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Universities Changing in Response to a Volatile Environment—A Case Study from Ireland

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Abstract

This paper is a short summary of a research thesis submitted for a doctoral degree in education in late 2008. The substantive issue investigated was the response of a large higher education institute (HEI) in Ireland, the Dublin Institute of Technology and hereafter referred to as the Institute, to the demands for change. The research was undertaken by an experienced academic from inside the organisation. What is happening in this institute may be significant to others because change in higher education is a key debate throughout the world at present.

The research study shows that stakeholders in the Institute acknowledge that change is necessary and some of the practices from both entrepreneurial and corporate universities are seen to be appropriate for certain activities. But an HEI contemplating change cannot simply lift a model that may have proven successful elsewhere and transplant it into its own organisation. The culture and power residing within the organisation must be acknowledged. The US entrepreneurial model is shown to be unlikely to be successful in this HEI because of its inability to raise money on the scale of the successful US model. The corporate model using managerialist practice used in parts of the UK, Australia and at least one university in Ireland is also firmly rejected by stakeholders in this case study.

It is concluded that a European style of University with Collegial Innovation may well be appropriate to this HEI. Innovation and collegiality would increase with bureaucracy seriously reduced but retained within a couple of specified activities. It was thought that some of the financial aspects, particularly budgetary allocations needed to become more businesslike or corporate.

The qualitative methodology undertaken for this research may also be of interest to readers and is described briefly in this paper.

■ **Keywords:** Changing Universities, the Entrepreneurial University, the Corporate University, Collegial Innovation as a model for change in European Universities.

1 Introduction

This paper describes recent insider research undertaken in a large institute of technology in Ireland, referred to in this paper as *the Institute*. What is happening in this institute is significant because change in higher education is a key debate throughout the world at present.

The binary divide still applies to higher education in Ireland. There are traditional universities on one side of the divide and institutes of technology on the other side. The Institute has recently applied to become a university and cross this binary divide. The Irish government has committed to spending nearly 1bn Euros on the development of a new campus for the Institute, which with 20,000 students is the biggest higher education institute (HEI) in Ireland. All of this combined with a volatile external environment has brought significant pressure for change in this HEI.

Shattock (2003b) highlights the importance of leadership in HEIs and suggests that universities slipping down league tables have failed to recognise the dynamics of a changed environment and have retained hierarchical and conservative decision making processes. He suggests this would be punished quickly in the business world but in academia it leads to a slow decline and a tendency to grasp at short term solutions often based on financial stringency. If a HEI thought like a business, it might view the phenomenon of the decline in numbers of traditional students as a threat and so make strong attempts to search for new markets. So how would a reduction in a HEI's main market, school leavers, be addressed? Perhaps by developing new markets by increasing diversity through increasing numbers of mature, overseas, disabled, ethnic and disadvantaged groups. How could an engineering faculty increase market share? Perhaps with a better product and better marketing. These are some of the questions facing this institute. This research considered whether it would be more appropriate for this HEI to operate more like a business in a corporate/managerial model or whether perhaps the entrepreneurial model, seen as successful in the USA be the answer.

The research question was:

- How does the Institute need to change so that it might become better able to respond quickly and appropriately to the fast and radically changing environment it now faces, whilst fully engaging staff in the process?

Higher education institutes (HEIs) are attempting to respond to the demands of governments and other stakeholders as the costs of higher education escalate due to increased participation rates, as technology changes at an unprecedented rate, as change occurs in the socio economics of fast evolving global economies and as the credit crunch is expected to increase pressure on governments to reduce public spending. Barnett (2000) writes about the realization of the university in what he describes as, an age of Supercomplexity. He suggests that universities must not just respond to the changing environment but they have to make a full creative contribution.

Barnett (2000) refers to three challenges for university leaders and these were at the heart of this research:

- 1 Enabling staff to understand the challenges ahead and to know that these will keep on multiplying and to recognise that there is no stable state and instability will accelerate.
- 2 To motivate staff to address these changes in the incessant turbulence of academic life and the volatile external environment applying.
- 3 To identify a form of leadership that engages staff and is not based on outdated hierarchical top-down systems or is managerial in the sense of excluding staff in decision making. Intellectual groupings must be brought together to understand each other and to engage with one another.

