



RCSI

UNIVERSITY
OF MEDICINE
AND HEALTH
SCIENCES

Royal College of Surgeons in Ireland

repository@rcsi.com

Curriculum reform: a narrated journey.

AUTHOR(S)

Geraldine MacCarrick

CITATION

MacCarrick, Geraldine (2009): Curriculum reform: a narrated journey.. Royal College of Surgeons in Ireland. Journal contribution. <https://hdl.handle.net/10779/rcsi.10786082.v1>

HANDLE

[10779/rcsi.10786082.v1](https://hdl.handle.net/10779/rcsi.10786082.v1)

LICENCE

CC BY-NC-ND 4.0

This work is made available under the above open licence by RCSI and has been printed from <https://repository.rcsi.com>. For more information please contact repository@rcsi.com

URL

https://repository.rcsi.com/articles/journal_contribution/Curriculum_reform_a_narrated_journey_/10786082/1

Medical School Curriculum Reform – A Narrated Journey

Abstract

Curriculum reform poses significant challenges for medical schools across the globe. Understanding the medical educator's personal and lived experience of curriculum change is paramount. The author, a foundation director of a recently established medical education unit (MEU) shares her lived experience of leading significant curriculum reform in her alma mater and that of other senior members of faculty in a medical school which has taken the decision to replace its 38 year old traditional program with a shorter, better integrated and case-based curriculum. Narrative based inquiry is illustrated as a means of focusing the gaze on the medical educator. Specifically this approach is explored as a means of helping define the professional identity of the medical educator engaged in planning curriculum reform. The telling and retelling of personal stories provides an opportunity to reflect on the meaning medical educators ascribe to their role as agents of change.

Introduction

Change is not a new phenomenon in medical education (1-4). Curriculum and governance change affects every aspect of an educational organization (5-7) whether it is incremental change (targeting refinements such as introducing a new module or a new form of teaching delivery) or more fundamental reform such as conversion of a traditional program to a problem based curriculum(9, 10). The phase often taken for granted is that of planning significant curriculum reform – that phase during which new

ideas about curriculum outcomes, delivery and assessment are developed, tested, refined and communicated (11-13).

There are however many documented barriers to implementing reform in medical education such as the desire on the part of medical teachers to maintain stability in their professional work and retreating therefore to traditional ways of teaching (3, 14). Bloom (15) drew attention to the many parallels between medical schools and corporate bureaucracies using the metaphor of the giant amoeba, arguing that medical schools tend to “absorb” the effects of innovation and change in ways that seek to preserve their traditional structures and functions.

Despite the acknowledged difficulties implementing change in medical schools one of the often overlooked aspects of reform is the impact change has on the individual medical educator. In particular there is a dearth of research focusing on the effect of curriculum change on shaping the professional lives of senior academics in the medical school who have been charged with leading such reforms – the school’s so called ‘change agents’ (16).

Descriptive narrative research has an established place in describing change in organizations and has been used by organizational analysts to help understand how others make sense of events in their lives and within organizations (17-20). Boje (7) describes storytelling in organizations as the “preferred sense-making currency of human relationships”. In the education organization context, the work of Clandinin and Connelly (21, 22) and Craig (23) recognizes the place that school teachers’ “narrative identities”

play in understanding their experiences of and their roles in curriculum reform. Craig (13) refers to teachers' "lived experience of school reform" as an important means to understanding teachers' implementation of reform.

Methods

A key purpose of narrative inquiry is to "organize and make actual past events meaningful" (24). The approach used by the narrative inquirer is very different from the post-positivist. The narrative inquirer seeks to remain embedded in the human experience or "within the stream of human lives" (25). Narrative inquiry is intimately connected to the experience and is "first and foremost a way of thinking about experience" (26).

The author's own account of a three year curriculum planning phase along with the accounts of colleagues who worked on the same curriculum reform project team - the New Curriculum Working Group (NCWG), were recorded using diaries and semi structured interviews. Former living Deans of the medical school were also included in the study. The interview technique used conformed to Kvale's description of a guided 'conversation with a purpose' (27). In addition to interviews and reflective diaries the author incorporated other sources of data collated throughout the period of the study (see below).

