Overcoming the problem of embedding change in educational organizations: A perspective from Normalization Process Theory

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Abstract

In this article, I begin by outlining some of the barriers which constrain sustainable organizational change in schools and universities. I then go on to introduce a theory which has already started to help explain complex change and innovation processes in health and care contexts, Normalization Process Theory. Finally, I consider what this theory might offer in practical terms to aid organizations and leaders in bringing about more sustainable and positive change in educational contexts.

Keywords
Innovation, Normalization Process Theory, organizational change

Introduction

Continual reform and change have become accepted elements of the daily work of education (Greany and Waterhouse, 2016). In both school and university sectors there are constant pressures to change and innovate in an attempt to increase levels of attainment whilst narrowing gaps between different groups (Bentley, 2010), to respond to economic and demographic changes (Wilkins, 2004) and to meet increasingly performative managerial imperatives (Ball, 2003; Newton, 2003).

Leaders are pivotal to change processes within organizations, but are in a difficult position, as they are often caught between the worldviews and decisions of policymakers and the needs and views of their own staff. But a reliance on leaders as the drivers of change can lead to a hierarchical process where they take on the role of ‘lone’ decision-makers, orchestrating and controlling through their personal enthusiasm and charisma. A hierarchical approach to change makes sense if organizations are seen as uniform ‘black box’ units, everyone moving forward in a ‘controlled’ process led by a management team which dictates the process via observation and objective measurement, leading to desired changes in desired ways (Streatfield, 2001). But the only contexts in which this model of organizational change can work are those which are linear and predictable in character. However, universities (Newton, 2003) and schools (Morrison, 2001; Wallace, 2003) are complex adaptive systems, where processes are non-linear, emergent and permeable to external drivers (in other words, they are open systems, exchanging information, knowledge etc. with others beyond the organization). These systems naturally present constant paradoxes and dilemmas which need to be overcome, leading to a process of change which is to some extent unpredictable and unmanageable. Starr (2011) argues that complexity and unpredictability often make the processes involved in successful innovation difficult to discern and understand, and create a number of barriers and obstacles which need to be
carefully navigated to bring any degree of identifiable and sustainable change across an organization.

Considering barriers to organizational change

A series of barriers to innovation have been identified across both school and university sectors, which may account for difficulties in embedding change in some educational contexts. Many of these barriers can stem from organizational cultures or from the complexities of the processes involved and how they are managed. Many organizations develop a ‘paradigm’ through which they work – a worldview which is coherent and comfortable (Calabrese, 2003). This allows the organization to understand its own cultures and operations in relatively clear and positive terms. However, if for legitimate reasons this paradigm is called into question, it is often difficult to move people from it, to establish a different worldview. This shift may result in organizational resistance as individuals are forced into new ways of thinking and working (Knight, 2009; Starr, 2011; van Dam et al., 2008).

Whilst a paradigmatic view of organization may sustain the notion of a single, unified set of views and processes within an organization, much educational work occurs in complex contexts which naturally have elements of uncertainty and unpredictability. This results in regular dilemmas in the work of leaders, where ambiguity has to be dealt with and successfully navigated. Wallace (2003) argues that because of the complex nature of educational organizations, ambiguity is an inherent feature of professional work. Unless there are clear processes and structures in place to affect change, there can emerge a feeling amongst staff that they have limited control over the change which is occurring, which in turn can lead to resistance. Feelings of limited control can also occur from a limited awareness of what is expected, particularly in larger organizations. As Newton (2003: 438) states in relation to university change agendas,

*it is important to heed Gibb’s warning that where the development of strategy and policy is too centralised then ‘departments may . . . neither understand nor believe in what is decided centrally’.*

This lack of control can be initiated by a central and leader-led position, the process becoming a top-down imposition, where decisions are made remotely (Hall and Hord, 2006). In addition, as Newton (2003) emphasizes, where change to pedagogy is dictated to practitioners, perhaps with the use of predetermined, narrow frameworks, or preferred approaches, there can be a perception of a bureaucratized performative process which again leaves little room for professional involvement.

