of data collection flowed from the Appreciative Inquiry approach. For the Discover phase I planned semi-structured interviews in order to gather rich data that could be built on and taken further in the Dream stage through the use of Focus groups.

3.6 Research Participants

The four different types of key stakeholders in the course were identified along with criteria for the selection of research participants. The Appreciative Inquiry approach lends itself to large group involvement; however, given demands on staff time, with many based outside London, I aimed for sufficient involvement to meet my research aims:

- 1. Students on the course at that time. The whole cohort of 12. The student cohort was chosen because they had a stake in the course and were explicitly recruited on to an experimental year where the aim was to introduce a module on systems innovation and co-create other new elements related to systems thinking. (They were made aware of this at the time they were recruited). They therefore were already partaking in experimentation and had the ability to contribute to a visioning process. They had successfully completed the first term of the course and therefore had experience on which to build.
- 2. Forum staff. Up to 20 from across the organisation. My choice was based on several factors. First was to involve key staff who could help champion making the course more central to the organisation. I saw the opportunity to consult and really listen to them as the start of stimulating their interest and building their commitment. Second, to gain the insights of key experienced change agents who were in delivery roles, such as Sustainability Advisers working with Forum's business partners. Third, some familiarity with the course was desirable, whether as a speaker or a student mentor. Finally, some experience of undertaking a Masters or other developmental learning programme that they could draw on was useful.

- 3. Alumni group. Up to 12, consisting of individuals who had volunteered to be interviewed and contribute to course development in response to a recent survey of all alumni. Within this group, those identified as successful early-mid-career change agents were prioritised (those who had self-reported that they were in a role where they could create change), ideally representing different types of organisations.
- 4. **An employer,** working for a partner (client) organisation of Forum's and also a host for the Masters course work placement.

Of these stakeholders, the student cohort was selected to be interviewed as a group, along with a representative sample of seven others. Three focus groups were planned, with the aim of having between 10 and 15 per group to allow for sufficient creativity and for the creation of sub-groups to work on course design. The Dream and Design stages would be richer with a mix of different stakeholders, but the decision as to whether all three groups could be mixed rested on practicalities of scheduling (since the students were only accessible for short periods between work placements). In addition, the insider researcher issue of differing power dynamics needed to be considered in deciding how best to elicit the students' active participation.

The setting for the research was the offices of Forum for the Future with interviews conducted in person.

3.7 Capture and analysis of the data

I approached the analysis of data using open coding, generating categories through the process.

Data from the semi-structured interviews were recorded by hand written notes and transcribed. Key themes were shared with the focus groups as a foundation for the Dream and Design phases. Outputs from the focus groups consisted of visual elements as well as material for curriculum mapping. Photographs were taken and actions recorded.

The nature of the final recommendations was shaped by:

- initial desk research
- the participants themselves through group work

the requirements of the Forum Senior Management Team

As researcher, I recorded my observations of the process, what I was learning about the process and myself as a change agent including how I reacted to unforeseen developments. Changes of plan were noted too.

3.8 Justification in terms of achieving project objectives and producing robust data

To ensure internal validity the following strategies were planned, based on Creswell (2009:191-192):

- The findings from the interviews were to form the basis of focus group attention. Themes aggregated from the different perspectives of the interviewees.
- Member checking. The outputs of the focus groups were shaped and determined by the participants themselves.
- Presentation of negative or discrepant information that ran counter to the themes were to be recorded
- Peer debriefing. I appointed two critical friends, one of whom was external
 to the organisation and a freelance tutor for the Forum Masters
 programme. She holds a doctorate in education for sustainable
 development. The second was an internal critical friend with many years'
 experience in learning and development, systems thinking and
 Appreciative Inquiry along with an action research based Masters degree.
 She had just joined the organisation.
- The Appreciative Inquiry method acknowledges that all social research is inherently biased by the positioning of the researcher and that organisational inquiry is simultaneously 'the product of self and the world' (Bushe, 2011) Clarification of my position as researcher is articulated earlier in this section.

3.9 Researcher competence

Watkins, Mohr and Kelly (2011:93) set out some competencies required for Appreciative Inquiry practitioners: in experiential education methodologies,

understanding the principles of organisational and human resource development, collaborative skills and following Appreciative Inquiry processes.

I had not explicitly followed the Appreciative Inquiry process before, but I actively espoused its philosophy and concepts. I had considerable experience in using collaborative processes and participatory approaches (most notably training others in capacity building for overseas development roles) and was skilled in interviewing in different contexts. These competencies were demonstrated in conducting action research in settings with school leaders, and leaders in further and higher education (see Chapter 1). In addition, two colleagues had experience as Appreciative Inquiry facilitators and I planned to work through the process in advance with their support.

3.10 Ethical considerations and transparency

The purpose of the project related directly to organisational strategy. However, I spent more time on it and conducted it more broadly and thoroughly than the organisation required. The findings were to be shared both internally through recommendations to the Senior Management Team and externally, through the medium of web blogs and presentations, bringing with it ethical implications.

There were a number of different parties and stakeholders to this research. They were broader than the 'three ringed circus' that Costley and Gibbs (2006) mention: between me and my own professional development, my workplace community and the university. Additional stakeholders were alumni of the programme, employers and, most significantly in terms of the ethical dimension, current students. All their needs had to be taken into account and a duty of care shown. In addition, these multiple accountabilities also included Middlesex University for the research and my manager. Potential conflicts of interest needed to be handled between my role and responsibilities. I would need to be clear whose interests I was responsible for. The structure of the research was designed to help overcome any conflicts of interest through the support of critical friends.

The framing of the research needed to ensure that stakeholders felt it was a mutual endeavour which they were a key part of in order to bring about wider ownership and emergence of a system around it. The approval of all participants was sought by letter agreeing what their participation would involve, what the research was for and how it would be used. No-one was pressured to participate and participants were

allowed to withdraw at any time. I made it clear where limits of confidentiality lay.

Comments were not attributable, rather labelled according to stakeholder group, i.e. staff, current students and the like.

I ensured that key information was supplied in accordance with the principle of informed consent. (See Appendix 2 for sample letter to interviewees).

With data checking, I considered the option of participants being invited to comment on written outputs since this would have enhanced validation and been a helpful way of triangulating the researcher's observations and interpretations (Doyle cited in Campbell and Groundwater Smith 2007:85). I decided against this, since the research was collaborative by nature and the data presented in aggregated form, therefore not practical. For detailed steps taken in addressing ethical issues see appendix 3.

The specific issues of being an insider researcher in relation to the methodology were the following:

As Course director with responsibility for the current students, differential power relations were acknowledged. A tension could be perceived by my being responsible for the summative assessment of their work and their success, whilst at the same time inviting them to be equal participants in the research process but also steering their input with the appreciative focus. This would be addressed through conducting a Board of Studies meeting shortly before the interview to allow students to give open feedback on their course experience, prior to the future focus of the research. In addition, I asked the Critical Friend with experience of Appreciative Inquiry to conduct the group interview. She was an impartial facilitator since she had not had any dealings with the student group.

Showing care and consideration to the other stakeholders by explaining the purpose and outcomes of the research and addressing their concerns as they arose, as well as actively valuing their participation, were designed to pre-empt any difficulties.

3.11 Handling difficult situations

Acting professionally and ethically in the treatment of participants is a core principle. Those participants raising issues unrelated to the research were handled sensitively and directed to a separate forum for their airing. I acted reflexively and balanced the

needs of the research with my on-going relationship with participants. Having a colleague facilitate the student group helped address differential power relations and potential response effect.

I prepared for potential ethical issues arising from the findings by discussing likely outcomes in advance with my manager.

The detailed research plan can be found in Appendix 4.

Chapter 4 - Project Activity

4.1 Introduction

In this chapter I explain the research activities carried out along with organisational developments that affected my plans. I conclude with reflections on my learning from the process of following my methodology and working within the Appreciative Inquiry paradigm.

Following the desk research and planning, the primary research took place over a two year period between Spring 2012 and Spring 2014. This was a much longer timescale than envisaged due to other unforeseen demands on my time, both professionally and personally.