The data analysis consisted of a "systematic search for meaning" using Hatch's eight-step "interpretive analysis" approach (28). The text was carefully 'entered' and sorted to identify categories relevant to the research question (29) and was then examined for links between the data or "sense making" through a holistic and comprehensive analysis of the

texts (transcripts and documents). Links were made from successive readings and immersion in the text and critical reflection and not simply “through statistical manipulation of the variables” (30). The final step consisted of ‘verifying’ the data to achieve “internal consistency” searching for alternative explanations. Each story was examined for elements such as place, plot, protagonists and predicament and then restoried (30).

The following table outlines the research procedure followed.

- Ethics permission sought to conduct the study and was granted by the Human Research Ethics (Social Science) Committee of SoM.
- Permission sought from the current Dean of SoM to conduct the study.
- Contact was made with all former Deans of SoM to seek their participation.
- Contact was made with key senior members of the New Curriculum Working Group (NCWG) to seek their participation.
- Six members of the curriculum working groups became the principal participants of the study. Five of the school's six former Deans and the current Dean also agreed to participate by sharing their accounts.
- The author's reflective journal was maintained between 2002 and 2005 and consisted of field notes and summary impressions.
- The NCWG participants were interviewed twice in semi- structured interviews lasting 1.5 hours. The interviews were audio-taped using a hand held recorder and later transcribed. Interview transcripts were returned to participants for editing between interviews to retell accounts in a collaborative way(8)
- The Deans were interviewed once in a semi-structured interview lasting up to 1.5 hours.
- Other text data collected over the three year period from end 2002 to end of 2005 included:
 - All NCWG minutes of fortnightly meetings held
 - All curriculum planning documentation generated by the MEU
 - All curriculum newsletters distributed by the MEU
 - All correspondence generated by the new curriculum working groups to internal and external stakeholders (i.e. Medical Council, Medical School advisory boards; Department of Health etc)
 - All feedback sent to NCWG from staff relating to plans for the new curriculum
 - All documentation relating to planning of and delivery of staff development in support of new curriculum including school wide gatherings and Forums
 - All media (medical school/university/public) coverage of new curriculum planning
 - All documentation to and from the national accrediting body
 - Archived material available from the State Archives office relating to the history of the medical school and the School's relationship with accrediting bodies since 1965
 - Handwritten notes submitted in support of interview with the oldest living Dean of the SoM

Data Interpretation

- Data interpretation used narrative analytical procedures (29, 30).
- Four chronological periods were restored (31) to retell the experience of curriculum reform planning.

Table 1: Research procedure followed.

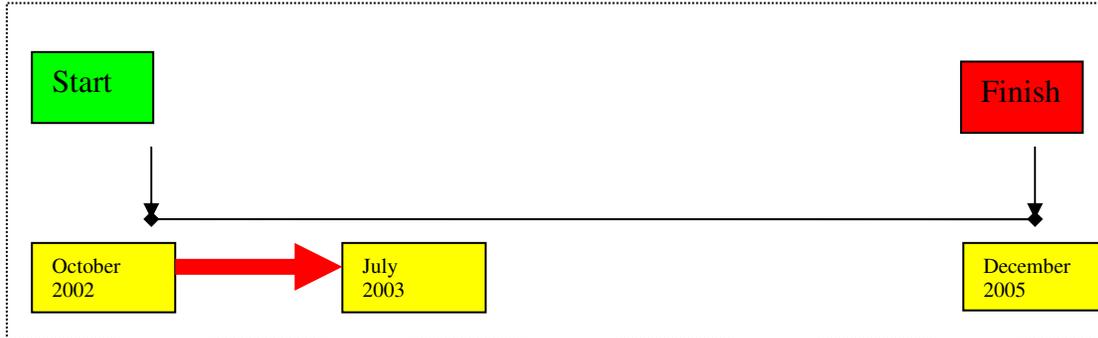
Results

As an alternative to using existing change models such as Rogers' (31) two-step process or Levine's four-stage description (32) to frame the stories, the author identified "specific situations in the storyteller's landscape" (30) that characterised the planning phases at SoM between October 2002 to November 2005. What emerged from the analysis of the narrative were four time frames which could be defined by an identifiable plot, protagonists and predicament and then rewritten using a chronological sequence of events (33). Voices from the present day curriculum planning team were intentionally interrupted by the voices of past Heads of the school who each grappled with curriculum reform issues during their tenure as Dean.

