What constitutes significant change in reforming schools?

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What constitutes significant change in reforming schools?

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Abstract

The *Most Significant Change* (MSC) Process was developed by Rick Davies for use in the evaluation of a social development program in Bangladesh (Davies, 1996). It also goes under several other names such as 'the Evolutionary Approach to Organisational Learning', 'the Narrative Approach' and also 'the Story Approach' (Dart, Drysdale, Cole & Saddington, 2000). In South Australia a large school reform initiative entitled Learning to Learn has been using the MSC process as a vehicle for reflecting on and developing participants' understandings of what constitutes significant change in an education setting. The process involved participants writing stories about what they perceived to be *significant change* as a result of involvement in the project, and then engaging in a process of discussion and selection to identify those stories that were considered to be most illustrative of significant change. The process and initial insights have been described elsewhere (Le Cornu, Peters, Foster, Barratt & Mellowship, 2003). This paper reports on the findings from a secondary analysis which was conducted on the stories to reveal participants' perceptions of what constitutes *significant change* in reforming schools.

Introduction

Since 1999, the South Australian Department of Education and Children's Services has provided funding for over 150 educational sites, from pre-school to year 12, to participate in a program of education renewal through involvement in the Learning to Learn (L2L) Initiative. The broad objectives of the Initiative are described as:

- Building our capacity to challenge 19th-20th century constructions of schooling and their underlying assumptions, worldviews and structures;
- Developing the knowledge base and a culture of inquiry in Learning to Learn sites, Learning Outcomes and Curriculum Group and the wider system by providing opportunities for participants to connect to and analyse the latest research on learning and curriculum;
- Reconnecting teachers and leaders to their vocation to create new partnerships in policy development that prioritises their voices and experiences. (DECS, 2004)

Schools in the Initiative receive funding to send school leaders and groups of teachers to a Core Learning Program which draws on the expertise of educational theorists from Australia and overseas. These experiences provide the stimulus for site wide programs aimed at transformation of the local learning environment for students and teachers. Principals and designated change leaders in each site, project managers, Departmental Curriculum officers and university colleagues attached to the Initiative meet together regularly in Learning Circles, each encompassing between 6-8 of the sites involved in the Initiative. The purpose of the Learning Circles is to provide the opportunity for participants to reflect on and share their insights, tensions, concerns, dilemmas and questions as leaders of the change process, and to grow their understanding of the process. A number of the Learning Circles have been using the Most Significant Change Process (Davies, 1996) as a vehicle for reflecting on and developing participants' understandings of what constitutes significant change in an education setting.

Overview of the Most Significant Change (MSC) Process
The MSC Process was developed by Rick Davies for use in the evaluation of a social development program in Bangladesh (Davies, 1996). It has continued to be used by many international development organisations (Dart & Davies, 2003). It is an evolutionary 'dialogical, story-based technique' that was designed as an alternative to the 'conventional monitoring against quantitative indicators' that typifies many evaluation instruments (Dart and Davies, 2003, pp 137-138). The process engages participants in writing stories of *significant change* followed by dialogue about groups of stories in order to select those stories that are perceived to be most indicative of significant changes. According to Dart and Davies (2003) this technique is 'conceived as a form of dynamic values inquiry whereby designated groups of stakeholders continuously search for the significant program outcomes and then deliberate on the value of these outcomes' (p. 140).

Along with a range of other data collection techniques, it was decided to trial the use of the MSC Process in Learning Circles as both a means of collecting rich, qualitative data, but also as a means of supporting participants to clarify their personal values about significant change and develop individual and shared understandings about the indicators of significant change. The process and initial insights, including the value of MSC as a learning tool for all of the educators involved in the Learning Circles, have been described elsewhere (Le Cornu, Peters, Foster, Barratt & Mellowship, 2003). This paper reports on the findings from a secondary analysis which was conducted on the MSC stories by the Project Manager (Foster), Project Officers (Barratt and Stratfold) and university colleagues (Le Cornu and Peters).

Methodology – Data collection and data analysis processes
A decision was made to limit the data to the *significant change* stories produced by three of the Learning Circles in 2003. There were two rounds of stories conducted in this time and so given that each Learning Circle had approximately 15-20 regular participants, the data for this study comes from approximately 100 stories. In the first round of stories, participants were invited to write a story about significant change, as a result of their involvement in Learning to Learn – using a one page proforma with two key questions: 'What happened?'; and 'Why do you think this is a significant change?' In the second round, the proforma was modified to include the question: 'How do you know that this has made a difference (What evidence do you have)?' Participants were also invited to write their stories about one of the following domains of change (which had been identified as being congruent with system priorities): student engagement, teacher/leadership engagement, whole school reform, student outcomes and classroom pedagogy.