4.2 Desk Research - Stage 1

The initial desk research included a preliminary literature search to inform primary research topic areas. It was a challenge to limit the range to make the project manageable, since a multi-disciplinary course touches on many different areas. The topics were narrowed down to the four of systems thinking, leadership and change agent capabilities, transformative pedagogy and curriculum frameworks (as set out in Chapter 2). Following some preliminary reading, Learning Needs Analysis did not appear very relevant. As both Behaviour Change and Organisational Development are significant disciplines in their own right a decision was made to not include them in the first stage of desk research but to identify focussed aspects through the research to visit later on.

The tools were developed through desk research using the Appreciative Inquiry framework. I aimed to discover respondents' own peak learning experiences and key successes in implementing change as well as their views of the strengths, opportunities and aspirations for the programme.

A set of questions were developed for the semi-structured interviews, with a minor variation between those developed for the individual interviews and for the student group (in recognition that staff had had the chance to apply their learning in the workplace). The questions were reviewed by a critical friend, familiar with using the Appreciative Inquiry approach.

The following were the key topics covered through the interview. A full set of questions can be found in Appendix 5:

- 1. Their experience of transformative learning, and views on the key constituents
- 2. The most significant change they had brought about in the workplace and what processes and learning had helped them
- 3. Views on attributes of change agents/systems thinkers and what experiences had helped them develop these themselves
- 4. Views of current Masters course strengths (not weaknesses per se since this did not fit with the appreciative approach).
- How the course could create more effective leaders for sustainable development
- 6. Recommendations for key content for a course using systems innovation to equip leaders
- 7. External resources and relevant future trends

Desk research was carried out using Forum's course documents. I had access to Board of Studies Masters course feedback dating back many years along with a course review and a revalidation review document compiled in 2010. This was useful background as to how the course had developed. However, my focus was on feedback from programme graduates who had had a chance to apply their learning to find out how well and what aspects of the course had equipped them to implement change. The key document was a survey I conducted for Forum in January 2012 with all 192 alumni (prior to the formal commencement of this research). It was designed to gain alumni views on the application of their course learning as well as Forum's new strategy and future course direction and at the same time to gauge their interest in becoming a member of Forum's network. This data formed a very useful base since it represented a 47% response rate (with 44% of these self - reporting that they were employed in senior sustainability roles) along with qualitative feedback from graduates from every year of the course. Questions in the survey relevant to this research included:

- How well the course had equipped them to create change
- Which particular elements of the course had helped

- Indicative job role and whether they were in a position to create change for sustainable development
- Indicative content for a course focussed on systems thinking
- Willingness to be involved in further research

The results confirmed that the course was meeting its key aims and also formed a base for the semi-structured interview responses to build on. From the responses there was a ready-made list of alumni willing to be involved in further research.

4.3 Semi-structured interviews

Six individual semi-structured interviews were conducted with staff and an employer/alumnus along with a group interview with the course participants. All had had experience of undertaking other Masters programmes themselves and in putting change theory into practice. The roles included some key 'Thought Leaders' in the Forum:

- 1. The Forum Chief Executive
- 2. A member of the Senior Management Team
- 3. Staff Training Officer
- 4. Head of Sustainable Business Programme
- 5. Sustainability Adviser
- 6. An employer and alumnus of the programme, director of a manufacturer noted as a leader in innovation

All but one interview provided detailed information with clear consensus about strengths of the course and some common threads for future course content. One contributor found it difficult to be to contribute to all the topics in that he had undertaken a scientific knowledge-focussed Masters and was only able to reflect on intellectual knowledge acquisition rather than the learning process itself.

For the group-based interview with 12 current students, in order to overcome the insider researcher issue of my role, two colleagues with experience of the Appreciative Inquiry approach and no prior involvement with the course were selected to conduct it.

The interviews were transcribed and categorised against the different curriculum elements. Properties were identified and recorded in a format that could be referenced by the focus groups.

4.4 The Focus Groups

The focus groups were designed to validate the Discover findings as well as contribute to the subsequent Dream phase of the Appreciative Inquiry process. Properties from the Discover phase were shared with each group. In order to encourage creativity in the Dream phase, each sub-group was asked to come up with a visual of the future course. This was followed by eliciting principles to guide course development.

Discover

- What are the course's strengths?
- Key attributes?
- How is it contributing to our strategy?
- What are the opportunities for the course in future?

Dream

- Imagine the 'Masters course' five years from now when it is a big contributor to delivering our strategy.
 - o What has happened?
 - O What is different?
 - o How have you contributed to this future?

Design Principles

- How it relates to Forum
- Indicative content
- Governance
- Structure
- Staffing
- Processes

Figure 8 - Focus Group Questions

Focus group participants were chosen from students, staff and alumni/employers. It was desirable to include as many people as possible to participate in the research, in line with Appreciative Inquiry philosophy, to enhance the potential for wider course ownership and, at the same time, not to make too much demand on staff time. The participants in the focus groups were therefore different to those interviewed. In April 2013 a new academic year was in progress allowing a new cohort of students to contribute too.

The composition of each focus group took the form of three options:

- To have representative of one stakeholder category only
- To have mixed stakeholders
- To have some focus groups made up of just one stakeholder category and other focus groups mixed.

The advantage of mixed groups was that diversity created more potential for richer data generation for the Dream element. A disadvantage of mixing all three was simply the practicalities of timetabling, since there was only a very small window of opportunity for involving the students. Having single composition groups had the advantage of allowing briefings tailored to their particular level of familiarity with the course and the process. The third, compromise option, was decided upon. The first group consisted of staff only, the second staff and students and the third alumni only.

Staff were selected who had change agent expertise and an interest in learning and innovation. The first focus group was treated as a pilot and included a review of the process at the end. Feedback from participants was used to enhance the two subsequent focus groups.

Focus Group 1: Ten staff took part in the 2.5 hour session, with some dropouts on the day, - sufficient nonetheless for three breakout groups. The design took the form of an initial presentation, which included some theory about the Appreciative Inquiry approach, before moving into breakout groups to review findings from the Discover phase and start to Dream and Design.

My reflection was that the workshop achieved most of its aims in that the key interview findings were endorsed, visions for elements of a future course created

along with some suggested curriculum topics. However, there was not time to get into any depth with the design principles.

The session did, however, noticeably contribute towards my aim of enthusing staff about a future course and how it could be closer to the organisation. This was evidenced by the excitement and high volume of idea generation at the time and also unsolicited contributions from staff in the weeks following the session. The workshop ended with a strong sense of collaborative energy for a course positioned more centrally in the organisation.

Feedback from participants about the focus group design included that it was not necessary to share so much information about the Appreciative Inquiry approach but to move into action earlier. They suggested that in order to prime participants better to move into the Dream phase and stimulate futures thinking, posting up articles and pictures of relevant future trends in learning, education and the potential of technology on the wall, akin to the process Forum uses in conducting Futures workshops with partner organisations, would help. Sufficient time should be allowed for getting participants' views on course design principles. A 'parking system' could be used for participants' comments/issues outside the scope of the workshop agenda. In addition, participants from the first focus group suggested that a mix of different stakeholders would have worked better.

Focus Group 2: This built on previous feedback in its design. It consisted of 11 current students (from 2012-2013 cohort), along with five staff. The workshop was shorter, at 1.5 hours, in order to fit into the students' timetable.

Outputs included reinforcement of key programme strengths, along with a number of visions and principles for course design. (See Appendix 6 for photographs of some of the visions and principles).

Focus Group 3: consisted of alumni only. The same format was followed as for Group 2. Due to London transport problems on the day, a smaller number turned up than had committed - only five participants. These five, however, were from a spread of organisations and year groups, and were all implementing change for sustainability.

It proved difficult to tune them in to the evening workshop. They did not already know each other and unlike staff and students were not as 'au fait' with the organisation's current strategy. Some felt strongly that the course worked well as it was designed currently and didn't necessarily buy in to its future direction. I designed the workshop to get more input into the Design phase to build on what previous groups had achieved. However, some felt more comfortable adding to or endorsing the Discover findings and it was difficult to move them into the Dream phase. There was not time to get to the Design element. (My reflections on this can be found later in the chapter).

4.5 Data analysis

Data analysis took the form of compiling the findings and coding them against the curriculum categories. Patterns emerged of specific course elements that were repeatedly mentioned by respondents. Those with the most mentions or endorsements were highlighted as significant.