The SoM

The current Dean's decision in 2002 to radically reform SoM's traditional six-year medical degree course converting it to a five-year integrated program, followed a decade of unfavourable external reports by the national accreditation agency. SoM was sometimes therefore portrayed by the local media as having a precarious future. The 2001 accreditation report to the School was the most significant catalyst for change. This report drew attention to the School's need for a "collective will" to introduce the required curriculum reforms. In support of the decision to introduce a new curriculum a dedicated Medical Education Unit (MEU) was established for the first time at SoM.

Getting Underway



The planning for the new curriculum began in earnest in late 2002 coinciding with the establishment of the MEU. The first nine months of the project was defined by the following:

- Staff in SoM were experiencing the impact of the recent governance restructure which was undertaken in response to the previous year's accreditation review findings and intended to improve curriculum integration.
- Gradually increasing medical student numbers as part of the University's overall growth plans were stretching existing human and physical resources.
- Lack of information regarding a major rebuild of the medical school with proposed relocation of some disciplines to the city centre was causing unease amongst staff.
- Apart from the Dean and a small number of his executive, very few accepted the premise that in addition to the existing challenges a new and shorter medical curriculum was also worth pursuing at this time.

Voices from the present:

I recall sitting in my office (during my) second week drafting the first of many project plans...It was a difficult time of the year to commence a new appointment. October is the second last month of the southern hemisphere academic year and it all seemed quiet on the top floor of SoM...

My somewhat austere first communication sought ideas for discussion (at our first NCWG meeting). I had plenty in mind. For a start we required terms of reference and a project plan...our first task should be to set to work on an agreed list of the attributes or the "profile" of the ideal medical graduate...What sort of graduate did we want at the end of the new five-year medical program?..

The single response to my request for other agenda items arrived the day before our scheduled first meeting and was more sobering than I had expected. Without salutation it read: "It might be worthwhile considering why there has been little progress in curriculum development to date, given the accrediting body has been giving us the same message since 1991."...

It was the extent of the negativity towards the new curriculum from within this planning team and from other senior faculty that surprised me most.

Author, November 2002

I still hold the view... that if you give motivated and bright students the opportunity and don't get in the way too much they will actually get there...most medical education is still post-graduate...you can't tell what Medical School they came from after a few years...I think it's challenging and interesting to try and refashion the way we make doctors... [However] I suspect it doesn't make any difference...Doctoring is something people pick up along the way.

I think you can by and large sell people on the new medical education paradigm. Most people when you explain it to them say yeah that seems very reasonable, that's why we tend to accept those assumptions. It's more overcoming the "it ain't broke so we don't need to fix it" mentality and so I think that's been the challenge....

Did it require a wholesale change?...No

NCWG senior member, May 2005

Voices from the past:

You could keep talking to them, but some people are impervious to persuasion and remember that our clinical staff...were deeply imbued with traditional

teaching...with the Scottish medical system which was heavily tilted towards lectures, textbooks, grinding detail and they were just not terribly interested in anything other than that.

Most of the time was spent arguing over allocating time for lectures which would drive me insane because I've never had any time for lectures...I've never learnt a single thing from a lecture but we were short of staff, we were short of money...but we really wanted small group clinical bedside teaching.