The stories have been analysed at two levels. The first level was based on the first round of stories and occurred during Learning Circles where a variety of processes were used to enable participants to engage in both individual and group data analysis procedures. These processes and findings have been described elsewhere (Le Cornu et al, 2003) but as a result of having to establish domains of change (loose categories of change used to

distinguish different kinds of stories) and then having to select the one most illustrative of significant change in each domain, most participants felt that they had enhanced their learning about what they and others value as significant change in schools.

The second level of analysis has been conducted by the Project Manager, Project Officers and university colleagues. The secondary analysis involves the examination, classification and analysis of the content (or themes) across a set of Significant Change stories (Dart et al, 2005). Two meetings of the analysis team occurred where it was decided to apply an analytical framework to the stories rather than to engage in thematic coding of the stories. The framework derived from the insights gained as a result of the first level of analysis of the stories and from other L2L data to date. The process of designing the framework was not easy. It involved extensive dialogue around the various terms to ensure common understandings and trial applications of the framework to two of the stories, each followed by more dialogue and modification of the framework. Finally, the set of stories was divided up between the five team members with each individually coding their own set. These coded stories were then given to one of the group members who reviewed them and collated them under the respective categories.

The final framework had four main categories of change, each with a set of sub-categories:
A. Conditions (physical resources, activities/processes, people/relationships, perceived need for change and problematic conditions);
B. Worldview (teachers' thinking and feelings);
C. Practice (classroom, sub-school, school and community) and
D. Outcomes (student engagement and well-being, student achievement, teacher revitalization and system wide change).

Findings
The findings of the secondary analysis are presented under the four main categories; conditions, worldview, practice and outcomes.

A. Conditions
There were five sub-categories in this section including: physical resources, activities/processes, people/relationships, perceived need for change and problematic conditions.

A. 1 Physical resources
It was clear from the stories that the funding associated with L2L has played a significant role in enabling the change process. A degree of funding is needed to sustain the following aspects of L2L: attendance of staff at the Core Learning Program and retreats (three day experiences), release time for staff at the school level to engage in local learning teams, establishment of new initiatives at the school level and school-based staff development with L2L colleagues as well as attendance at Learning Circles.

In regard to the attendance at the Core Learning Program, schools in L2L are encouraged to send school groups along rather than individuals so that maximum benefit is gained.

This has financial implications for a school budget but the effects can be worth it, as described by this school leader:

> *When I promoted the opportunity with all staff, Ms X was keen to take up the offer to engage with Julia Atkin for a 6 day program called 'Teaching for Effective Learning'. In all a team of 9 staff, including Ms X, attended…ouch the $$$$ cost..but wow, what an impact!...While traveling home with another participant and sharing how wonderful the program was, Ms X confided, "I think the problem might be me", what a brave admission…She was beginning to see that by changing the way she thought and operated, by changing her beliefs and actions, she could achieve the improvements she wanted. (secondary principal, Nov. '03)*

Releasing staff from their teaching duties to engage in follow up learning to the Core Learning Program also has financial implications for school leadership, but again is considered an essential aspect of L2L as explained by another school leader:

> *Quality time is required for staff to construct and challenge their thinking about the process of learning itself…One structure that has been significant for staff learning has been the release for two hours over several weeks of across band learning teams with five staff to engage more deeply about learning (in relation to an aspect of the Core Learning Program). (primary deputy principal, Sept. '03)*

One of the university colleagues reflected on the importance of these elements in her story:

> *It seems to me that what Learning to Learn has done is produce a model of professional development that combines the stimulus and challenge of the theories of outside experts with ongoing opportunities for educators to interpret and critique these ideas collaboratively in their own settings, as they try to optimise learning opportunities for themselves and their students.*

Learning Circles are another structure which required funded release for some participants. These too have proven to be a central element of Learning to Learn and highlight the importance of learning over a sustained period of time (ie 3 years).

A.2 Processes/activities and A. 3 People/relationships

The stories revealed that interactions with other people, and the inherent relationships and processes, are important conditions for significant learning and change. The Core Learning Program involves a range of local, national and international educators who have contributed their work and understandings through extensive workshops, conferences, articles and online chat sessions. The way in which the Core Learning Program is offered and the presenters themselves had a significant impact on the L2L participants. All Core Learning sessions run over a minimum of two days and schools are encouraged to send along a minimum of four staff each time. These factors enable time for processing of ideas and dialogue with colleagues, both considered necessary

when people are having their thinking challenged and trying to make new meanings. Moreover, participants appeared to appreciate how the educators engaged with them and modelled the processes they were talking about. The presenters shared their thinking and helped participants to look at themselves as learners. References that were made to various presenters included comments like *"there's an obvious valuing of people and their experiences"* and *"she (Julia Atkin) listens to people with an open lens"*. The Project Manager summarized her view when she wrote, *"…it's about the learner being invited into learning again and "re-engaging" as an active participant rather than in passive acquisitional mode"*.