Available time for innovation is a major barrier to successful engagement with change. Agendas are all too often instigated as additional elements of work beyond the core business of teachers (Hall and Hord, 2006). Because of the lack of integration of change into this core work, an increased level of work and effort is required from teachers (Starr, 2011), layered over already heavy workloads. These time stresses can occur because of policy and strategy overloads both externally and from within the organization (Newton, 2003). But change implementation, to be successful, can require extended periods of time and
resources, making sustainability very difficult where they are not made available. Change should be a core task, rather than an additional imposition, as it requires time, attention, and possibly alterations in processes. These are activities which often need changes in working practices, and perhaps even in organizational cultures if they are to be successfully normalized.

If the barriers outlined here begin to establish themselves, it is of little surprise that change stalls or fails to become normalized new practice within an organization. Teachers can feel remote from the decision-making process, seeing themselves as merely the individuals who must carry out pre-determined plans over which they have little agency or voice. A lack of discussion across an organization to shape the detail of change agendas in their initial stages can lead to fracturing into different subgroups, some of whom take on the role of dissenters. This can occur if top-down change contradicts deeply held professional values and beliefs. In turn, some teachers may see an opportunity to retain their professional agency through active resistance and subversion. Starr (2011: 648) argues that accounts of resistance begin to call into question the view of the leader as visionary and staff as ‘myopic and self-interested opponents’.

Another potential problem which can occur during a change process where teachers become the implementers but are not involved in the creation of the innovation is that solutions may be viewed as remote and divorced from the contexts and complexity of practice. Newton (2003) suggests that where solutions appear to be too simplistic, teachers can give the illusion of change without real engagement in the process. This can lead to innovations which exist in strategic plans, which are shown to be successful in evaluations, and which are recorded in set piece observations but which are absent in day-to-day practice. I characterize this as a form of ‘zombie innovation’, where a change process carries on lifeless, sometimes for years, in the twilight of official documents, plans and quality assurance reports, but never lives in the normalized practices of the organization.

Streatfield (2001) argues that organizations as complex adaptive systems need to work with ambiguity. This means that leaders are in the paradoxical position of being in control and not being in control at the same time. In such situations, to bring about real and sustained organizational change, leaders need to be willing to overcome many of the barriers set out above by including teachers in ongoing dialogue and activities which allow them to play a central role not only in implementing but forming the change agenda, as well as providing concomitant resources and time. Jones and Lewis (1991: 51) observe that, ‘there is yet to be developed a model of educational change that is sufficiently general to allow transfer to a range of environments but specific enough to be able to be translated into action.’ In the next section I outline one potential contender, developed in the health and care sector, which may fulfil such a brief: Normalization Process Theory.

**Normalization Process Theory (NPT) as a framework for change**

In 1998, a group of medical sociologists began empirical research with the aim of understanding how practice is embedded into the everyday work of groups and organizations (May et al., 2009). This work led to a focus on three interacting problems. Firstly, they considered how practices are brought into action within organizations
(implementation), then how this practice becomes part of the everyday practice of individuals and groups (embedding). Finally, having embedded new practice, sustainability in the longer term becomes a prominent issue (integration). These processes together bring normalization of a process or innovation into organizational practice. May and Finch (2009: 540) define normalization as,

*the work that actors do as they engage with some ensemble of activities (that may include new or changed ways of thinking, acting and organizing) and by which means it becomes routinely embedded in the matrices of already existing, socially patterned, knowledge and practices.*

Through analysis and interpretation of empirical research focusing on the dynamics of these processes, May and Finch (2009) developed NPT. Since the publication of their initial work, there has been a rapid take-up of the theory as a framework for understanding the relative success or failure of innovation normalization in health and social care contexts. They identify four ‘generative mechanisms’ (May and Finch, 2009: 540) which are crucial in implementing, embedding and integrating new practice. These mechanisms are implemented through the actions of both individuals and groups.