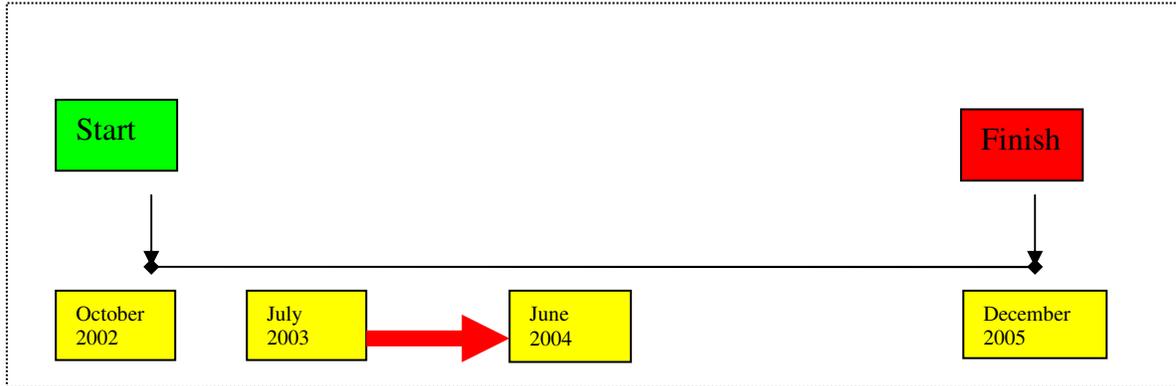
There was a break in the meeting during which I dramatically threw all the plans for the pre clinical building in the waste paper basket and accused them of throwing away seven thousand pounds...out of that meeting we decided to go for broke.

Retired Dean's reflections:1964-1965

My problem was...do you throw the baby out with the bath water?...This was my conflict... and yet I could see you had to do it, you know we had to go through with [the reforms] because not to would have meant... closure of the Medical School.

Retired Dean's reflections:1991-1994

Growing Pains



July 2003 saw the beginning of a period of proliferation of documents, submissions and committees. The second phase of the planning project (eleven months duration) was defined by the following:

- The pace of activity within the NCWG increased significantly fuelled by the success of the recent first school wide curriculum forum, nonetheless there was widespread lack of commitment to the introduction of the new curriculum.
- Between July 2003 and June 2004 two significant submissions were expected to be prepared by the NCWG articulating developed plans for the new curriculum.
- Two of the clinicians in the NCWG resigned during this period owing to the escalating workload associated with curriculum planning and competing clinical responsibilities.
- The State was experiencing a widespread shortage of doctors which was hampering efforts on the part of the NCWG to recruit support for the new curriculum.
- The increasing numbers of medical students enrolled in 2004 continued to pose a challenge for teaching staff.

Voices from the present:

There were other explanations for our colleagues' lack of participation...increasing student numbers and increasingly stretched resources. I saw it as our brief to do whatever was necessary to find a way for others (outside the NCWG) to make a contribution, however small...Hand written notes on pieces of paper and conversations in the corridor were all considered legitimate contributions.

The pressures of clinical work and the tyranny of distance contributed to our first academic staff resignation...I felt this first resignation deeply, although others followed over the three years of the project...Trying to maintain a core group of active clinicians on the NCWG was always going to pose a major challenge...we were developing a new medical curriculum at the worst possible time, in the middle of an acute doctor shortage.

Author, July 2003

Voices from the past:

Within the School of Medicine yes there was *not* a lot of enthusiasm and quite a lot of opposition particularly from senior Faculty...their argument was we're training medical graduates who are as good as any so why