Many of the stories contained illustrations of how the particular processes and activities that were introduced to participants were then translated into classrooms. For example:

> *I came away from Tony Buzan wanting to give mind maps a go…I tried it with my year 10 Geography students to develop a mind map of mangrove ecosystems and their sustainable use, which was then used to develop an essay. The results were impressive as a way of summarizing and essay planning. (secondary teacher, Nov. '03)*

Finally, Learning to Learn does not involve a one off attendance at something – there are many offerings in the Core Learning Program. People have time and space to engage with new ideas and thinking, they have opportunities to revisit and re-engage with theories and ideas and they have access to a range of presenters. An interesting insight that has emerged is that there are varied responses to most presenters – for some people one presenter might provide the catalyst or that tangible link, while for others, it might not be challenging at all. Similarly people had differing responses when they engaged with ideas. The following extract illustrates these points;

> *Throughout my involvement in L2L up to this point I had also heard a lot about Brain Theory but had not really engaged with it. I also had a lot of ideas roaming around my head that were fairly separate from each other. I needed a catalyst to help gel the ideas together and to make links between what I had been learning. My most significant learning came from 6 days with Julia Aitkin learning about 'Teaching for Effective Learning'. (primary teacher, Sept. '03)*

Hence as noted by at least one leader in his story, *"multiple entry points are needed"* (primary principal, Sept. '03).

A.4 Perceived need for change
Many of the early MSC stories reported on a 'critical moment' in participants' learning which had been prompted by the Core Learning program. As they engaged with new ways of thinking and came to appreciate that a change in headset was required, they could see also that the change needed to start with themselves. Participants came to appreciate the influence that their worldviews had on their thinking and how their current views were, in some cases, constraining their capacities for change. These realizations are exemplified in the following extract from one of the project officers who had been

involved in some earlier school reform work (and had indeed read about some of the ideas presented in L2L but had not engaged with them at the time);

> *I realized that the only thing I could work on with any confidence was me: it was my head that was getting in the way of thinking freshly about this dilemma. This time the readings hit the mark and I made some sudden insights into how my world view was shaping my capacity to see a situation clearly.*

The need to look inwards and to become aware of one's own personal lens is reinforced by this leader's comment on some of his staff members' reactions to what they were learning; "*World views are being challenged and even some of those most resistant to change, those who tend to externalize problems and challenges, are beginning to look inwards*" *(secondary principal, Nov. '03)*. One of the teachers from the same school commented simply in his story that "*Much soul searching is needed: and happens*" *(secondary teacher)*. As participants embraced the idea of focusing on themselves, there appeared also to be a shifting of teachers' identity from deliverers to learners.

A.5 Problematic conditions

Not all stories focused on positive aspects of change. One person called his story, *Where are the zealots?* and within it described how it was only possible for some staff to be involved in L2L, given school timetables, full teaching loads and so on. Hence he described the situation where those who could be involved "*are instantly branded zealots and are undoubtedly, viewed with suspicion by many others who share their spaces but not their ideals*". He then noted that a number of the staff could see "*little difference*" as a result of the school's involvement in L2L and indeed, for some, there was quite a cynical attitude as indicated in the following statement: "*Isn't it just a matter of calling things by different names? I've been around a lot of this stuff on and off for years*" *(secondary teacher)*.

This issue of polarization was evident in a number of the stories, as indicated in the following extract which tried to capture a school's early involvement in L2L:

> *...But as the list of staff who attended the workshops with renowned educators grew, so did the bored or rudely smug looks on the faces of a number of teachers at staff meetings designed to share the information. At the same time the enthusiasm of those who attended waned and while they may have applied what they learned in their own classrooms it didn't permeate the whole school as we all would have hoped. (primary teacher)*

The L2L language emerged in some stories as problematic. A number of teachers and leaders commented on "*the rhetoric*" of L2L and how in fact the language of learning and constructivism could be appropriated without matching changes in practices. As one leader said, "*Authenticity is everything and it wasn't there*" (primary co-ordinator, Sept. '03).

Even when the issue was not one of polarization, there was evidence in some of the stories that a disruption to the status quo had a destabilising effect for some staff. In developing a learning community, conflicts and challenges emerge as people attempt to work through the tensions and paradoxes of learning and coping with ambiguity and uncertainty rather than certainty. Moreover, in the processes of deconstruction and co-construction, there are many opportunities to disrupt people's safety and their taken for granted views of the world. This can have a most unsettling affect on a staff, as depicted in the following extract;

> *Initially many teams experienced considerable difficulties. It was very challenging for some to focus on learning and this disturbed the collaborative equilibrium that previously existed in P.D. For example one learning team experienced considerable conflict and felt most uncomfortable during the first session as two members found it virtually impossible to talk about learning. (primary deputy principal, Sept. '03)*

Finally, staff changeover, a problematic condition for change in any school, featured as a negative factor in some stories. The impact that this has on school culture can be immense as depicted in the following:

> *In 2003 there was significant staff change…and the organizational resiliency wavered. This was evidenced by less energy and willingness to engage in (and previously agreed upon) whole school initiatives eg Learning Circles… (primary principal, Sept. '03)*

B. Changes in worldview
Many stories, particularly in the first round, focused very much on change at the level of personal thinking/understandings. These stories also highlighted the role of emotions in these changes and in particular, teachers' feelings of discomfort.