2 Methodology

This was an exploratory study, using qualitative data. The views of stakeholders were presented, interpreted and analysed. The various types of university model, including collegial, bureaucratic, corporate and entrepreneurial were examined and compared with the cultures, practices and understandings of stakeholders in this institute.

Stake (1995) suggests that a case study catches the complexity of a single case and emphasises episodes of nuance in the wholeness of that case. He suggests that qualitative researchers seek to discover the multiple views in a case—the multiple realities. There are conflicting views and opinions and the culture or the way things are done is important and impinges upon many aspects of this research. Twenty individual interviews and a focus group interview took place. Interviewees represented all of the major stakeholders including students, technical staff, central services and all levels of academic staff up to and including the President of the Institute. The intention was to consult and collaborate with stakeholders and *Fourth Generation Evaluation* as described by Guba & Lincoln (1998) is used in this regard. This seeks to address the concerns and issues of all stakeholders and not prioritise the opinions of any one group.

Stake (1995) maintains that in a case study like this it is necessary to put aside pre-suppositions whilst we learn. The researcher's role in this case study was not to judge; but to act as a critical voice identifying the process of change and the mechanisms that affect this and to reflect back these ideas to the stakeholders and key players. The purpose was to illuminate, as suggested by Parlett & Hamilton (1972), about what was happening for all to see so that successful and less successful change adopted both inside the Institute and elsewhere could be considered.

2.1 Underlying Philosophy for Using Qualitative Design —(Relativist Ontology)

Schon (1995) refers to the use of technical rationality often being used to answer research questions of little interest to most people. The questions that many people are interested in having answered are those concerning everyday practice but these questions cannot always be answered using technical rationality. The ques-

tions raised in this research affect many people and the answers were embedded in a deep rooted culture of an institute of technology. This means that there were a number of perspectives and all of them were considered valid and relevant; and the data analysis recognised this. According to Guba & Lincoln (1998), if there are a number of constructions possible with data collection, as is the case with this research, then objectivity makes no sense. So we are in what Schon (1995) describes as the *swampy lowlands* of messy everyday practice where problems are unpredictable but require answers. The dominant epistemology in engineering and science uses positivist methods to answer technically rational questions using quantitative data. Such methods are quite appropriate for realist questions but it is important to highlight for readers from those disciplines that good quality research is possible where qualitative data is used. Questions raised in this research were not realist questions which could be answered with positivist methods but relativist questions as defined by Guba & Lincoln (1998) whose answers are subjective and set in a particular context. Guba & Lincoln (1998) refer to the adequacy of fourth generation evaluation as including validity, reliability and objectivity. They suggest that the most certain test of validity with this type of research is verifying constructions with those who provided them. At various points, interviewees were involved in doing this and the data and interpretation was made available to them for scrutiny. Feedback from interviewees and critical friends was also helpful in this regard as was a series of presentations of work in progress at various workshops and conferences.

3 Changing Universities Internationally—Literature Review

A literature review took place which examined the modern university in advanced economies competing in a globalised setting with diminishing resources per student. Increasing university autonomy appears to sometimes restrict academic freedom as well as increasing responsibility and accountability by academics towards stakeholders. For a publicly funded university the demands of taxpayers and government are likely to increase significantly as more austere economic developments continue with the world wide credit crunch and global crisis.

Increased accountability requires institutions to monitor quality and improve the efficiency of what they do. This raises questions about who determines the rules and value systems. Increased autonomy for an institution can be translated into restrictions for academics working in it if the institution defines the value system and strategic aims, determines links to other fields and generally sets the agenda. Restricting academics autonomy would not seem to lay a good foundation for encouraging them to play a full creative role and active part in innovation and change. This is where universities as institutions might need to be seen differently from industrial organisations and Watson (2000) differentiates between institutions and organisations. He believes an organisation is there to get something done whereas an institution is less definite and is held together by people with a similar frame of mind and is composed of the visions and projections of those people. These ideas may not be consciously negotiated or agreed, but they exist. An organisation is often set up for profit whereas an institution seldom is. This differentiates HEIs from corporate organisations.