Reviewing the 'Dream' findings from the focus groups helped me to see a way that Forum as an organisation could work more systemically by bringing together all its different learning offers, and place the Masters programme at the core. The idea of broadening the target audience from the focus on graduates was sparked by my findings. Digital capabilities would enable this and help Forum with its global reach. In this way the organisation could put systems thinking into practice, bringing together previously siloed elements to make its work more effective (and at the same time directly addressing the purpose of my research).

My research findings came at an opportune moment in the organisation's planning process as the Senior Management Team were reviewing the future of Forum's magazine as well as the offering to our membership network, so the time was ripe to put this concept forward, ahead of completing my research with a full curriculum proposal. Following an enthusiastic reception from my manager, I put a paper to the Senior Management Team. It was very much at the conceptual and structural level setting out benefits and with three levels of ambition for organisational learning described.

The paper was well received and the Senior Management Team expressed interest in the most ambitious option for bringing together organisational learning in a

transformational learning proposition. As a result, a cross-organisation working party was set up to explore how to take this forward and make more detailed proposals. The concept of an organisation-wide learning strategy and internal change strategy bringing together Forum's futures work, magazine, network and learning offers was born and became a key priority project for the organisation. This endorsement moved the idea of a learning programme at the heart of Forum centre stage.

4.6 Desk Research - Stage 2

Examining the research findings gave rise to themes to explore further through a second round of desk research. One was emerging models and thinking around systems change. A second was around the future shape of Higher Education, enabled by technology and innovative pedagogies. Linked to this is the issue of how to design a course that is as close to real life challenges as possible. Marshall's challenge (2013) to designers of learning, "Why aren't we trying to replicate the many chaotic experiences that change your life?" struck a particular chord in trying to address the challenge of enabling learners to turn theory into action.

At the same time, the issue of target audience and conducting a specific learning needs analysis arose. Without a very clear target group it is difficult to design an effective learning intervention. For example Merriam (2004:63) argues that in order to be able to engage in critical reflection and reflective discourse adults need to have reached a high level of cognitive functioning and that this doesn't correlate directly with level of educational attainment. So establishing learners pre-existing capabilities as well as motivations and needs is important.

4.7 Organisation developments related to the research

Organisationally, at this stage, in order to convince some key decision makers amongst the Trustees who were not in agreement with the planned course trajectory, the Forum Senior Management Team decided to appoint external consultants, to conduct a review of the existing course. They felt that a neutral and objective report would provide the evidence needed. I shared my findings with the consultants and contributed to their review. They carried out some additional desk research into competitors and interviewed some stakeholders. Their findings validated my own, and they are mentioned in Chapter 5. The exception was that they identified more weaknesses with the current course. My methodology, focussing on the positive and

appreciative, hadn't been designed to discover weaknesses, enquiring instead, into how it could be made better.

4.8 Reflections

The data collection went well in helping me collect most of the information I needed and the Appreciative Inquiry approach was successful in enthusing the participants about the possibilities of a more centrally situated course.

I found it a challenge being one step removed from the student group interview process, entrusting colleagues to ensure the interview followed Appreciative Inquiry principles and to elicit the information in the time allotted. The interview didn't go entirely as planned in that time ran out before all the questions were addressed. The students' responses were useful in terms of the strengths of the existing course, which correlated well with those of the alumni. Prompting students to think about a different future, the Dream phase was more challenging. Inevitably the students were embedded in their own experience and therefore keen to share their ideas about minor course improvements, despite having conducted a Board of Studies previously. On reflection, it might have been useful to have these listed by the facilitators in terms of acknowledgement at the start. However, students reported feeling energised and enthused by the process as well as learning about the Appreciative Inquiry approach at the same time.

For the second focus group, consisting of a different cohort of students and staff, I was sensitive, as their course leader, to possible insider researcher issues and response effect. However, the mix of participants worked well in giving the students confidence to express their views. The process of including posters of future trends on the walls acted as a useful stimulus for the Dream phase and the diversity of experience and participant mix helped generate more ideas and discussion.

With the third focus group consisting of alumni, their contribution was less than I had hoped for. I had not anticipated some of the challenges. On reflection, a mixed participant group, scheduled at an earlier time, with the opportunity for a pre session networking meeting and briefing on the current course would have helped.

My reflections on using the Appreciative Inquiry approach is that it is designed for large groups who have a stake in the change process and make, or are required to

make, a time commitment to it. I did not secure sufficient time commitment from them to take them through all the stages that I had planned. In retrospect, I would have tried to secure one group for a number of sessions which would have enabled more detailed findings and testing at the design stage.

Due to the elongated time frame along with changed organisational priorities such as the broader remit of the working group, explained earlier, the report outlining the curriculum plan for the Directors didn't happen in the way set out in my plan.

The Appreciative Inquiry approach was congruent with Forum's approach and philosophy and for that reason worked well. There was useful learning for conducting research in that way in the future.

Chapter 5 - Project Findings

My research strategy was to draw on a range of expert knowledge to inform the development of a course for change agents for sustainability. Findings would help enhance the design of the current course, including creating conditions for scaling, along with flexible and cost effective learning approaches. The first aim of my research was to consider the course as being a central point of learning and knowledge transfer in the organisation to effectively prepare change agents to bring about change in their own context. Second, I wanted to involve practitioners and learners in the co-development of the programme. The product envisaged was a proposal for a learning programme to evolve in parallel with the organisation. This was to be achieved through exploring these two key questions:

- What features need to be included in a course that enables change agents to be ready to manage change for sustainable development?
- By what means can expert practitioners in sustainability contribute to course development?

During my research it became apparent that my assumption about the target group being recent graduates with the need for a grounding in sustainability was challenged by the emerging findings. Respondents expressed the need for a course to help participants with the challenges of bringing about change in the workplace itself, rather than as a course for fresh graduates. This could have been due to the particular vantage point and positionality of the majority of respondents, expressing their own needs as sustainability professionals working within organisations.

Seeking a decision from Forum's Executive about the target group in order to reframe my focus was not feasible at that time. Instead, in order to make my findings coherent, I decided to refocus on a programme for people in the workplace. This target group would have several years' work experience trying to implement sustainability and would have already had a broad grounding in the topic and understood the root causes of unsustainable development.

My findings are set out in terms of a broad curriculum specification in Appendix 9
Strengths of and improvements to the existing course can be found in Appendices 7 and 8.

In this chapter I shall discuss the following five themes that emerged:

- 1. Personal skills
- 2. Professional skills
- 3. The safe container of group-based learning
- 4. Flexible by design
- 5. Climate and Institutional Governance

1. Personal Skills

Skills to understand one's own worldview and connect and communicate with others

In order to create change you need to understand yourself and how you relate to others. (Alumni respondent)

Helping participants understand themselves, their strengths, their own mind set and values, and how they relate to others were reported as strengths of the existing programme.

As the main commentators on the topic of transformational learning state, understanding one's own worldview is an important step towards personal change. It is what Sterling calls the meta cognitive order of learning. Being able to monitor change in oneself is a key skill for change agents and to do this requires having some 'reflective distance' (Jucker, 2002). Skills of enquiry and action research are necessary to encourage radical and deep questioning of the incumbent world view and experimentation with alternatives.

The philosophy of reflective learning is the closest fit to what I was thinking ... it's the supportive environment and constant source of motivation that best equips me, I think. (Alumni respondent)

Participants reported that some of the core abilities change agents require include relating well to others, predicated on learning skills, listening and empathy. To influence successfully requires understanding the anatomy of power and what

motivates diverse actors across the corporate, NGO and development sectors. It also requires being sensitively attuned to their social, psychological and behavioural dynamics. Skills in remote facilitation and engagement of diverse groups, together with negotiation and the ability to 'articulate an end game that people can relate to' (staff respondent) were specified. A core part of enabling systems innovation is dependent on skills of intense collaboration.

Collinson (2013) proposes that inquiry and intense collaboration requires three particular skills: developing trust-based relationships, skills in framing perceptive and provocative questions, and skills in managing the process.

Respondents reported that a lack of diversity among participants in the current course meant that it didn't provide the conditions for sufficient development of these skills. A future programme should aim to incorporate diversity across cultures, geographies and experiences.

The students recruited are far less diverse than they should be and this reduces impact and reach. (Alumni respondent)

2. Professional Skills

2.1 Skills to interpret and analyse the system

We need to understand how structural change comes about and how change is created socially and organisationally. (Staff respondent).