<u>B. 1 Teachers' thinking</u>
Many stories highlighted changes in the learning culture conditions in sites. Stories were written about *'valuing teacher talk"* and *"giving people time to talk to each other about their own learning"*. Leaders wrote about *"staff learning teams"* and *"conditions for deep learning"*. Key words which seemed to appear over and over in the stories were *"critically reflecting"* and *"questioning"* as well as *"trust"* and *"relationships"* as participants in L2L became engaged as learners and developed their capacity to articulate their learning. One teacher captured the impact of this when she wrote;

> *I understand on a much deeper level now that there are times when you need to change your opinion according to evidence and not hang on to ideas simply because you believe them, that listening, talking and reflecting are the most valuable activities you can ever be part of. (primary teacher)*

The Core Learning program prompted an epistemological shift for many as they embraced the notion of knowledge as constructed and contextual. This was in sharp contrast to their previously held view of knowledge as "a given". As one teacher wrote, *"…the new information and knowledge has…challenged our old paradigm of learning and (caused us) to view learning from a more powerful and inclusive way"*. Big shifts in

thinking were recorded in a number of the stories as teachers and leaders came to value the complexity of the learning process and how it is grounded in each individual's own engagement with the world. As one teacher wrote, *"We do not readily move from what we know. We make judgements based on our experience" (secondary teacher).*

Participants' stories also reflected changes in attitudes towards themselves as learners and the learning process, as illustrated in this extract:

> *The notion that we are all learners, that risk taking is valued and encouraged, that it is OK to make a mistake and that a degree of discomfort in our learning actually provides for active learning. (primary principal, Sept. '03)*

Other changes in teachers' thinking that were illustrated in the stories include the notion that it is okay not to have all the answers and to take time to engage with ideas. A curriculum policy officer for example, wrote, *"I was struck by the revelation that it is powerful to be in a state of unknowing".* A common theme in the stories was the length of time that was needed (ie 12-18 months) for teachers to engage with the new ideas and to critically reflect on their beliefs, values and underlying assumptions which ultimately led to changes in their thinking. A related theme was that dissonance in people's thinking needed to happen first before changes in practices and outcomes. Teachers and leaders alike often referred to the L2L adage that effective learning can only occur *"when the hearts and minds are involved"* and this seemed to occur as a result of the new and challenging thinking to which they were exposed.

It was evident in the stories that the changes in teachers' thinking were not limited to just one area but that new thinking and new understandings re-positioned so much of what they knew (or thought they knew). New insights highlighted the need for people to rethink their views and assumptions in relation to many areas including teaching and learning, leadership, professional development and the change process itself, as indicated in the following extracts;

> *…I have grown to understand the impact of poverty on thinking and the impact of thinking on student engagement. I have learned how society empowers the powerful and what our role is in perpetuating this. And I have discovered that it can be changed by rethinking our notions of student voice, of community ownership, of listening to students and trusting them. (primary principal, April, '03)*

and;

> *I am now more concerned with professional development experiences in which teachers are active participants in the co-construction of meaning (involving a lot of thinking) about an educational aspect, rather than recipients of the wisdom of others. I use this headset in the collaborative design of PD programs and workshops and the delivery of PD. (secondary teacher)*

B. 2 Teachers' feelings

The stories also highlighted the emotional dimension of change and captured both the positive and negative aspects. L2L participants wrote about their feelings of excitement and inspiration but they also reported feeling anxious and confused at times. One leader captured the whole gamut of feelings when she wrote:

> *Having decided to apply to journey into Learning to Learn, the staff knew that the road was not likely to be linear and smooth with a final destination. Personal experience of this journey was exciting for some, uncomfortable and the cause of anxiety for others. (primary principal)*

At a personal level there were often feelings of discomfort associated with worrying about an idea or worldview, a process which one person described as *"mental wrestling".* One example of this was in regard to the notion of 'letting go of control', a concept which L2L participants need to embrace, if they are serious about engaging with L2L's view of teacher as learner rather than teacher as knower. A number of teachers commented on how hard it was for them to do this as it meant that they had to change some of their previously held assumptions about the role of the teacher. As one teacher wrote; *"I still have some way to go. I still feel I need to be in charge"* (*primary teacher,* Sept. '03). The Project Manager reinforced the difficulty of 'letting go' in her story. She wrote about *"the illusion of control"* and how *" it is so tightly woven into western thought".* She also hinted at the emotional dimension when she wrote; *"This is such a hard construct to let go of – such a frightening prospect".*