should we change

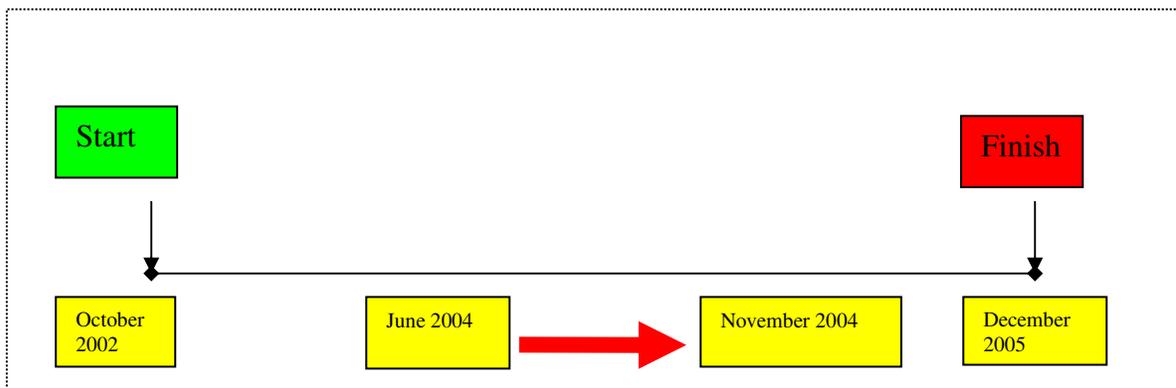
Retired Dean's reflections:1988-1993

I had this conflict personally about what I thought was good and what was being required of us ...to bring us into the modern era and whether it was change for change's sake...or whether in changing we were going to in fact 'water down' or in some way produce a graduate who was not up to what was the perceived high standard.

The politics of medical education has been you know "I mustn't let go of that lecture, or that half hour even, because that in some way dilutes me as an academic".

Retired Dean's reflections: 1991-1994

Under Siege



The next seven months represented a period of intense turmoil for the NCWG and a sense of the project being ‘under siege’. Between June and November 2004 the planning project was characterized by:

- Preparation for the final written submission¹ to the accrediting body was undertaken.
- The NCWG which began in October 2002 with five members, had tripled in size.
- Three of the remaining original members of the NCWG considered the vision for the new curriculum had become “diluted” and that the cohesiveness of the group had been eroded.
- The leadership, direction and authority of the NCWG was challenged from within.
- Robust debate continued within the NCWG and across the School regarding the School’s actual capacity to properly resource the new curriculum.
- Two further resignations from the NCWG occurred.
- The school’s main teaching hospital was embroiled in a political battle over doctor shortages, with some doctors threatening to withdraw their services as clinical teachers and their support for the medical school and its new curriculum.
- Widespread ambivalence about the new curriculum continued.

Voices from the present:

¹ The final submission was the third and final document submitted to the accrediting body. One hundred and fifty pages and over 30 appendices were included.

Over time I could see the curriculum being used as a political tool and it angered me. I also became increasingly irritated on hearing unsubstantiated claims about the new course...Each fortnight we were apprised of the latest "rumour" about the new curriculum...By August 2004 there had been a series of critical medical consultant resignations...The hospital's Medical Staff Association was preparing to convene a crisis meeting...

I was beginning to find the pace arduous. From without I felt we were under continual scrutiny by our hospital-based colleagues who were embroiled in a bitter dispute over staff shortages...

By the afternoon I found myself sitting in a student discussion room of the medical school library...Across the table from me sat the three other longest-serving members of the NCWG...The list of concerns which had clearly been brewing for some time was placed on the table...the "rapidly changing face of the NCWG" ...the concern that decisions...were being "made in haste" ...the lack of clarity around operational authority...Nothing I had read in the literature prepared me for this day.

Author, October 2004

Voices from the past:

We were fighting for our existence...It may have been paranoid but we felt at the time that people were trying to pull the rug from under the Medical School...and this was another way that it might happen if we got a very bad report...

You were all the time looking over your shoulder and fighting battles you weren't altogether equipped to fight - the political battles and the financial battles - and of course at that time in the University there was not much support for the Medical School. The rest of the University... perceived that Medicine got more than its share... and so other Faculties were almost gleeful that we were under threat and I found that difficult...