During the period of this research, Forum developed its thinking on Systems Innovation and arrived at a model for change – '6 steps to significant change'. This proposes that in order to create systemic change for sustainability there are some key steps. In order to understand where the levers are for creating pioneering practice, a diagnosis of the particular system is necessary. Pioneering practice itself won't necessarily lead to change, so understanding where there are windows of opportunity that will enable the tipping is key. I believe that this is a useful guide for those trying to implement system innovation.



Figure 9 - Forum's 6 steps change model

Since the target group would have already 'experienced the need for change', in that they will be working in sustainability in different sectors, and instead would be grappling with stages 2-4 of the change journey, I found that respondents would like to be able to apply systems innovation in the workplace. This requires understanding key theory, seeing examples of systems innovation in action, together with the ability to influence colleagues by translating the theory into everyday language.

During the second stage of my literature review I focussed on Geel's interpretation of system innovation as a useful theoretical model (see figure 10). It shows the main components of the socio-technical regime (combining behaviour, technology, policy and economy), which need to be reconfigured if systemic change is to be created.

Civil society in sustainability transitions

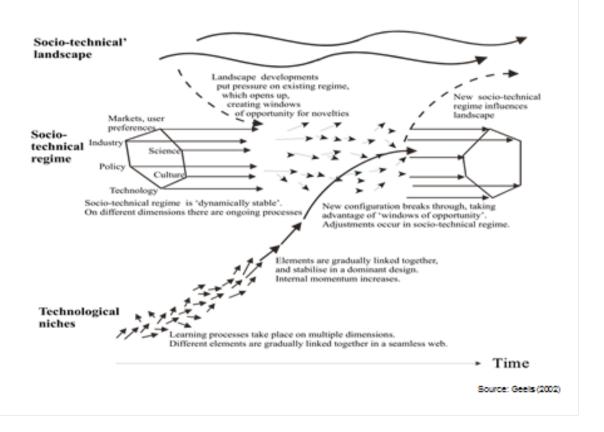


Figure 10 - System innovation model (Geels 2002)

My view was if change agents are to be successful in finding windows of opportunity that lead to the necessary reconfiguration then they will need to have a good understanding of the four different components along with the levers for change. These components coincide with some of the key topic areas of the existing Masters course which have proved to be robust. Respondents themselves reported requiring in-depth understanding of these topics. Firstly, with behaviour change, respondents wanted to gain sufficient insight into the latest understanding of how people change: the psychology and the neuroscience behind it along with how change is created organisationally and societally. With technology, an understanding of how it can be used to move to a more resource-efficient model of consumption, for example through enabling the move from a linear to a zero waste 'circular economy'. With policy, how it is made and what levers are proving effective. What an economy without growth might look like along with the features of business models that are actively contributing to all five capitals rather than depleting them.

2.2 Skills to create -Innovation and design thinking

Respondents cited the need to understand the role of innovation and design thinking.

The course should include the role of ethnographic research and end users in designing system change. (Alumni respondent)

The course should enable people to create and implement change within existing structures and create a network of friendly, ensconced practitioners. (Alumni respondent)

My findings pointed to the importance of the integration of theory and practice in the programme along with an implementation element built in afterwards. Respondents indicated the need for deliberately tapping into 'different ways of knowing' (Student respondent) in a course and in this way similar to that described by the American University, MIT as 'hands on action based that challenges students to do things, build things, change things'³.

The practice element could include short work placements with organisations in Forum's network, (a key feature of the existing course), in order to gain new knowledge and perspectives through grappling with similar issues or seeing a different part of the same system. The programme could also include a Lab element in the form of a virtual space for experimentation. This could be constructed as a place for ideas to be played with and prototyped using different mediums: word, graphics, film and sound. It could have few or different rules of engagement to other elements of the programme in order to encourage creative thinking.

The implementation phase might require a 'long tail' to the course in order to incorporate support for the learner once back in the workplace. This is where support could be given by a network of existing practitioners. Respondents proposed that alumni in particular might be well qualified to act as mentors. A database and locator pin would help with appropriate matching.

3. The safe container of group based learning

Collaborative group work is important for life. The group dynamic and cohesion reflects a systems approach and helps live the values. It also really pushes interpersonal relationships. (Alumni respondent)

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³ http://mitleadership.mit.edu/a-about.php

The 'safe container' provided by the group was identified by respondents as a particular strength of the current course. It is noted that this is a key feature of many cutting-edge learning programmes emerging for social entrepreneurs such as The Experience Institute and Year Here⁴.

Systems thinkers assert that achieving a sustainable world will involve a shift of mainstream values from the self-assertive to the integrative. In a sustainable world, people would be working and learning collaboratively, building on the diversity contributed by all the different skills and approaches within a group. The group can be viewed as a system in itself and insights can be gained from reflecting on the processes taking place within it.

Stuff happens when people like each other and trust each other. (Alumni respondent)

In order to progress rapidly to reach the stage where high-quality feedback, selfdisclosure and trust between individuals are the norm, groups need to be supported by processes for structured feedback as well as psychologically to ease them through the different stages of group formation.

The group-based structure provides scope for interesting and flexible pedagogic design. This includes group-based inquiry, peer-to-peer learning and support, and the opportunity to tackle group challenges.

Group learning was invaluable, like a multi-headed/brained fast track into cross-sectoral sustainability, where the levers of change are now and how to pull them. (Alumni respondent)

One of the strengths recognised by student respondents is the opportunity group-based learning gives to optimise learning potential. A model from the current course is students enquiring together into the food system through individual work placements; one placed with policy makers, another with a food producer, a processor and a retailer, as examples. By sharing their insights in a deliberate and structured way they can build up a picture together about the different elements and

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⁴ http://expinstitute.com/about/ http://yearhere.org

actors in the food system as well as identify the challenges, opportunities and main levers for change.

The aliveness of an organisation – its flexibility, creative potential and learning capability resides in its informal communities of practice. (Capra and Luisi 2014:318).

Looking at how wider stakeholders can be involved in a future, more adaptable programme, one mechanism is through less formal, more elastic groups in the shape of communities of practice. These are defined as informal, self-generating networks within organisations.

Communities of practice could form around particular aspects of enquiry and exist for the length of time necessary for the question to be answered. These could be formed around topics such as the role of small and medium sized enterprises in contributing to system innovation, or learning processes, such as the effectiveness of Massive Open Online Courses for learning about behaviour change. In this way Forum staff as well as Forum's partner organisations could have live involvement in the course.

4. Flexible by design

Skilful managers understand that in today's turbulent business environment, their challenge is to find the right balance between creativity of emergence and the stability of design. (Capra and Luisi: 2014:320)

I found that respondents supported the development of a cutting edge, fast moving and disruptive programme that could incorporate new thinking as it developed.

A programme that could change rapidly would mirror the context of today's business environment which is one with complex and ambiguous challenges and constant change. Commentators increasingly describe this as a 'VUCA World' (Volatile, Uncertain, Complex and Ambiguous)⁵, meaning that the so called 'half-life of facts' - the pace at which knowledge becomes outdated, is speeding up⁶. I realised that change agents need to understand how to explore future uncertainties and

⁵ http://en.wikipedia.org/wiki/Volatility, uncertainty, complexity and ambiguity https://hbr.org/2014/01/what-vuca-really-means-for-you/ar/1

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⁶ http://www.economist.com/blogs/babbage/2012/11/qa-samuel-arbesman

interrogate information, along with the skills in dealing with complexity. The programme should be designed to ensure learning is located as close as possible to individuals' everyday experience and in helping participants to learn about change, attempt to try and replicate an aspect of 'the many chaotic experiences that change your life'. (Marshall 2013).

Students dictate content of the course – 'these are the pressing sustainability issues of our time.' (Student respondent)

The course should be designed to have sufficient structure and fixed points but at the same time allow for emergence and scaling up in different ways. Technology should help enable this. The learning architecture, the structure and teaching and learning strategies would be a constant with the content emergent. I set out some of the design components below.

4.1 The roles of different stakeholders

In a course where the content is topical and evolving there is scope for a range of stakeholders to contribute flexibly in different roles. These stakeholders include Forum Faculty, other staff, alumni, expert contributors (who are at the cutting edge and top of their profession) and Forum's paid network members. Some of the roles envisaged are set out in figure 11 below:



Figure 11 - A model of stakeholder roles in future programme

There is the opportunity for Forum staff to alternate between the role of learner and contributor, as needed, at different times. Staff could pose group-led challenges on a real life topic, as mentioned earlier. With a modular course there would be the opportunity to join as a learner for a particular module, for example on innovation techniques.