There were also feelings of discomfort expressed by teachers in regard to changing their classroom practices. One teacher recalled how she had felt *"crestfallen and angry"* when she started to make some changes. She continued to capture the emotional nature of the journey when she wrote, *"It was with trepidation that I persevered…."* (secondary teacher). This particular teacher also captured how hard some students find it to engage in different ways of doing things when she wrote:

> *It was difficult to get the students to work in their new groups. They looked so uncomfortable and their conversations were stilted. They were angry about the idea of having to work with students who didn't share the same approach to their learning. They challenged me about the value of such an exercise.*

Perhaps the paradoxical nature of the emotional journey can best be summed up in the following comment by a leader: *"Bumpy yes, messy yes, exciting yes, scary yes, but most of us wouldn't get off the ride!" (primary principal).*

C. Changes in practice

Many stories, particularly in round two, reported on changes to practice – in the classroom and also at a wider sub-school and school level. Although we also had 'community' as a category, there were not any stories to date that focused on significant change in that domain.

C. 1 Classroom
The classroom stories encapsulated changes in pedagogy relating to increasing student participation in their own learning. For example, one teacher explained that her involvement in L2L *"has made a difference to the types of tasks I set my year 12s"* (secondary teacher) while another said how much it made a difference to how she listens to children;

> *If I truly believe that students are capable of initiating and managing their own learning then I have to learn to truly listen to them…give them time to work out what they want to say, how they will say it and allow them the time to finish…and not to use my position of power to impose what I believe they should be learning and thinking. (primary teacher)*

Another story was written by a school resource teacher who highlighted the following about *"an extremely rich learning culture"* she had seen develop in one teacher's classroom over the previous 18 months:

> *This manifested itself in a variety of ways….They (the students) were employed in shared social inquiry and were working collaboratively and cooperatively to achieve the task… The teacher was using constructivist feedback language, 'Let me tell you what I saw happen'.*

An underlying theme in the stories about classroom change was that teachers appeared to be encouraged and supported to trial changes in their classrooms at a level at which they felt comfortable. One leader included the following observations or *"discoveries"* as he called them in his story*; "we are experimenting more successfully with constructivist methodologies"* and *"we are appreciating that there is no one right way"* (*primary principal).*

C.2 Sub-school and C.3 Whole school
There were many stories which were written about changes to sub-schools or to the whole school. This is not surprising given that many participants in the Learning Circles held leadership positions in their schools and so were focusing on whole school change. One story was told about *"fundamental changes in the way teaching and learning happen in our Middle School"* which included changes in how the day was structured, the use of personal learning logs and thinking and learning styles, incorporating more music into the program and having all year 6/7 students attend a one day 'brain learning' workshop. And another example was provided by a secondary principal who described how for the year 9s at her school *"traditional boundaries in the so-called traditional subjects are being removed"* and *"teachers are developing courses where students will have the opportunity to really determine the content and nature of the learning".*

Many early stories attempted to capture the whole school's learning journey by explaining changes to both structures and culture. In their transformational efforts, schools focused on changing structures and cultures in ways that might improve student engagement, success and relationships. Consequently there were reports of particular programs or processes being implemented across the whole school eg Bully Audits, reading programs, management of resources, etc. The most common changed whole

school structure for staff, as mentioned earlier, was in relation to how teacher learning was facilitated at the school level and the introduction of learning teams or site based learning circles.   Various other local professional development opportunities were also described including in one school, the idea of a "Learning Circuit" to showcase various L2L 'inputs' where staff who had attended some Core Learning "gave back to the rest of the staff".

D. Changes in outcomes

Although four sub categories were identified in our original analytic framework, including student engagement and well-being, student achievement, teacher revitalization and system wide change, there were no stories to date in the last category, that of system wide change.

D. 1 Student engagement and well-being

Many of the stories indicated that as teachers implemented different L2L processes and practices in their classrooms, there was an increase in the level of engagement and well being for students. Such enhanced engagement is illustrated in the following extract;

> *The students are excited, actively engaged with the tasks and are asking clarifying questions about their learning eg What does this mean? And Why does this happen when I…The most significant change has been the active engagement of students of a lower academic ability. Their ability to be involved at their level to complete tasks has been very important to their self esteem. (secondary teacher)*

After writing some MSC stories themselves, a number of the participants in Learning Circles involved their students in the process and so perhaps the most illustrative stories of changes in student engagement and well-being are from the students themselves. The following extract is from a primary student's story;

> *…I feel very comfortable and confident with the way my learning is going now… I feel that I am more in control of what I learn… I like the way I am trusted to use the phone, computers, photocopiers and cameras for my learning plans…I feel that I take more responsibility for my learning. (Year 5 student, '03).*

And this one is from a secondary student;

> *I think that the most significant change in me since I have been introduced to the L2L program is that I'm more conscious of myself as a learner…I have even started to notice that I pick out Habits of Mind in everyday tasks…I think that the L2L stuff that we have been exposed to is excellent. (Year 10 student)*

These extracts from both the teachers' and students' stories exemplify how the students are experiencing their learning differently – feeling more in control, being able to challenge themselves and taking more responsibility.