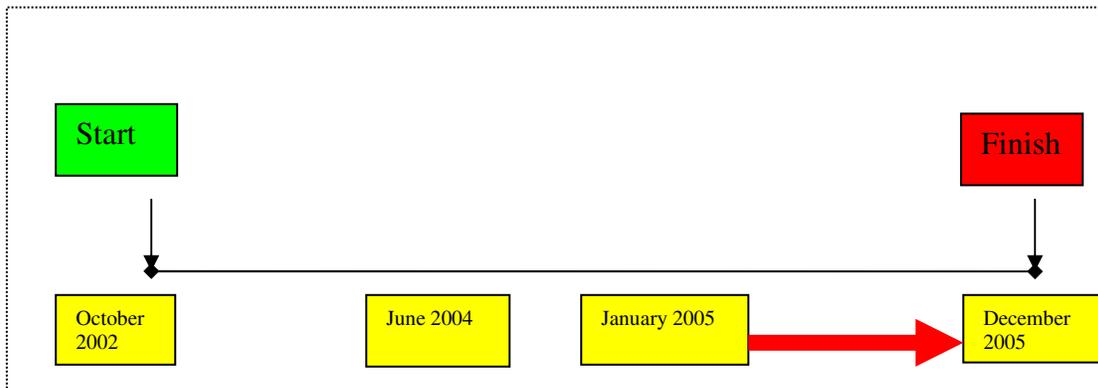
Former Dean's reflections on 1991-1994

What we had to do I felt was to firstly try and get rid of the domination of one specialty in final exams and in some way or other to not so much downgrade the importance of final exams but to put them in a context with the whole course...[some colleagues] saw this as a great downgrading of [their] discipline and they started a campaign against anything we did...The Vice Chancellor...said he thought that University politics were dirty but he didn't understand how dirty medical politics were....I felt under siege and I felt quite betrayed by [my colleagues]...The

biggest problem I think really overall was there was so many people who really could *not* see the greater good of the school over their own particular needs or wishes...A low point I suppose really was when the College...met and declared a vote of 'no confidence' in me.

Former Dean's reflections on 1994-1996

Race to the Finish



The final 11 months of the planning project represented the busiest time frame of the three year project, culminating in the accreditation visit to the school and the handing down of the final accreditation result. The key events during the period November 2004 to December 2005 were:

- The final 150-page submission was dispatched to the accrediting body.
- A “mock” accreditation visit took place in preparation for the final visit.
- An external and independent review of the school’s resources concluded their report on the cost of medical education in the State.
- In May 2005 the landmark week-long accreditation visit by an independent expert panel took place.

- In December 2005 the national accrediting body handed down its final verdict on the fate of the new curriculum at SoM.

Voices from the present:

I felt euphoric, recognizing this was a remarkable and historic victory. When I opened my personalized copy of the printed accreditation committee report of December 2005, my eyes were immediately drawn to the front page executive summary which listed amongst the School's notable strengths:

A particularly strong Medical Education Unit (MEU) which has been a major driver of the new curriculum through excellent vision and leadership.

I felt the process had been finally vindicated. The project management style I had used ...was styled on a participative model...We had convinced the external accrediting body of our commitment to radical reform and our capacity to deliver a world class medical curriculum.

The consequences of the project, however, were much less clear.

We had lost permanently on this journey of reform the commitment of some diligent, committed and visionary teachers, and there still remained large pockets of uncertainty about the benefit of the new reforms even amongst those

who agreed to teach in (it)...Although the curriculum at SoM was irrevocably altered by our intervention in the past three years it nonetheless felt to me as one who had helped craft it, that the curriculum was nonetheless poised and ready in a moment to “absorb” the effects of the recent reforms and revert back, like Bloom’s amoeba, to its traditional form. I sensed that continual and unyielding vigilance was all that stood between the School’s new found status and a steady retreat back to the past.

Author, December 2005

Final Reflections...full circle

Following the three year planning phase the author continued to reflect on the curriculum planning experience at SoM as the school entered the implementation phase of the new program in February 2006:

Reflecting back:

As I look around the planning table I know that each and every member of the NCWG – including the newer membership – has worked tirelessly ...But when will it all be over for them? Will it ever really be over? It seems one wave of change overtakes the next in relentless succession.

I try to urge caution against too hasty modifications to the new curriculum, particularly in the absence of sufficient evidence and wonder if we have, through all of this, inadvertently created an insatiable appetite for change.