**Coherence:** When a new practice or innovation is introduced into an organization, before it is instigated, individuals and the teams they work within need to understand both the nature of the proposed change and the processes involved in introducing the innovation at a practical level. All too often, a new practice might be introduced by a leader or consultant, focusing mainly on the nature and steps involved, before teams are asked to introduce the new practice. There is little time for discussion of the philosophies, changes in work practices required, and how individuals and teams might make sense of this departure in their work. The change is framed as a simple, linear integration of a process into the complex work environment of teachers. In contrast, NPT breaks down the phase of implementation into four aspects of work. Explicit consideration of how the innovation differs from current practice is important (differentiation), as is giving the staff responsible for implementing the new practice an opportunity to build a shared understanding of the aims and potential benefits (communal specification). In addition, individuals need to understand their personal responsibilities and the nature of the new practice so that they can gain a sense of how their work will change and fit into the implementation process (individual specification). Together, these elements lead to the need for discussion and time for those involved to understand the purposes and benefits of the new practice. Together, they give opportunity for participants to understand the benefits and importance of the new practice (internalization).

Porter et al. (2016) evaluated a tool for predicting clinical risk amongst patients, named Prism, developed for NHS Wales. The intention of the computer-based system was to use patient data to predict and identify possible health risks, thereby making clinical management and resource allocation more effective. A cluster randomized trial was used to measure the impact of the tool on medical outcomes, focusing on ‘effects of delivery on care, patient satisfaction, quality of life and resources used’ (Porter et al., 2016: 2). Their evaluative research focused on the initial reflections of practitioners concerning their understanding of the project, and analysis therefore focused on coherence. Focus groups
were completed with a total of 33 practitioners, including general practitioners, practice managers and nurses. These focus groups asked participants to reflect on the degree to which they understood the focus and aims of Prism. The study found that there was a general willingness to try the new tool, but arising from past experiences of innovations which were seen as add-ons rather than new, core practices, the issue of workload was emphasized. Additional, new activities relating to the use of the new software, for example, following up emerging issues and planning new care systems, were all seen as potentially stretching workload and resources. Hence, to move beyond initial implementation to develop a level of embedding of new practice, participants emphasized the need to make clearer statements concerning the potential benefits of the new practice, and how it might be developed in a sustainable way. By adding these steps to the initial implementation process, respondents believed there would be a good level of preliminary adoption by practitioners.

Cognitive participation: Once the new practice has been explained and discussed, it is important to build and sustain a community of practice (Wenger, 2000) around the change process. Key participants need to be identified to help drive the innovation forward (initiation) so that the emergence of the new practice comes from those involved rather than from a remote source (activation). It is also necessary to allow the participants to organize their own work, which may lead to the need to form new relationships (enrolment). As part of this team-building, individuals need to believe that their involvement is worthwhile, and for them to understand how they can make a positive contribution (legitimation). Finally, in developing the initial framework for implementation, participants need to be able to help define the activities and procedures which they believe are needed to implement and sustain the new practice.