Another indicator of student engagement which appeared in a number of stories was a reduction in behaviour management issues. For example, one primary principal reported that in the numbers of total time outs (classroom and yard) for each year level in 2002 and 2003, there were marked decreases for each of the primary year levels, with Year 7 showing the greatest decrease, from 280 to 96. In another story, a leader used students' written reports as the measuring stick; *"Anecdotal records of student conflict by evidence of Trouble Trackers, a written account of student conflict resolution has decreased in the number of incidents"* (*primary principal*).

D.2 Student achievement

If students are more engaged in their learning, one might anticipate improved learning outcomes. This was certainly the case as reported in a number of stories. Whilst it is difficult to demonstrate a change in student academic achievement from an MSC story, a number of leaders incorporated quantitative data in the section 'How do you know that this has made a difference?' These stories provided statistical data that support claims for enhanced student achievement. One leader for example, in her story about building student engagement, highlighted a total turnaround for one of her middle school students, 'Jackson'. Jackson changed from someone who *"argued with most adults, disrupted classes and (frequented) Lunchtime 'timeout's"* to *"someone who today is mostly polite, generally involved in school and a keen volunteer"*. He also *"progressed in reading by 2.5 years in less than 12 months"* (primary principal). This leader also had literacy data to demonstrate improvements in another 40 students' reading achievements.

Another teacher wrote about how one of her Year 12 English students explicitly thought about his Four Thinking Selves as he wrote his Reading Folio and as a consequence wrote *"8000 words that were testament to his ability to analyse, empathise, infer and plan"*. She also included the fact that he received a *"perfect score"* in his final year English exam. A leader of a small rural school was able to report improvements in literacy for children with cultural differences and for children with disabilities, as a result of a whole school approach to Social Inclusion.

There were also stories about improved student achievement in other areas other than the traditional academic outcomes such as the development of meta-cognitive skills and students' ability to self assess their learning. A school resource teacher recorded these observations;

> *They (the students) were writing on the board using cognitive language from our school developed tools of a literate learning community… These students also build and use assessment and evaluation tools such as rubrics…*

D.3 Teacher revitalization

There is no doubt that many of the stories contained elements which indicated a heightened level of teacher revitalization. One of the indicators appears to be the involvement of staff in their own learning. Comments such as *"staff are focusing on their own learning and transferring this understanding to that of student learners"* (*primary*

deputy principal) and *"all teachers are willing to share their practice and have it critically examined"* (*primary principal*) appear in many of the stories about teacher engagement.

Another indicator appears to be in the nature of 'teacher talk' that is occurring at the school. One leader described the following situation at his school:

> *There is a measurable increase in staff talking about, and debating teaching and learning and professional development. A 'measurable' shift from complaining, blaming and dissatisfaction and wanting more punitive Student Behaviour Management, to engagement in thinking and dialogue about pedagogy, curriculum and structures. (secondary principal)*

Some of the most convincing examples of changes to teachers' levels of engagement are in their self-reporting. Here is one such example:

> *I have rediscovered the joy of learning new things and now experience the sense of empowerment that has given me. Never before have I felt so confident about listening into, thinking about and contributing to the professional dialogue that I can be a part of at school" (secondary teacher)*

Teachers' stories illustrated both the personal and professional power that come with enhanced teacher learning. These teachers appear to have a greater sense of agency as a result of their involvement in L2L and a willingness to take risks and make a contribution beyond their own classrooms. The importance of teachers contributing to the whole school and not only to the groups of students whom they teach was recognized by at least one leader when he wrote;

> *Large scale change cannot be achieved if teachers identify only with their own classrooms, and are not similarly concerned with the success of other teachers and the whole school. (primary principal)*

Discussion
The secondary analysis of the stories has revealed participants' perceptions about *what* constitutes significant change in reforming schools as well as *how* significant change can occur. Both teachers and leaders identified changes to conditions, worldviews, practices and outcomes as being significant. It is clear that as well as demonstrable changes in practices and outcomes, which one might argue would be expected of any large reform project, these stories have highlighted another set of significant changes which related to the teachers and leaders themselves as learners. These include changes in their worldviews and in the learning conditions available to them. It is the reporting of these changes which illuminate *how* the significant changes occurred in practices and outcomes. We argue that the stories have affirmed the power of *reculturing for learning*. We know from the literature that reculturing is the bedrock of sustainable redesign. Fullan (2002) for example, wrote:

> Reculturing is the name of the game. Much change is structural and superficial. Transforming culture – changing what people in the

organization value and how they work together to accomplish it –
leads to deep, lasting change…never a checklist, always complexity.
There is no step-by-step shortcut to transformation; it involves the
hard, day-to-day work of reculturing. (p. 18)

However, what these stories have highlighted, is the significance of putting *teacher learning* at the centre of the reculturing process.