The deceiving aspect for me has been the absence of a finishing line. What defined this “marathon” for me has been the sense of continual movement. I presumed this movement would take us in a forwards direction – away from the past and towards a better curriculum. Yet many of the aspects...on my ‘landscape’ looked similar to those described to me by voices spanning SoM’s 42 year history...

Over the course of this project several key visionaries have separated from the process for various reasons, in some cases over conflicting ideologies...Now I am able to take fuller account of their perspectives through reflecting on my own experience. I am also able now to acknowledge the equally remarkable colleagues who chose not to engage at all in the planning stages...I have come to know and respect them all – those who joined the reform project early on and are still here, those who came and left in dispute...those who simply chose not to engage with the planning phase at all but are ready now to play their part in delivery. I have found there are many ways in which people can contribute to curriculum reform and not all of them easily categorized by a taxonomy.

Author, February 2006

Five years after embarking on the curriculum planning project at SoM, the author continued to reflect on her professional role as curriculum ‘change agent’ as she prepares to take up a new medical educator post in a different medical school.

Reflecting back again:

One of the most insightful questions I was asked by the interview panel in late February 2007 was, "What has your last experience of curriculum change taught you about yourself and your approach to change management?" ...I had learnt a great deal about the application of change management theory in the medical education setting and so began my response with the need for a clear vision and an appropriate communication strategy...I also stressed the need to establish in the minds of faculty the need for change and to incorporate change into everyday practice...What had worked well for me before (in SoM) was the clear description of a mission or "capstone" statement of commitment for the new curriculum...

However, I knew they alone would not be sufficient...

I knew now that I could expect to be altered myself by the change process and that it would effect not only me but others around me. To these reflections then I added that I felt I had come to know change was not merely a "process" I could administer, conduct or deal out "at arm's length," but rather the process of change would

need to be very carefully understood in terms of its potential impact on myself and others. I now looked upon change with much greater respect than I had done before...I no longer saw the failure to adopt change at face value as a sign of resistance which would need to be overcome, but rather a call to listen and explore and if necessary reconsider my *own* position.

Author, February 2007

Conclusion

Through a telling and retelling of stories of curriculum reform the author was able to focus the gaze on the lived experience of curriculum change. The combined perspectives of senior educators working on the same reform project as well as voices of past Deans illustrates the continual conflict and shifting viewpoints experienced by individual medical educators over time as they plan and lead curriculum reform. Narrative inquiry has a role to play both in elucidating the individual lived experience of curriculum change and in shaping the evolving professional identity of the medical educator as change agent.

1. Weiskotten HG, Schwitalia AM, Cutter WD, Anderson HH. *Medical Education in the United States, 1934-1939*. Chicago,IL: American Medical Association; 1940.
2. Deitrick JE & Berson R. *Medical schools in the United States at mid-century*. New York: McGraw-Hill; 1953.
3. Association of American Medical Colleges Washington DC. *Physicians for the Twenty-First Century*. The GPEP Report: Report of the Panel on the General Professional Education of the Physician and College Preparation for Medicine; 1984.
4. Marston, RQ & Jones, RM. (Eds.). *Medical education in transition*. Princeton, New Jersey: Robert Wood Johnson Foundation 1992.
5. Christakis, NA. The similarity and frequency of proposals to reform US medical education. Constant concerns. *The Journal of the American Medical Association* 1995;274(9): pp. 706-11.
6. Cuban, L. Change without reform: The case of Stanford University School of Medicine, 1908-1990. *American Educational Research Journal* 1997; 34(1): pp. 83-122.
7. Hoy WK & Miskel CG. *Educational administration : theory, research, and practice*. 3rd ed. New York: Random House; 1986.
8. Clandinin, DJ & Murphy, MS. Looking ahead: Conversations with Elliot Mishler, Don Polkinhorne, and Amia Lieblich. In: D. Clandinin (Ed.), *Handbook of Narrative Inquiry. Mapping a Methodology*. Thousand Oaks: Sage Publications 2007; 632-650.
9. Kaufman A. *Implementing problem based medical education:Lessons from successful innovations*. New York Springer; 1985.
10. Newman, M. *A Pilot Systematic Review and Meta-Analysis on the Effectiveness of Problem Based Learning*, Middlesex University: Social Research Council, Lancaster (England) 2003.
11. Mennin SP & Kaufman A. The change process and medical education. *Med Teach*. 1989;11(1):9-16.
12. Christianson CE, McBride RB, Vari RC, Olson L, Wilson HD. From traditional to patient-centered learning: curriculum change as an intervention for changing institutional culture and promoting professionalism in undergraduate medical education. *Acad Med*. 2007 82(11):1079-88.
13. Bland CJ, Starnaman S, Harris D, Henry R, Hembroff L. "No fear" curricular change: monitoring curricular change in the W. K. Kellogg Foundation's National