According to Clark (2004), privatisation of universities is highest in many parts of Asia, and lowest in Europe, with the exception perhaps of the UK. He lists various Asian countries who have from 50% to 80% private expenditure as a total of overall expenditure on education. The US at 53% is ahead of Australia at 44% and Canada at 43%. The UK is at 37%, France at 14%, Netherlands 12%, Sweden 11%, Germany 8%, Norway 6% and Denmark is at 3%. The public purse in Ireland pays for 80% to 95% of the costs of higher education varying between universities at the lower end to institutes of technology at the higher end of this spectrum.

It is shown in this research that universities in those parts of the world with the highest levels of private funding tend to be becoming either more corporate or more entrepreneurial. This trend brings pressure on universities in Europe to follow suit in this regard.

3.1 The Corporate University and Managerialism

Waks (2007) offers three types of corporate university as well as hybrids combining them. The first type are established mainstream, non-profit universities (public or private) which are adapting to economic and political pressures or technological opportunities by adapting managerial practices of modern for profit corporations. Waks (2007) suggests that established universities in Britain, Australia, the USA and Canada are now of this model. The second type are newly established universities who are highly innovative and operate as for profit organisations but satisfy the political and legal requirements for university status. The University of Phoenix is exemplified by Waks (2007) in this regard. Thirdly the term corporate can be used where universities operate within and provide services to, for profit companies. The latter two examples are mainly American based.

3.2 The Entrepreneurial University

Shattock (2003b) refers to Clark's picture of the Entrepreneurial University as achieving almost iconic status amongst university models for the 21st century. Similarly Marginson (2007) refers to Clark's entrepreneurial university as the idealised model of research university. Clark (1998) in his first analysis of Entrepreneurial Universities in Europe describes them as universities that move away from close governmental regulation and sector standardisation. The catalyst for change is an age of turmoil for higher education with no end to change in sight. Demands on universities are often greater than their capacity to respond, so responding to external needs and demands appears to be an endless task.

Clark (2004) in follow on research outlines in detail the take off of entrepreneurial universities in the USA and cites Stanford as a good example. Stanford became the mother university of Silicon Valley in the 1930s and supported the development of electronics firms such as that formed by Stanford graduates William Hewlett and David Packard. Clark (2004) describes the resulting Hewlett Packard company as the classic university spin-off. The university supplied materials and a physics lab for a 50% interest in future patents. Ties between the university and firms were close and

collaborative. The university opened its classrooms to local businesses. Marginson (2007) believes that the Ivy League universities in the USA are closest to Clark's model. Apart from Stanford, Clark (2004) also examines other American universities such as Massachusetts Institute of Technology (MIT), University of Michigan, University College Los Angeles (UCLA), Georgia IT and others with an ability to charge top-of-the-line tuition fees and with a capability of raising enormous sums of income.

Edwards (2004) compares the university in Europe with the USA. He believes there are no large private benefactions in Europe such as that which has enabled universities in the US like Harvard and the other Ivy League private universities to prosper. Even Oxbridge receives only small benefactions by comparison with US universities he contends.

So what are the lessons to be learned? Certainly all of these entrepreneurial universities appeared to have certain things in common. They identified their niche in the market and sought to capitalise on it. The newer universities did not attempt to replicate the older ones and compete in a game they could not win. Instead they looked at their own characteristics and culture to build on the very sound foundation of their own unique identity. They had confidence in themselves and accepted that there were obstacles and many inhibitors to change to overcome. Hierarchical structures were seen to be one and bureaucratic practices were often seen to prevent or certainly slow down change. There seemed to be a clinging to a steady state inertia that wedded some universities to the status quo.

4 The Conceptual Framework and Analytical Tool for this Research

Having considered changing universities internationally it is now necessary to highlight key aspects of academic change. There were four main theoretical models that were examined in this research in connection with the decision making structures, university autonomy and changing paradigms in higher education policy. These were Collegial, Bureaucratic, Corporate/Managerial and Entrepreneurial.