Hooker and Taft (2016) evaluated the implementation of a domestic violence intervention to help new mothers – a project called MOVE – improving maternal and child health care for vulnerable mothers. This innovation led to new practices supporting mothers and new-born children: ‘MOVE nurses became more proficient at screening, began to use the maternal health and well-being checklist and see favourable responses from women’ (Hooker and Taft, 2016: 6). These interventions and new practices were assessed through the use of a randomized controlled trial. Running parallel to this, Hooker and Taft (2016) carried out interviews with nurses to gauge the development and level of normalization of the new practices in their work. Early signs demonstrated that coherence occurred as the nurses began to understand the nature and potential of the intervention. However, in terms of cognitive participation, nurses stressed that, to be successful, there needed to be organizational support. Resource use increased, and as nurses had opportunity to familiarize themselves with the approaches and resources, they reported a positive impact. However, there were barriers to full embedding of new practice. A lack of time to complete the checklists, given pressured timeframes, a lack of privacy in some contexts which did not allow mothers and nurses to talk confidentially, and also a lack of referral sources to help mothers once initial checks had been completed, were all issues. The study also suggested that the impact was strongest where there were pre-existing links and relationships which could be called upon. Therefore, results seemed most positive where individuals believed they could help make a positive contribution in already established and supportive networks.
**Collective action:** Once the new practice has been understood, and the participants have organized their work to implement the practice, they need to enact and operationalize the work. The degree to which a new practice becomes embedded within organizational activity is shaped by issues that either encourage or deter enactment. The participants need to build knowledge, accountability and confidence around the new practice (relational integration), through interactional work with each other and with any new procedures and tools (interactional workability). To do this well, there needs to be explicit consideration and allocation of work as the practice is developed (skills set workability). However, for any of this embedding to occur positively and effectively, there needs to be careful consideration of resourcing. Resourcing is crucial, in terms of physical resources, but also time and execution of procedures (contextual integration). All too often, as the barriers presented in the first part of this article demonstrate, new practice is merely added to an already long list of responsibilities and duties, thereby assuming that participants will simply take on more and more work.

Looking at the Hooker and Taft (2016) study on MOVE once again, the development and use of the maternal health and well-being checklist was reported to help develop more professional discussion. However, the degree to which new networks and collaborations developed was variable. Some new relationships remained underdeveloped owing to a lack of time for discussion and normalization. In other cases, individuals wanted to attend training and collaborative meetings, but had workloads which would not allow them to. A number of participants identified the need for continuing professional development if practice was to become normalized,

well my concern is that the department has given the training like they’ve ticked off a box, here it is, go out and do it without that ongoing support or updating. (Team Leader 3CG: 9)

The study therefore stressed that the evidence was of a project where collective action had not been embedded across the project and was not fully normalized into practice, particularly owing to a lack of reasoning and knowledge and skills development.

**Reflexive monitoring:** As the new practice becomes embedded, it needs to be appraised and potentially modified to ensure normalization. Appraisal is needed to understand and assess the new practice as well as its impact on other processes which are already part of the organization’s work. The new practice therefore needs to be communally evaluated, through both formal channels and the sharing of less formal experiences (communal appraisal). The new practice obviously impacts on individuals, and therefore there needs to be an opportunity for individuals to assess and reflect on the impact of the new practice on their own work (individual appraisal). The use of collective and individual appraisal is the basis for determining how successful and useful the new practice is within the context (systematization) and how it might need to be modified to fit the particular situation in which it is being embedded (reconfiguration). The importance of feedback and evaluation is stressed by practitioners.

In Hooker and Taft (2016), the majority of participants reflecting on the MOVE project said that they had received little feedback concerning the impact of the amended practices, and
that little quality assurance was completed to help them move their practice on and ensure the project approaches became sustainable. Toye (2016), researching the development of an electronic client assessment and information system for home care (Resident Assessment Instrument–Home Care RAI-HC) in Saskatchewan to create care plans and service provision within the community, found that, as with Hooker and Taft (2016), there was little formal evaluation of the processes which had been developed. Participants felt the project had promise, but that, without proper evaluation, normalization into practice was difficult.

NPT is constructed from these four mechanisms, thereby offering a framework for understanding how innovations become sustainable new practices. In health and social care, NPT is often used as an evaluative tool, sometimes by itself, and sometimes as a parallel process to randomized controlled trials. It stresses the ongoing interventions which are needed to take initial enthusiasm and change to a position of full integration. In this way, it offers a critical and generative set of perspectives to aid organizational thinking, planning and decisions concerning resource allocation.

In the health sector, NPT tends to be used as an evaluative tool. As outlined in the examples of the operationalization of the four mechanisms here, many studies use the theory as a way of evaluating and explaining the degree and nature of change. By analysing research evidence from interviews with participants, useful insights can be gained concerning the dynamics of change, and also, potentially what might need to be altered in the future to help further positive adoption and normalization of practice. This alludes to another potential use of NPT, as an accompaniment to an action research design. As cycles of research emerge, they can offer insights into the evolving processes of normalization as an innovation or new practice is adopted.