Taking into account the ubiquity of knowledge available via the internet, the speed with which knowledge becomes outdated as well as work converging with learning into the new conceptual workplace, I believe that this changes the role of the trainer/educator and Faculty staff.

Every two days we create as much information as we did from the dawn of civilisation up until 2003. (Schmidt, Chairman of Google, cited in Barber, Donnelly and Rizvi, 2013:17)

Strengths of the current course design, includes peer-to-peer learning and the role of practising experts as contributors. Strengthening and reinforcing connections between the different programme elements and successfully linking the theory and practice will be important. These areas were highlighted as needing strengthening within the current course model and will be more essential in a more flexible programme with many different contributors. I conclude that the key role for Faculty staff will be as curators or facilitators of learning, focussing on teaching and learning strategies that help formalise the development of sustainability knowledge and ensure the building and sequencing of sessions.

4.2 Course delivery methods

Digital technology would play a significant role where pure knowledge delivery is required, whether using Forum-developed material or through widely available MOOCs. Webinars, live streaming and discussion fora, both synchronous and asynchronous, would also have a place. In a blended learning offer, face-to-face learning would take the form of seminars to allow deep discussion. Group-based activity would allow a safe space for peer dialogue, debate and practical activity.

Forum has just launched a new digital platform, the Futures Centre, that gives business leaders access to scenario-planning and trend-monitoring tools, aimed at helping to identify sustainable solutions. This includes user-generated material and is designed with expansion and an education focus in mind. This could form a digital hub for the new course with a ready-made way for participants to learn about the use of scenarios and trends.

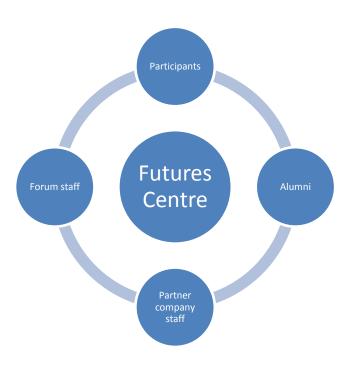


Figure 12 - The link with Forum's Futures Centre

Participants could be recruited in different countries and supported in a tight-knit learning group based in their home country. Interaction with fellow learning groups in other countries would be via technology only. Employing this range of learning approaches has the advantage of allowing:

- Learning resources to be captured for use by different groups at different times
- Flexible and cost effective learning
- Learning which lends itself to international working and scaling up



Figure 13 - Proposed teaching and learning methodologies

4.3 Assessment and Accreditation

My findings demonstrated that there is an inherent tension between a fast-moving, cutting- edge and disruptive programme incorporating group-led processes with emergent content and an accredited Masters programme with the attendant academic rigour, fixed structures and quality control processes.

The consensus amongst respondents was that the Masters qualification for a programme of this type is not essential since it is likely that those in work will have already acquired a post-graduate qualification. However, should participants require certification, making the programme modular would allow assessment on that basis. Knowledge-focussed modules would be more straightforward to devise assessment for. Accreditation could take the form of credits building up to Certificate or Diploma, or in the UK or US these could contribute towards Continual Professional Development.

Considering other forms of assessment, respondents suggested the use of more real and impactful measures of success. For example, if participants produced practical proposals as part of the programme then peer voting, or 'crowd sourcing' type voting involving a wider constituency, or level of funding attracted, could all be used.

5. Climate and institutional governance

It should be about good collaboration in a more porous Forum for the Future. (Staff respondent)

Forum is a learning organisation with a mission to tackle the systemic and interconnected causes of the great challenges of our age. Since system innovation is about intense collaboration and shaping the external context, a spirit of co-enquiry is needed and an opportunity is presented by this programme. It would also allow the organisation's resources to be better focussed.

My aim is for the course to become a central point of learning and knowledge-transfer in the organisation. This will require some restructuring through the merging of learning functions. A core team of staff would have formal roles as Faculty but with organisation-wide input. The creation of more fluid communities of practice of staff and other stakeholders charged with some aspects of content development, will allow for dynamic content development.

Congruity needs to be a principle in programme design, whereby learners experience the same methodology, tools and content that they themselves will use with colleagues in their own workplaces. Bringing the staff and Forum network learning functions together should contribute to upholding this principle.

In managing this programme, Forum will be engaging different perspectives, maintaining networks and strengthening connections; skills that equally apply to the needs of systemic change agents themselves.

Chapter 6 - Conclusions and Recommendations

6.1 Conclusions

Through this project I set out to address the following questions:

- What features need to be included in a course that enables change agents to be ready to bring about change for sustainable development?
- By what means can expert practitioners in sustainability contribute to course development?

In addition I examined the strengths of the current programme that could be built on, and identified potential improvements.

6.1.1 Strengths of the current programme

Respondents reported that becoming part of a network of practitioners who are inspiring and making change was an important outcome of the current course. The work placement programme gave them an excellent insight into the perspectives and power bases of government, business and NGOs enabling them to 'translate between sectors'. The teaching and learning strategies, in particular the work placement programme, the group learning and collaborative aspects and how these elements contributed to praxis, are all strengths. In addition, skills development in the form of self-awareness, reflective practice and facilitation were cited.

6.1.2 Improvements to the existing course

My findings showed that many of the programme elements work well but a more coherent narrative thread is desirable. Mechanisms to help students better identify, prioritise and apply their learning are desirable and a more deliberate focus on action research methodology would assist this. Students could be inducted into the action research approach and helped to frame their individual questions early on. Group sessions could be better structured after each placement for shared reflection. The elements on reflective practice delivered by the Leadership Trust could be better integrated so that they form a template for the year.

6.1.3 New programme

Whilst the current programme has many strengths, the aim and target audience are no longer the best fit with Forum's strategy nor have the elements needed for scaling up internationally. The findings point to a programme designed for early career change agents in sustainability working in incumbent organisations.

The skills set required through a learning programme can be summarised as:

- Skills to understand one's own worldview and connect and communicate with others
- Skills to interpret and analyse the system
- Skills to create innovation and design thinking

My research aim of designing a curriculum has been partially achieved. The findings (set out in appendix 9) indicate many features that contribute to this, based on systems principles. However, these different elements will need to be filtered in the light of a decision on a specific audience. The target group will need to be consulted further on their learning needs and the aims and outcomes tested with them. Setting out what learners need to be able to do to turn theory into action along with creating a coherent and compelling learning journey will be the next step.

In trying to answer the question, 'how can expert practitioners in sustainability contribute to course development', my findings pointed to the need for a spirit of co-enquiry. A flexible and modular design whereby stakeholders can pose real-life challenges for the participants to tackle and there is the opportunity for all to be learners and contributors at different times.

My findings confirmed that an Appreciative Inquiry approach, bringing a range of stakeholders together to create compelling visions about the future, is an effective approach for change agents to use in creating momentum for change.

6.2 Recommendations to Forum's Senior Management Team

The context that Forum is now operating in is a' VUCA' (Volatile, Uncertain, Complex and Ambiguous) world. Much has changed in the 19 years since the Masters course was devised. The current course has been instrumental in launching future leaders into careers in sustainability. They are equipped as generalists with the ability to 'translate between sectors' and equipped with a personal toolkit of reflective and collaborative skills. The course itself and the alumni give Forum reputational capital to build on.

My research has shown that there is a need for a learning programme that will help change agents to implement systemic change from their base working within organisations. They need the skills to take their organisations on a change journey that involves influencing both internal and external contexts.

The change needed involves changing mind-sets, a key competency of sustainability educators, together with taking a holistic approach and envisioning change (UNECE 2011).

6.2.1 Recommendations

First, we need to strengthen the existing Masters programme by considering the more deliberate use of an action research approach to help students to identify, prioritise and apply their learning more effectively.

Second, we should be targeting the proposed programme at early career change agents in sustainability who are working in incumbent organisations but who are keen to collaborate externally in order to create change. They will already have a grounding in sustainability and be very aware of systemic challenges, and are therefore further along Forum's change curve than those on the Masters programme. This would be a way to help deliver Forum's vision and strategy.

We need to market test the feasibility of such a programme outlined below.

This should be followed by the development of a business model and funding and implementation plan to include marketing. It is recommended that a pilot course is planned for up to 25 participants from two or three different geographies that Forum is operating in.