McNay (1995) offers a model, shown in Figure 1, with two dimensions:

- Dimension 1 (vertical) Policy definition;
- Dimension 2 (horizontal) Control over implementation.

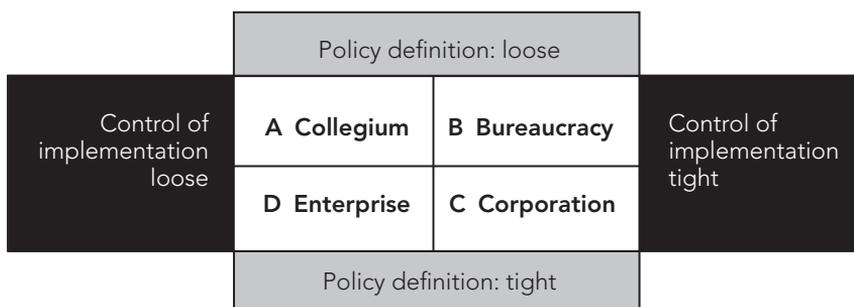


Figure 1. McNay Model.

And four University types operating from the four quadrants of the McNay model:

- Type A, Collegium, this model has the freedom to pursue university and personal goals unaffected by external control; it has loose policy definition and loose control of implementation.
- Type B, Bureaucratic, this model focuses on regulation, consistency and rules; its management style is formal with a cohort of senior managers wielding considerable power. It has loose policy definition but tight control of implementation.
- Type C is the corporate university where the management style is commanding and sometimes charismatic. There is a crisis driven competitive ethos and decision making is political and tactical. Students are units of resource and customers. It has tight policy definition and tight control of implementation. It uses managerialist practices.
- Type D is the enterprise, orientated to the outside world and it espouses continuous learning in a turbulent environment. Management style is one of devolved leadership where decision making is devolved and its dominant unit is the small project team. Students are seen as clients and partners. There is tight policy definition but loose control of implementation.

McNay (1995) concludes from his research that all universities draw on each type of management.

Similarly Coaldrake & Stedman (1999), suggest that most universities around the world are moving from loose policy definition to a policy that is more firmly determined; away from organisations featured by collegium and bureaucracy to one closer to the corporation or enterprise. They believe that successful higher education institutions will be those who can mobilize people and facilities flexibly into project based teams across organisational boundaries. This will require the linking of individual energies in line with the goals of the organisation. Coaldrake & Stedman (1999) warn this is often viewed as managerialist, but they continue that whilst no university can expect optimum output and innovation by imposing inspection and control on staff, neither can it be expected that some invisible hand will guide the path of individual academics or that effective change will happen by academic introspection and reflection. Herein lies the kernel of the problem, academic freedom does not include freedom from responsibility to stakeholders.

It is clear that there is a need to negotiate the match between organisational goals and individual work and to allow substantial freedom for academic staff to contribute to those goals. But one of the difficulties for higher education, as it moves to become a mass system, is that values formed by academics in an elite system may persist in some cases in a developing mass system. The culture can become embedded it seems and is difficult to change at times.

Many universities in Ireland have historically operated from a somewhat collegial model whilst institutes of technology have been more bureaucratic in their operation and practice. This is now changing. It becomes clear in this research that there is an Irish take on certain concepts. Certainly staff interpret terms such as collegiality, entrepreneurship and corporatism differently. The difficulty now is that with a volatile

external environment combined with increased expectations from the government and public, much more collaborative and creative solutions are now required. But a trend towards more corporate or entrepreneurial universities can have major implications for policy and culture. Some members of the academy may be better positioned or capable of capitalising on research and other opportunities. Rewards in the form of status, promotion and resources may flow unevenly through the system. This can lead to resistance from teachers' unions who are there to protect all of their members. These and other aspects were investigated as part of this research.

5 Research Findings for the Institute on the McNay model

The culture and practices in this Institute as change is attempted shows that stakeholder constructs, how they see past and present practices and what their imagined future may be, is affected by their age, predispositions, their professional identities and their position in the organisation. Nobody in this research could see their ideal for change in the McNay (1995) model or use this model to describe their situation perfectly. Nonetheless the model did offer a conceptual framework and a focus for questioning. Interviewees adapted the model, and their adaptations were revealing. What was clear to all was that the Institute cannot stand still.