- Initiative on Community Partnerships and Health Professions Education. *Acad Med.* 2000;75(6):623-33.
14. Neufeld V, Khanna S, Bramble L, Simpson J. *Leadership for change in the education of health professionals.* Maastricht, The Netherlands Network Publications 1995.
 15. Bloom SW. *Power and Dissent in the Medical School.* New York: Free Press; 1973.
 16. Havelock RG, Zlotolow S. *The Change Agent's Guide.* Second Edition. 1995.
 17. Boje DM. The Storytelling Organization: A Study of Story Performance in an Office-Supply Firm. *Administrative Science Quarterly.* 1991;36(1):106-26.
 18. Czarniawska B. *Narrating the organization : dramas of institutional identity.* Chicago: University of Chicago Press; 1997.
 19. Czarniawska B, editor. *Narrative interviews and organisations:* Thousand Oaks, CA:Sage; 2002.
 20. Czarniawska, B. Narrative inquiry in and about organizations. In D. Clandinin (Ed.), *Handbook of Narrative Inquiry. Mapping a Methodology.* Thousand Oaks :Sage Publications 2007; 383-404.
 21. Clandinin DJ, & Connelly, F. M. Teachers' professional knowledge landscapes: Teacher stories--stories of teachers--school stories--stories of schools. *Educational Researcher.* 1996;25(3):24-30.
 22. Clandinin DJ, Connelly FM. Stories to live by: Narrative understandings of school reform. *Curriculum Inquiry.* 1998;28(2):149-64.
 23. Craig C. The relationships between and among teachers' narrative knowledge, communities of knowing, and school reform: A case of "The Mon-key's Paw." *Curriculum Inquiry.* 2001;31(3):303-31.
 24. Polkinghorne D. *Narrative knowing and the human sciences.* Albany: State University of New York Press; 1988.
 25. Clandinin J, Rosiek J. Mapping a Landscape of Narrative Inquiry. In: Clandinin J, editor. *Handbook of Narrative Inquiry Mapping a Methodology.* University of Alberta: Sage Publications 2007; 35-75.
 26. Connelly FM, Clandinin DJ. Narrative Inquiry. In: Green J, Camilli G, Elmore, editors. *Handbook of complemenatry methods in education research.* Mahwah, NJ: Lawrence Erlbaum; 2006.

27. Kvale S. *InterViews : an introduction to qualitative research interviewing*. Thousand Oaks, Calif.: Sage Publications; 1996.
28. Hatch JA. *Doing qualitative research in education settings*. Albany: State University of New York Press; 2002.
29. Muller J. Narrative approaches to qualitative research in primary care. In: Crabtree BF, Miller WL, eds. *Doing qualitative research*. 2nd ed. Thousand Oaks, Calif.: Sage Publications; 1999; 221-38.
30. Ollerenshaw J, Creswell JW. Narrative Research: A Comparison of Two Resorying Data Analysis Approaches. *Qualitative Inquiry*. 2002;8(3):329-47.
31. Rogers EM. *Diffusion of innovations*. 4th ed. New York: Free Press; 1995.
32. Levine A. *Why Innovation Fails*. The Institutionalization and Termination of Innovation in Higher Education. 1980.
33. Cortazzi M. *Narrative analysis*. London ; Washington, D.C.: Falmer Press; 1993.