6.2.2 Programme features

Aim and outcomes

The aim of the programme would be to give change agents the knowledge, skills, confidence and support to create and scale up pioneering practice. Such a programme would give them:

Skills to understand their own worldview and connect and communicate with others

To bring about system innovation, by its very nature involving the engagement of key stakeholders is dependent on skills of intense collaboration.

Skills to interpret and analyse the system

In order to understand how structural change comes about and how change is created socially and organisationally. To acquire the skills of a systems thinker and understand leverage points for change. To acquire skills in futures thinking.

Skills to create - innovation and design thinking

In order to understand the latest approaches and practices to innovation and design.

The programme would have the following design features:

- Flexibility through use of modular design.
- Cost effective by making the most of digital. It will use digital for theory and face-to-face group work for sharing experiences and practice. This will also permit scaling.
- Integration of theory, practice and workplace support.
- Learning located as close as possible to individuals' everyday

- experience. This implies some user-generated content and an element of self-organisation.
- Sufficient structure in design and teaching and learning strategies but allowing the content to be emergent.

Assessment

This would be linked to real life and impactful measures of success. It could take the form of practical proposals that are voted on by peers, or 'crowd source' type voting involving a wider constituency or the level of funding attracted by a proposal. Stakeholders who have posed real life challenges for the participants to tackle could assess to what extent the subsequent proposals address them.

Accreditation

Since the course would be modular, the more theoretical modules could be credit bearing. Credits could be accumulated towards a Certificate, Diploma or Masters. For UK or US participants it could take the form of certification towards Continual Professional Development.

Involving practitioners

The course should be considered a central point of learning and knowledge transfer in Forum with the different learning functions for staff and partner organisations reconfigured around it. The development of the Futures Centre could be an integral focus for this.

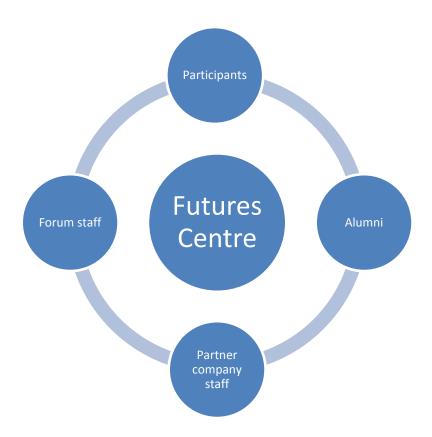


Figure 14 - Model based on the Futures Centre

A flexible and modular design would allow stakeholders to pose live challenges. This would allow different stakeholders to be both learners and contributors at different times. Communities of practice could form around particular aspects of enquiry and exist for the length of time necessary for the question to be answered. These could be formed around topics of interest. In this way Forum staff as well as Forum's partner organisations could have live involvement in the course.

Climate

A spirit of co-enquiry where all stakeholders are learning together to try and accelerate the change needed to address the big challenges of our age is what I have seen in embryo form and what I envisage to be our end goal.

I recognise the importance of congruity, ensuring that the learner experiences a similar learning experience, change journey and tools and approaches that they subsequently use in their work with others. The Appreciative Inquiry approach could be used for this reason.

Chapter 7 - Reflections

What has gone well?

A key outcome that I thought necessary from this research was more central ownership of a learning course by Forum. This has been achieved in that the Trustees and Senior Management team are now excited by the prospect and have allocated time, resources and a working group to develop it further. The future learning programme is now in the ownership of a wide cross-section of the organisation. The simultaneity principle of enquiry and change happening together worked in practice as did the congruity of this approach with Forum's own approach to change.

The challenge of my dual role of insider researcher and course director and the issue of the power relations never materialised as the pro-active measures I took such as appointing colleagues to conduct the student group interview, appeared to pre-empt this.

On a personal level I have read widely and increased my knowledge base immensely, for example with the seminal writings on ESD pedagogies. I would not have made time for this otherwise. It has led me to be more enquiring with an appetite for more in-depth enquiry in specific areas, such as behaviour change. I feel that I am moving up the learning levels and have reached the meta cognitive level whereby I am recognising and challenging my assumptions. I am a more skilled training practitioner as a result. My written communication skills have improved too.

What would I do differently next time?

I would work more collaboratively with others, in sharing ideas and asking for feedback and comments. I carried out most of the research and writing in my own time, and the structure of the Middlesex MProf, meant there were reduced opportunities for collaboration. In addition, I would have built in stages in the research to feed-back interim results to management to get their steers and any refocussing necessary.

How did I construct the problems I chose to focus on in the project?

I found it a challenge focussing on particular manageable objectives for the project. These objectives were narrowed down to the product of a course outline. However, the problem was still too broad and I didn't appreciate all the critical dependencies that hinged on assumptions at the time. In addition, the mapping of what constitutes a truly transformative process that change agents are empowered to use with others is really the core which did not get sufficient focus.

How well did the methods I chose help to solve them?

Using the Appreciative Inquiry approach worked well in engaging and enthusing participants; for example, it allowed ideas, however radical, to emerge and flow unfettered about future possibilities. The semi-structured interviews gave me a lot of rich and useful data to build on.

The focus groups didn't achieve as much as I had planned, with insufficient time to get into the Design phase. Piloting a focus group and getting feedback on the process was helpful. On reflection, I would have tried to engage one larger mixed cohort of representative stakeholders for all four stages of the Appreciative Inquiry process and conducted it over several meetings with time to build in reflection space between. In addition, I would have spent more time at the outset tuning participants in via futures thinking. I recognise that I didn't have 'all the voices in the room' and wonder if it had included representation from the Trustees they would have come and if so whether the change process would have happened more quickly. In summary, if I had been more confident and demanding of people's time and followed the Appreciative Inquiry process to the letter, the process might have worked even better!

What assumptions, values, goals and ways of working have affected my project and how?

I had made an assumption at the outset that the findings would result in the key target group for the programme remaining the same, not realising the potential for a number of different options. In addition, during the period of my research a number of certainties about higher education were thrown into question, with the rapid rise of the MOOC along with radical new models emerging from outside the sector

designed to develop social entrepreneurs, for example. Publications on the topic of education for sustainable development flourished over this period too: for example Marshall, Coleman and Reason (2011) and those such as Sterling (2012) and others commissioned by the Higher Education Academy.

Consequently, some of the fixed points that would have determined other elements of the programme were no longer there. The assumption about the target group led to dependencies in learning outcome and design that I had not anticipated.

What political and social aspects of my work situation have affected my project and in what ways?

Organisational priorities and budgets changed, so the focus and support was shifted elsewhere in the organisation. Moreover, I had several line managers over the period. Senior staff who had different ideas about the future course led to the directors commissioning an external review of the course, which I had not factored into my plan.

The challenge of creating space in both life and work was a considerable issue. The period of the research coincided with taking on caring roles and the subsequent loss of two close family members. This had not been foreseen at the time I embarked on the MProf and resulted in it being carried out over a more protracted period than planned.

What have I learnt about myself?

I have learnt that I very much enjoy wide ranging research and ideas generation as well as the practical application. I like to research as many options as possible before closing down into action. I can get absorbed by details and find it a challenge to stand back and look at patterns and get perspective. I am attracted to learning for myself that incorporates all the different 'ways of knowing'.

Coming from a more scientific academic background, I am still finding qualitative research a steep learning curve in being able to assess the validity of findings when there is little statistical rigour behind them. However, it has made me appreciate how much all research, both quantitative and qualitative, is influenced by the world view and assumptions of the researcher.

The disordering of ecological systems reflects a prior disorder in the thought, perception, imagination, intellectual properties, and loyalties inherent in the industrial mind. Ultimately then, the ecological crisis concerns how we think and the institutions that purport to shape and refine the capacity to think. (Orr 1994:2)

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Appendix 1 – Middlesex University Curriculum framework

Curriculum specification

Target audience
Aims of the programme
1 - 2
Aims of the programme The programme aims to:
1 - 2
1 - 2
1 - 2
1 - 2

Programme outcomes	
A. Knowledge and understanding On completion of this programme the successful student will have knowledge and understanding of :	Teaching/learning methods Students gain knowledge and understanding through Assessment methods Students' knowledge and understanding is assessed by
B. Cognitive (thinking) skills On completion of this programme the successful student will be able to:	Teaching/learning methods Students learn cognitive skills through Assessment methods Students' cognitive skills are assessed by
C. Practical skills On completion of the programme the successful student will be able to:	Teaching/learning methods Students learn practical skills through Assessment methods Students' practical skills are assessed by



Appendix 2 - Sample letter to potential respondents

August 2012

Jane Wilkinson Forum for the Future Ironmonger Row London EC1V 3QN

Dear Ben

Review of Forum for the Future's Masters programme in Leadership for Sustainable Development

I am writing to invite you to contribute to some key research with Forum for the Future.