Using the McNay (1995) model as an analytical tool it was found that traditional collegial and bureaucratic models were seen by most stakeholders in this research as being too slow to change, however, it was thought that collegiality was essential in academic work. It was concluded that the institute was not a collegial organisation as such but that there was a lot of bottom up change that happens in a collegiate way and that by and large this was a good thing and should continue. But significantly, the Institute was viewed as overly bureaucratic and that bureaucracy must be reduced significantly.

Nonetheless there was support from stakeholders for continued bureaucracy in some specific aspects of operation. Student assessment was seen by all stakeholders to require strong rules and regulations to protect both students and academic staff.

Quality assurance was also exemplified by most staff as requiring bureaucracy but the QA officer argued that it was necessary for this activity to devolve more to faculties in the form of quality enhancement (QE) procedures. In this way, it was argued, it would become more innovative and responsive. But there were complaints from faculties that new QE procedures were becoming over burdensome and pushing out other important activity because of a lack of time and resources. For this reason faculty staff argued against devolving of responsibility and argued that QA must remain centrally controlled and hence bureaucratic. This is an example of the kind of tension that arises with change and highlights the need for allocating resources appropriately.

Nearly all interviewees were opposed to business like or corporate models to run the university. Concerns were raised about the effects this might have for students, society, academic staff and the Institute if implemented. A number of interviewees referred to another university in Ireland when asked about corporate models. Nearly all interviewees were strongly opposed to such a model for the Institute. The very

idea gave some interviewees a chill down their spine but one interviewee thought that it had been successful for another Irish university and that the Institute should follow suit. When asked whether there was a risk that this Institute would be in danger of being at the whims of a particular chief executive officer (CEO) at a particular time, this interviewee thought that there were enough checks and balances in place and that a style of management that is more decisive would be better.

Writers such as Shattock (2003a) argue that businesses that adopt top down management processes and a non-participative, non-empowering style of management may belong to an earlier industrial age. Shattock (2003a) goes on to warn universities who adopt this approach as a short term reaction to acute financial stringent, that such a reaction is not likely to provide long term academic success.

Surprisingly most interviewees supported corporate practice for some activities. For example resource allocation should be more businesslike with resources following students it was felt. Also where research carries significant risk or potential for significant profit, then it was felt that this needs to be more businesslike with tight control of policy definition and tight control of implementation. Campus companies would fall into this category. This would put these activities in quadrant C on the McNay model as shown in Figure 2 below. However it should be emphasised that although this would mean corporate or businesslike operation in these activities, there was no support for managerialism, not even by top management. It was thought that managerialist practice would mean staff would wait to be told what to do rather than innovating and responding to change in the innovative way required.