L2L from the outset targeted teacher learning. The designers set out to deliberately change the *learning conditions* for participants by providing the overall Core Learning Program and Learning Circles for leaders and supporting redesign initiatives which focused on developing site learning cultures. The focus was not on quick changes to practice but rather on a longer term process of educational redesign informed by new understandings about learning and learners. There was an explicit commitment to "immersion", or "going deeply to increase the chance of transformational change", and to "providing a range of learning experiences that re-engaged educators" (DECS, 2004, p. 25). These two elements, *immersion* and *engagement* appear to have been crucial to the successful outcomes of L2L as reported by the participants themselves. It is these themes that will be elaborated on in this discussion.

Immersion
The stories revealed that participants in L2L were immersed in new learning which was provided, at least initially, by the Core Learning Program. The Core Learning Program invited teachers and leaders to fundamentally reconsider their roles as educators. It focused on learning and thinking about learning and participants were invited to engage with the ideas and arguments of leading scholars around the need to reinvent schooling. Stephanie Pace Marshall, for example, was influential in this thinking when she coherently argued;

The educational contract for 19th century schooling was designed to
produce workers and citizens who would advance the economy by
following the rules of the machine-and factory-driven production, but
the educational covenant for the 21st century mind must be grounded
in an agenda that is decidedly different…To pull this off, (schools) for
the 21st century must reinvent two things: our institutions and
ourselves. (1995, p. 8)

Participants were involved in identifying and analysing the often invisible and embedded limitations of traditional schooling. They were also immersed in the exploration of "big picture questions" such as, "What difference, in what kind of world and for what reasons?" According to Hargreaves (2003), "These are the issues that count in today's high stakes, high risk knowledge society" (p. 6).

The Core Learning Program also invited participants to explore their epistemological stance. Here again, Stephanie Pace Marshall's explanations are most helpful when she compares the old/current story of learning with the new story of learning. According to

Pace Marshall (2000) the old story is grounded in an epistemology that honors the objectively verifiable, the analytical and the experimental and produced a culture of acquisition, independence and competition. The new story is grounded in an epistemology that affirms integrative ways of knowing and believes meaning and connections are constructed by the learner. The new way produces a culture of inquiry, interdependence and collaboration. Participants' reporting of changes in their world views demonstrated the powerful effects of their immersion in the "new stories" presented by L2L.

The fact that the Core Learning Program modelled the 'new way' in its presentations was also highlighted as an influential condition in participants' stories. Its use of constructivist learning principles and structures and processes that fostered informality, dialogue and individual challenge, encouraged participants to explore diverse and sometimes conflicting views of knowledge. Participants were immersed in these processes for a minimum of two days at a time and returned to different offerings throughout their three year involvement with L2L. They were constantly exposed not only to new thinking but to a wide network of colleagues from participating sites to collaborate and share their learning. The network also included a range of educators spanning the Department of Education and Children's Services (DECS), tertiary education sectors and educational researchers from around the world. Harnessing the potential innovation and energy from learning across sectors and non-traditional networks has contributed to the generation of new knowledge in sites.

It can be seen then that the Core Learning Program provided leaders and teachers with extended learning opportunities for deep reflection about their educative purpose and craft – moving beyond 'the doing' to include 'the thinking'. This program is deliberately designed to stimulate thinking about educational futures, purposes and transformation. It is not about providing answers by experts; instead it is about immersion in leading edge research and thought to 'grow' deep understandings of the imperatives and possibilities for school redesign.

Engagement
The stories clearly demonstrated that *engagement* is the key for teacher, as well as student learning. Through involvement in the Core Learning Program and in the development of their sites as learning communities, participants were provided with many opportunities to engage in their own learning. Senge (1995) characterised learning communities as;

> Organisations where people continually expand their capacity to create
> the results they truly desire, where new and expansive patterns of
> thinking are nurtured, where collective aspiration is set free, and where
> people are continually learning together. (p. 3)

Many stories revealed how teacher learning was facilitated at the school level and illuminated the impact of changing the learning conditions for staff. Teachers learnt about constructivism by experiencing constructivist learning environments which gave them time and space to consider educational research in light of their own experiences of

working daily with students. Many schools established 'learning teams' or 'learning circles' to help teachers make sense of their new learning and to support the various levels of discomfort that emerged in the process of critical reflection. It is this deeper reflection which allows new meanings to emerge and new relationships and practices to be sustained. Learning to Learn participants come to realise that the key to changing practice is successfully challenging and transforming the assumptions, beliefs, values and understandings that underpin practice. For teachers and leaders this means being prepared to examine critically their 'taken for granted' views and practices in the light of new understandings and discard those that are found to be wanting. Cochran-Smith (2003) stressed that engagement in learning communities involves 'both *learning* new knowledge, questions and practices, and at the same time, *unlearning* some long-held ideas, beliefs and practices, which are often difficult to uproot' (p. 9). There were many examples in the stories of the unlearning which needed to occur.