The masters course is being reviewed in the light of our new strategic plan focussing on systems innovation.

The course has been successful over the 15 years it has been running, so we are taking an appreciative perspective to it, looking at what works and what the course of the future might look like, using collaborative research: http://en.wikipedia.org/wiki/Appreciative_inquiry.

In terms of time commitment, participation will involve a one to one interview initially of up to an hour, followed by up to two focus groups, lasting half a day each in order to give time to develop new ideas.

We think this is an exciting initiative which we very much hope you would like to be part of. If you are willing in principle, then I can send you more details

Yours sincerely

Jane Wilkinson Masters Course Director



Information form

The research is being conducted in order to develop a cutting edge course to prepare systemic change agents for sustainable development. This will include how a learning programme might be more adaptable to be rolled out internationally for different learners and also how it might become more central to Forum's organisational learning.

Findings from the research will be presented to Forum's directors. In addition, because this is such an interesting area, the findings will be written up as part of a research degree with Middlesex University.

Participants with different perspectives are being invited from the masters alumni, Forum staff, Forum partners/employers and current scholars.

The following principles will apply with the research:

- It is intended that the information you give will not be attributed to you personally, (unless you expressly agree to be quoted in the final report).
- · Confidentiality and anonymity will be maintained. Data in the final report will not be linked to you personally.
- Participation is entirely voluntary and you have the right to withdraw from the process at any time
- The products of the research will belong to Forum for the Future but can be used by anyone as long as they are acknowledged.

I have read the above and agree to participate

Name

Date 24.9.12 .

Appendix 3- Steps taken to overcome ethical issues

My intention was that by demonstrating principles of honesty, fairness, integrity through the following steps this would address the issue:

- Permission would be sought from the seven interviewees that themes emerging from the collated data would be shared with the wider group, thus addressing the attribution issues.
- The research was *with* rather than on subjects so the remainder reported as a collective response.
- The method was appropriate since the participants by nature of their role and background, were all highly educated adults with excellent communication skills. The design aimed to make best use of their time.
- No access to confidential records was required.
- Intellectual property was not be an issue since it is was a group process.
- Ownership of data was made clear through the informed consent letter.
- An undertaking was given about the confidentiality of both interviews and electronic data.

Appendix 4 - Research Plan

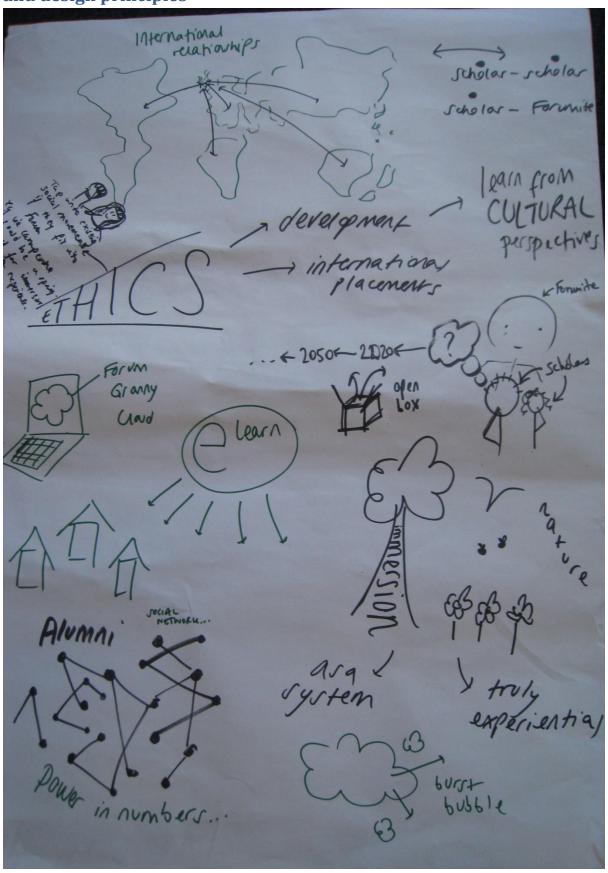
Aim	Objective	Data Collection Tool
To consider the	Conduct a review of the literature in order to	Desk research
course as being a	inform the development of questions, the	
central point of	final report and framework for	
learning and	recommendations	
knowledge transfer in	Develop data gathering tools in order to	Desk research to develop
the organisation to	formulate questions about the students'	Appreciative Inquiry questions
effectively prepare	experience, and understand their best	
change agents and	experiences along with aspirations of the	
leaders to bring about	different stakeholders.	
change in their own	Review feedback on the course from past	Desk research into Forum
context.	students.	course documents
	Carry out data collection with current	Semi-structured interviews x
To involve	students, staff, alumni and employers	7: 3 with individual staff, 2
practitioners and	through interviews. Initiate phase	with individual alumni, 1 with
learners in the co-		employer and 1 group-based
development of the		with the cohort of current
programme and		students.
learning about	Identifying key strands and powerful stories.	Transcribe interviews
systemic change.	Locate themes in the stories and select	
	focus from themes for further enquiry	
	Focus groups. Explore views from the	Focus groups x 3 with current
	range of stakeholders about strengths,	students, staff and
	opportunities, aspirations and desired	alumni/employers 10+ in size.
	results. Inquire phase.	
	Create strategic vision and prototype design	
	(imagine and innovate phases)	Record graphic outputs
		photographically. Written
		record.
	Analyse the data to extract the key features	Content analysis using open
	of course design	coding
	Select key themes for further research in	Desk research
	the literature	
	Map new insights onto the existing course	Desk research using Forum
	design	documents
	Write a report outlining the curriculum plan	Curriculum framework
	for Forum directors. Present findings to	
	colleagues.	
	Write up the research for Middlesex	
	university	
	<u> </u>	

Appendix 5 - Interview questions

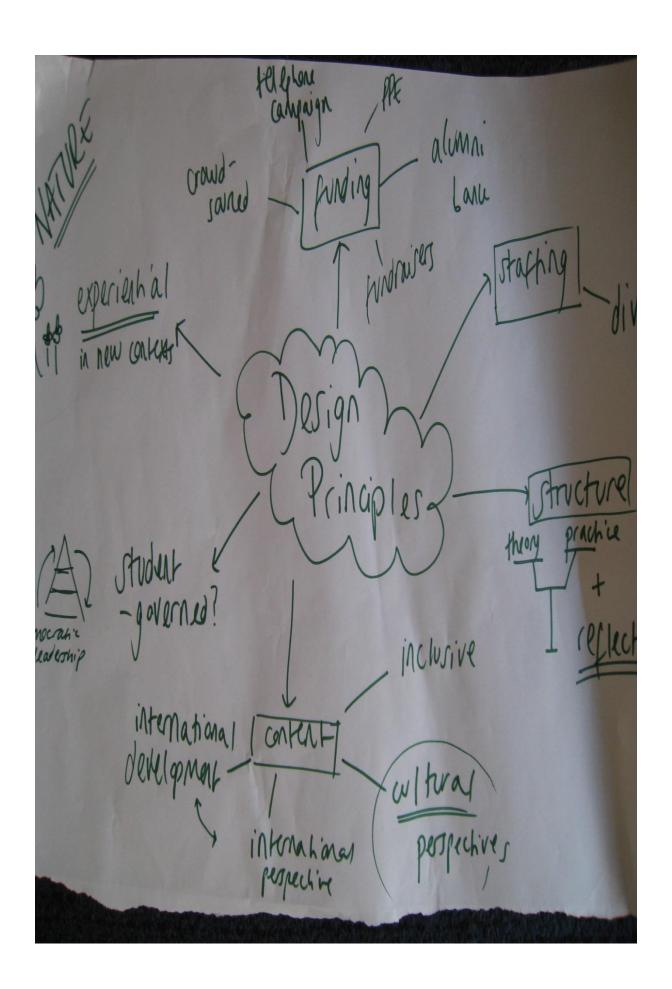
I am interested in your experience to feed into future development of the Masters programme.