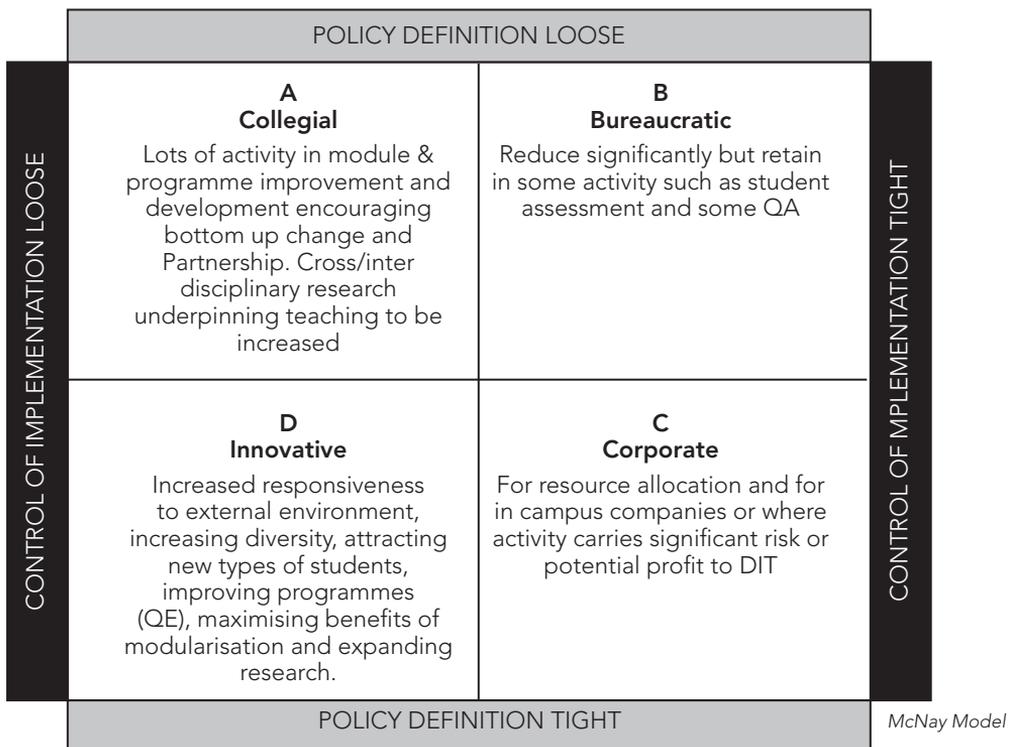


Figure 2. Collegial Innovation Model.

Although the suggestion for the Institute to become an entrepreneurial university, like a US university, were considered by some staff to be unrealistic, there was a lot of support for a move to the left hand side of the McNay model, loosening control of implementation with more innovation and collegiality. This was supported by many staff and management interviewed. But the word *enterprise* was opposed strongly by some staff. Nonetheless most stakeholders saw the recruitment of international students for example as being legitimate and important in raising revenue. Clark (2004) at times uses the word innovative for entrepreneurial with respect to European universities but Shattock (2003a) believes this word does not capture the concept adequately. He believes what is needed is a stand up or self reliant university, confident in what it does and is autonomous. Nonetheless nobody interviewed was opposed to the word innovation and for the Institute to operate in area D of the McNay model for much activity. Interviewees thought that the Institute could then become responsive to a changing environment. There would certainly be a need for less control over implementation for this to happen it was thought but a tight policy definition was agreed to be sensible in this regard at times. Otherwise if loose policy definition were applied some innovative but poorly controlled areas might head off in a direction with consequent risks to the whole organisation. Top down decisions on policy were supported provided there was prior consultation with staff on major issues.

Diversity and student numbers could be increased by maximising the benefits of modularisation by operating this activity in quadrant D of the McNay model, with the Institute setting policy and encouraging departments and schools to implement it as they saw fit for their area. It was also thought by staff that the move to become a university means research needs to be increased, and if this is so then a lot of research might evolve at department level and so operate well from area D of the McNay model. This is provided such research did not offer significant risk or potential for large profits in which case as already stated it should operate from quadrant C.

Many interviewees were very opposed to the American style of entrepreneurial university for the Institute where they believed all activity would be dictated by money and the needs of the economy. The term innovative seemed to most interviewees to be more appropriate for European universities.

6 Conclusion

It was clear in this research that all stakeholders interviewed understood the need for change. A *European type* of entrepreneurial university was explored where *innovation* was the key word—a so called European model of entrepreneurial university as an innovative organisation. Most stakeholders were quite supportive of increasing activity in the D quadrant with tight policy definition but loose control of implementation. As one dean put it, agree the policy and then get out of the way to let the academics implement it. This appears to be consistent with what Clark (2004) describes as *Collegial Entrepreneurship* and this appears to be very close to the innovative model preferred by many stakeholders for the Institute. Clark (2004) too sees entrepreneurship as very different in European and American settings and that it is relatively new in Europe. Clark (2004) sees sustainable entrepreneurialism as having

a shared governance where those who do the work of policy implementation also participate in policy formation. This is in sharp contrast to what happens in the corporate university where decisions are made at the top without consultation.

Figure 2 shows where the main academic activities in the Institute might need to operate for the institute to respond adequately to change whilst keeping stakeholders committed and involved. This would see most activity on the left hand side of the McNay model as shown in Figure 2 above, hence the term *Collegial Innovation*.