Structured opportunities for interaction and what we have termed 'learning conversations' (Le Cornu, 2004; Peters et al., 2003) appear to have been central to the learning processes of L2L leaders, teachers and students. We have used the term 'learning conversation' to capture the dialogue-based approaches used in L2L classrooms, schools and Learning Circles. These conversations engage learners in deeper ways than ordinary conversations in that they enable them to negotiate new meanings and deeper levels of understanding. Feldman (1999) argued that conversations are a form of inquiry which enable people to 'work through the dilemmas, quandaries and dissonances that relate to their living and being in the world' (p. 137). The stories revealed that such conversations do not just happen but are dependent on learners having the time, opportunity and meta-cognitive language, skills and processes to engage in them (Peters, Le Cornu & Collins, 2003).

The stories illuminated a paradox in regard to teacher engagement in their learning – both challenge and support were needed. Many teachers and leaders appeared to need the challenges and uncertainty that were created for them by the Core Learning Program. These generated powerful crises of meaning which allowed the consideration of new possibilities for classroom pedagogy and relationships. They then engaged with a range of learning theories and models to critically reflect on their practice in a challenging, but supportive environment. They needed the safety and security of a learning community to cope with the new and challenging thinking and the corresponding feelings it engendered in them.

In summary, the stories revealed that L2L offered a set of options for participant engagement rather than a top down approach. It provided time, space and resources for deepening knowledge and understanding of the processes of teaching and learning. Opportunities were provided to revisit and re-engage with theories and ideas. Participants were encouraged to take risks and to *"learn our way forward"* (Project Manager).

Reculturing for learning
These stories have highlighted the significance of putting *teacher learning* at the centre of the reculturing process. The ultimate aim of any reculturing process is enhanced

student learning outcomes. L2L has achieved this, as confirmed by the stories and a range of other data collection strategies (DECS, 2004). The findings are congruent with those of Hillock's literacy research, cited in the Harvard Educational Review (2004) which identified the following two factors as key to influencing student learning: the teacher's epistemological stance (whether he or she has an objectivist conception of learning believing that knowledge is objective and therefore teaching is telling) or a constructivist conception believing that learners build their own knowledge and understandings based on what they already know) and the teacher's expectations of students (whether he or she is optimistic or non-optimistic about students' capacity for learning). It is clear that these factors – epistemological stance and teacher expectations – have been significantly developed through engagement with L2L. Teachers reported themselves as being considerably more critically reflective of their practice, with many teachers practising a greater variety of teaching styles and content, underpinned by constructivist principles to support all students' learning. Critical reflection and ongoing learning have transformed practice in many classrooms.

Not only have many L2L sites improved their student learning outcomes, as measured through formal testing procedures, they have also expanded their view of valued outcomes. Teachers and leaders have come to recognize the roles that engagement and wellbeing of the learner play in overall student achievement. Indeed many teachers from L2L sites have argued that without engagement there is no real learning, just temporary surface acquisition or 'cramming for the test'. Consequently teachers have come to value independent learning skills and have explicitly developed students' meta-cognitive skills. Many stories included examples of students exercising choice responsibly, reflecting on their learning, taking responsibility for their learning, working with greater persistence and being able to articulate their learning and self assess their learning. This expanded view of outcomes is in keeping with L2L's imperative that schooling must reinvent itself so students can thrive in the new world in the 21st century. It is supported by UNESCO's international study for future education, which acknowledged that schools can no longer pay sole attention to the one domain of knowledge learning. It proposes that education throughout life should be based on four pillars:

  ➢ Learning to know;
  ➢ Learning to do;
  ➢ Learning to live together;
  ➢ Learning to be. (Delors, 1998, p. 37).

The secondary analysis of the MSC stories has demonstrated that these pillars apply equally to teachers and students. Teacher learning needs to be placed at the centre of professional development programs so that teachers too can learn to re-engage with knowledge, learn to participate effectively in learning communities and learn to "do and be" differently.

Conclusion

A challenge for any project aimed at educational transformation is to be able to both demonstrate that significant change has occurred and explain the change process. The

MSC stories written by L2L participants appear to be one means of meeting this challenge. By illuminating aspects of the critical domains of conditions, worldviews, practices and outcomes, the stories have provided valuable insights into *what* constituted significant change in L2L schools as well as *how* significant change occurred. In particular they have highlighted the importance of the reciprocal processes of immersion and engagement in developing learning cultures that optimise learning opportunities and outcomes for teachers and students.

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