- 1. What experience, training or learning do you think has equipped you to create change?
- 2. What is the most significant change you have brought about in the workplace and what processes and learning have helped you
- 3. What has equipped you to be a systems thinker
- 4. What has helped you develop as a leader for sustainability?
 - a. What prompts you to change the way you are doing things yourself?
- 5. In your mentoring and work with business leaders what do you see as the key attributes of those making change happen right now in organisations.
- 6. Taking into account the above, what do you think the existing masters does well?
- 7. If you had three wishes for enhancing the masters programme what might they be?
- 8. Thinking about a course that equips leaders to create change using SI and is more central to Forum's work and network. What do you think that course might look like?
- 9. The current findings are that key elements are being able to translate between sectors, understanding own strengths and weaknesses, the collaborative element and reflective practice. being ready to implement change.
- 10. What external opportunities could we tap into?
- 11. Are there any future trends we should be aware of?
- 12. Are there any other organisations that it might be useful to look at? Any sources of info that would be useful?

Appendix 6 – Sample photographic records of Focus groups visions and design principles







Appendix 7 - Strengths of current course

Aim

- A network of others who are inspiring and making change elsewhere
- A cross sectoral view, being able to translate between sectors
- Helping participants create change through understanding themselves, their own mind-set and values, how they relate others, their strengths and how they can impact on issues at hand
- Gaining an insight into how sustainability is embedded and practiced, through a mixture of theoretical and practical understanding
- Gaining a breadth of knowledge, tools and experience with which to build a cv and win work
- Transferring skills to a context beyond
- The confidence to question

Knowledge and Understanding

- Gaining an understanding of how unsustainable current systems and organisational models are
- Learning about the challenges and opportunities for SD from practitioners including inspiring individuals on placement
- Understanding how society works
- the philosophy and theory of social change
- Understanding the levers of change and how to pull them.

Skills

Reflective practice

It has helped me be more intentional about changes I want to make the skills I want to develop

- Facilitation
- Networking
- Public speaking
- Curiosity and challenging

Teaching and Learning

- Experiential learning
- Collaborative group work important for life. The group dynamic and cohesion reflects a systems approach and help live the values. Pushes interpersonal relationships.

Group learning was invaluable, like a multi-headed fast track into sustainability

- Feedback from peers
- Mutual understanding and the support network
- The autonomy and trust accorded to students during work placements

- · Lectures from experts in their field
- Designing and facilitating a student led event post placement
- Solution focussed lectures
- Leadership skills such as self-awareness taught by the experts at the Leadership Trust
- Simulating real world pressure
- The group project 'bookending' the journey
- Multi-dimensional nature of the course.
- Interface between theory and practice
- · Access to other sustainability professionals and networks
- Mentors

Placements

• Placements grounded in real world situations

Climate

- The link with Forum opened doors.
- Supportive environment and constant source of motivation
- Camaraderie and support from other scholars.
- Safe environment

Appendix 8 - How existing course could be enhanced

Teaching and Learning

- More formalised development of sustainability knowledge. Better building and sequencing of sessions
- More reinforcement or more connections between placements and theory to aid retention
- Deep debrief with Forum after each placement
- Build Leadership Trust module a core part of the programme
- Mechanisms to help students identify, prioritise and apply their learning
- Using action research methodology and applying it to research and essay writing
- More speakers who have created change themselves
- More workshop based, using tools and building scenarios
- Look at efficacy of placement. Part time? Some content delivered during placement. More work projects with solid outcomes
- Students embedded in Forum projects and to learn from Forum staff in similar way to placement
- Give strategic questions that they have to grapple with every few months.
 Present back to CEO
- Self-directed learning
- Digital as part of delivery a platform for reflection and collaboration

Curriculum

- Pilot the group projects (otherwise just theory)
- International placements
- External mentor
- Find a mentor post-graduation

Appendix 9 - Proposed curriculum elements

Target Audience

- 1. Those who are wanting to take pioneering practice to scale
- 2. Sustainability entrepreneurs to develop technological and commercial solutions
- 3. Mainstream experts such as economists, scientists and political thinkers

Programme Aims

- Cutting edge, experimental and strictly unique
- Creating a community of experiments
- Space to try out stuff and build real, tangible things
- Strategic system intervention deliberate and targeted
- Provide the context and challenge
- To create a network of friendly but ensconced practitioners
- Enabling people to create change and implement it within existing structures
- How to do change on a day to day basis
- · Getting solutions to scale
- Developing technical/commercial solutions
- Participants to have a clear plan of what they will do afterwards

Programme Outcomes

Knowledge and Understanding	Teaching and Learning Strategies
Sustainable Development	MOOC
Evidence and science behind the SD agenda	
Power and Influence	
 Understanding how the key centres of power function namely– Government, Business, Civil Society. Be able to translate between sectors. Understanding the anatomy of power. Politics and the means of influence 	
Understanding the international development agenda and levers for poverty reduction	
System Innovation	
 System change theory. Understanding systems, connections and blockages How to understand the whole picture Constantly learning about the system and how to be effective in it 	

How to make effective interventions by understanding patterns in the system Consider different time scales, long and short term • Identify connections between different parts of the system Engage different perspectives Recognise the role of models How to apply systems innovation in the workplace and how to translate it into everyday language. Examples of systems innovation **Ethics and Values** What it means to shift mainstream values from self-assertive to valuative and inherent value of non-human life. recognition of all living beings are members of ecological communities bound together in networks of interdependencies Behaviour change Latest understanding of how people change – psychology and neuroscience Behavioural economics How change is created socially and organisationally How structural change comes about. How change is created through leadership How to do change on a day to day basis **Technology** Understanding technology and what it can do through both course content and delivery methods Science and Ecology – Focus on small and large scale changes and associated impacts. Good understanding on how to apply tools such as the Five Capitals model and the Natural Step. Present a set of accounts for each capital and flows from these. Links to economics. Innovation and Design. Action Role of design and design thinking in solving sustainability Research challenges Eco-design – biological or technical nutrients. Biomimicry. How would nature do that? 'Try to analysis and imitate biological structures and processes at the micro-level of biochemistry and molecular biology, sometimes even at the nano-level of individual atoms and molecules' (Capra and Luisi 2014:450) Understand the innovation process. Open innovation

Management of innovation as a discipline
The relevant of resilience to innovation – theoretical and applied exploration.
Opportunities and barriers to innovation in institutions.
How to address complexity
Research process – the role of ethnographic research and using end users in designing system change.

practice works and the art of generative discussions.
Understand themselves and where they are coming from.

Skills (cognitive, practical and personal) Group learning journey. Learning skills Listening skills Group cohesion Empathy reflects Reflection – deep personal and group systems How to maintain reflective practice in the workplace approach and Influencing strategies lives the Negotiation – ability to articulate an end game that people values can relate to Facilitation – bringing groups to agreement. Remote facilitation Nurturing the desire and ability to focus and continually question everything Skills in intense collaboration and how a community of

Professional skills	Seminars
 Futures techniques Action research methodology Applying systems thinking – lots of practice so have confidence to hit the ground running Creative thinking Budgeting 	Real life projects
Forum's knowledge transfer	
 Make more of Forum's work explicit such as sustainable business models Look at each stage in the supply chain 	

Teaching and Learning

- Mechanisms to help students identify, prioritise and apply their learning.
- Safe container of the group

Skilled at reflective practice

Able to monitor change in themselvesSkills of enquiry – Action Research

- Blended
- Piggy back on lecture series

- Take advantage of digital online such as Newscorp
- Have students responsible for designing and delivering an alumni gathering.

Assessment

- If required, through voting by 'client' group real life measures
- Peer assessment

Overall structure

- All stakeholders are involved as content contributors, mentors, posers of challenges, clients, mentors, sounding board etc. Alumni 'locator pin' so can be contacted wherever they are geographically/job role
- Enabler placements for Forum in the future such as technology
- Cohort and cross cohort projects. Food cohort, Energy cohort, Innovations cohort, Scalers cohort
- Client project with Forum as client
- A dedicated learning and collaboration space

Climate created in interacting with the students

- Shared understanding of goals, drivers and direction. Good collaboration in a more porous Forum
- Learners dictate content
- Students as peers
- Course leaders as curators/facilitators/peers/fellow learners