To summarise then for the Institute, this all means reduced bureaucracy with increased collegiality, much increased innovation and some specific corporate activity. This then requires a trajectory for the Institute as illustrated in Figure 3 below.

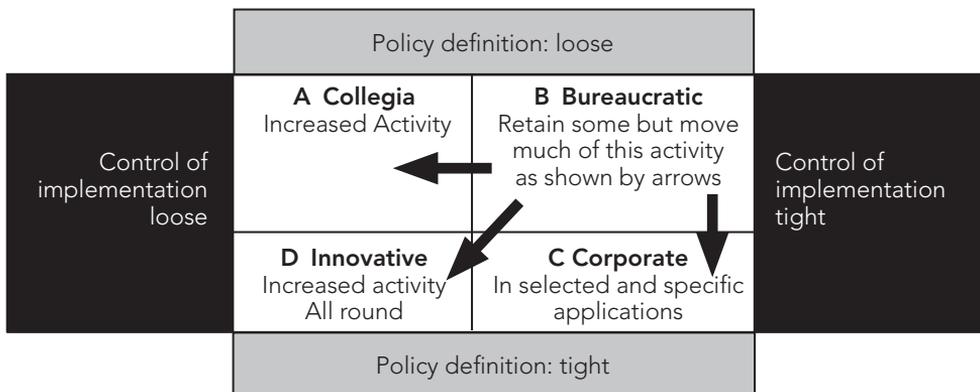


Figure 3. Trajectory Needed for the Institute.

This research supports the view of Fullan (1999) that a particular model of university, no matter how successful, cannot just be lifted and applied to a HEI elsewhere. The history and culture of any organisation must be examined and change made in a way that will suit that organisation or institute. This supports the proposition put by Ramsden (1998) when he warns that the mistake many universities make is believing that structures are subordinate to cultures. He argues that no structure will work unless the culture also works.

7 Relevance and Limitations of Research

Williams (2003) warns that case study research is often criticised for generalising from a small sample. But good quality evidence based case studies can contribute to knowledge of organisational phenomena that is rich and insightful. In this case study there were many unique and interrelated factors that might tend to make generalisation inappropriate at times but the study is intended to contribute to knowledge of aspects of the Institute with its culture and in the context and setting described that may have resonance for HEIs elsewhere with similar characteristics and facing similar challenges.

This research was a snapshot of parts of the Institute at a moment in time. If this research project leads to further more widespread research in the Institute it will have

served its purpose in this regard. For the general reader a knowledge of what is happening in this Institute can facilitate the extrapolation of learning from this context and setting, to other settings but with appropriate health warnings about different cultures and contexts in tow. There is no suggestion of a panacea; just messy articulations from the swampy lowlands of everyday practice in an institute of technology in Ireland that is undergoing major change.

This research is *not* intended to be satellite navigation providing exact instructions at every point of difficulty to academic managers finding their way. It is intended to be more like a compass for managers and academics attempting to navigate through the tricky terrain of organisational change in the Institute and other HEIs facing broadly similar challenges. The compass points to a collaborative style of change model harnessing all of the ingenuity within the university towards an agreed end. The compass for this HEI points to a university not focused solely on finances but a university that is willing to make appropriate decisions and not drift. A stand-up university that makes ends meet. The compass points to a new type of European, *Innovative Collegial University* and to adopting bureaucratic and corporate business practice where this is appropriate. A university comfortable in its own skin, establishing an appropriate identity and confident to debate policies openly in a mature way with decisions made based on the strength of the argument and supporting evidence and not on the power or position of the person.

About the Author

- **Kevin Kelly** has recently been conferred with a Doctor of Education Degree from Sheffield University where his research examined academic change in the Dublin Institute of Technology (DIT). He is a chartered engineer and is a Fellow of both the Chartered Institution of Building Services Engineers and the Society of Light and Lighting. He lectures at undergraduate and post-graduate levels in sustainable building design, lighting engineering and electrical engineering. He has a successful track record as a course leader for various programmes including a very successful part-time programme for electricians from which hundreds of electricians have graduated with bachelor degrees in Electrical Service Engineering.

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