The rapidly developing literature focusing on NPT in health and social care is testament to the potential of the theory to help affect positive and sustainable change, but to date its insights have not been translated to educational contexts. However, the evidence from the health sector, similar to education in its complex nature, is that NPT might offer a useful perspective for planning, executing and evaluating complex change agendas.

**Discussion: The potential of NPT in educational contexts**

As outlined earlier in this article, there are a number of barriers which can inhibit or even prevent change and innovation from embedding and normalizing in educational organizations (at both school and higher education levels). They tend to be linked to a lack of teacher agency, remotely generated and managed change, a lack of time to engage with change processes, and scarce resources. NPT has helped researchers and practitioners gain insights into the complex nature of change management in the health sector, and I believe shows equal potential for doing so in educational settings. It offers a framework for engaging with many of the barriers to change in positive ways, thereby lessening their impact, or even removing them altogether. A possible questioning framework which would support this process is given in Figure 1.
The focus on coherence at the start of a change process ensures that individuals have a genuine and meaningful opportunity to discuss how a new practice is understood, what it is hoping to achieve, and what the benefits might be in adopting it. This helps to instil a greater sense of agency across the organization, and locates the change process within the team rather than positioning teachers as mere participants in someone else’s project.

Having gained a clear and agreed set of principles and objectives, the move towards cognitive participation can aid individuals in understanding what they are expected to contribute and how their different responsibilities would fit together to help drive the new practice forward. It would also help teachers reflect on how the various elements of the practice might begin to be embedded with related elements of their work. Beyond this, collective action would then begin to answer resourcing and professional development issues. Those involved need to understand what it is they are attempting to do, and they need the time and physical resources to embed the innovation properly. As discussed above, this is an element of educational change which is often underplayed. Hall and Hord (2006) suggest that all too often change processes focus on the development of the innovation and its initial implementation, but little consideration and resources are given to the ongoing, and often long-term, process of embedding and normalization; this is why change processes can lead to ‘zombie innovations’.

Finally, the reason for new practices failing to normalize can be owing to a lack of enriched appraisal. Evaluation sheets, inclusion in quality assurance reports, and observation of new practice can all offer some insights, but they are also remote from the hoped-for day-to-day utilization of normalized practice. NPT highlights the need for richer evidence, driven by those who have embedded the practice. It also requires space for participants to have the responsibility and ability to amend and change the features of the new practice to fit the local context.

The overarching potential of this theory for use in educational contexts stems from its ability to uncover and work with the complexities of practice change. As suggested earlier in this article, organizations tend to deal with complex adaptive processes and contexts. The use of NPT allows for a coherent approach whilst working with emergent experiences and practices. It also stresses the need for the normalization processes to be driven by those involved, with leaders being part of the evolving dialogue, facilitating change and helping provide resources where needed and within fiscal constraints. This is a role similar to the paradoxical position of leaders as being in control and not in control at the same time, as suggested by Streatfield (2001).
Final reflection

Many educational systems are increasingly characterized by a perceived need for rapid change and innovation to meet the challenges set by politicians and wider society. However, the degree to which these changes are truly normalized into practices is unclear. Barriers to change, often the natural result of systems which do not support the complex professional work of teachers and lecturers, make the adoption of new practices difficult. NPT offers a potentially useful tool to help evaluate and support processes leading to normalization of practice, whilst also emphasizing some of the dynamics of organizational work which are likely to lead to positive change.

One of the problems of ‘educational transformation’ is the all too often assumed need for speed, and public demonstrations of radical change. However, true transformation is a quiet, evolving and communal process located in complex contexts. NPT attempts to work with the complex and emergent nature of organizational innovation processes. In an educational context, it may offer a positive response to Jones and Lewis’s (1991) challenge by offering a model of educational change which is general enough to transfer between contexts whilst being specific enough to translate into action.

References


