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Enabling curriculum change in physical education: the interplay between policy constructors and practitioners

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ABSTRACT

Background: Curriculum for Excellence (Scottish Executive, 2004), a new national policy initiative in Scottish Schools, provides a unified curricular framework for children aged 3-18. Physical Education (PE) now forms part of a collective alongside physical activity and sport, subsumed by the newly created curriculum area of 'Health and Wellbeing' (Scottish Government, 2009). This research set out to examine the new curriculum in Scottish schools at the micro-implementation stage of the policy process within the context of practice.

Purpose: The primary objective was to understand the factors that enable teachers to enact government led curricular policy. The secondary objective was to compare policy constructors' vision of Physical Education (PE) to the interpretation of PE teachers who were currently immersed in initiating curricular development.

Methods and Procedures: The research adopted a mixed method survey approach. Eighty-eight secondary school physical education teachers responded to a questionnaire that explored teachers' perceptions of curriculum change. Respondents were full time physical education teachers working in secondary schools across Scotland and represented sixteen local authorities. In addition, seventeen physical education teachers within one local authority took part in semi-structured individual interviews. Comparisons were made with ten interviews conducted with policy constructors who were responsible for the initial, interim and final stages of developing and designing the experiences and outcomes for physical education.

Main outcomes and results: The results from the questionnaire indicated that 66 per cent of teachers believed there was a need for change within the Scottish curriculum, however only 54 per cent anticipated that they would change the PE curriculum. Crucial in enabling teachers to enact and sustain change was the important role of agency, culture and social and material structures along with the schools capacity to manage new policy development. When comparing the data with the policy constructors the findings revealed a discrepancy between the policy constructors' understanding of the vision of physical education and teacher's interpretation. The alignment of PE within health and wellbeing was seen as an opportunity to build on the strengths of the subject; however concerns were raised that this shift may result in physical education becoming part of a fitness discourse distorting policy intentions.

Conclusions : As PE teachers act as agents of change translating policy uniquely to fit with the opportunities and constraints of the school there is a fear that policy intentions may mutate as they percolate into practice.

Introduction

Curriculum for Excellence (CfE), a national policy initiative in Scottish Schools, provides a unified curricular framework for children aged 3-18. Within this framework, Physical Education (PE) now forms part of a collective alongside physical activity and sport, subsumed by the newly created curriculum area of 'Health and Wellbeing' (HWB), (Scottish Government, 2009). The fundamental aim of the HWB curricula area is to develop pupils' knowledge and understanding, skills, capabilities and attributes necessary for mental, emotional, social and physical wellbeing now and in the future (Scottish Government 2009). However the positioning of schools to play a part in the promotion of childrens' HWB is not limited to Scotland. There has been an increasingly systematic approach to the study of effective schools across the globe in the last twenty years, with evidence emerging from research that supports the promotion of health in school contexts. This has led to health promotion becoming a recognisable discourse in educational policy (Allensworth, 1994; Clift & Brunn Jensen, 2005; Kolbe, 2005).

'As health promotion initiatives become more integral to mainstream educational practice I would predict that it will become more and more evident that the factors that produce effective schools from the viewpoint of educational achievement will be essentially the same factors which produce schools which promote health effectively' (Young, 2005, p.115)

Prior to the development of the CfE, the Scottish Executive (2004b) set up a 'Physical Education Review Group' to identify key principles which would inform the redesigning of a curriculum spanning the 3-18 age range. The message surrounding their recommendations were based on the assumption that good quality PE could improve the health and wellbeing of children, which in turn, could improve their achievement in school, their confidence and their 'capacity' for learning, (Scottish Executive 2004b). The report by the review group played a key role in the development of PE and as such, within the draft and final texts of the CfE the government recommended that the time allocated to PE increase to two hours in the school week. The impact of increased time for PE within a curriculum framework of HWB, offers promising potential; as the stated experiences and outcomes are not focused on improving 'fitness' but rather recognise the contribution that PE can make to pupils' mental, emotional, social and physical wellbeing.

CfE has been described as Scotland's 'new breed of national curriculum' (Priestley, 2010, p23) a process of top down government led policy with bottom up curricular development initiated by teachers. It was anticipated that this radical reform to education would have a fundamental impact on the nature of pedagogy and schooling (Reeves, 2008) as 'one of the most ambitious programmes of educational change ever undertaken in Scotland' (Scottish Government, 2008, p8). However, the ambitions of the Scottish Government (2004; 2009) can only be realised by overcoming the long acknowledged problems associated with implementing and sustaining curriculum change (Snyder, Bolin and Zumwalt, 1992, Bekalo and Welford 2000). Contemporary research continues to indicate that there is a complex relationship between policy intentions and practitioners actions in the implementation or transformation of policy (Johns, 2003; Priestley and Humes, 2010; Priestley, 2010; Gray, Mulholland, MacLean, 2012a). This paper adds to the discourses on policy and curriculum change by analysing the extent to which teachers translate and enact policy within Scotland's thirty-two local authorities. This research takes forward the notion of 'policy as process' and investigates the implications that flexible policy frameworks have on teachers' capacity to recreate policy within the school setting. Enabling curriculum innovation is perhaps less about the rigid adherence to policy as inscribed in texts, as one possible reading of enactment, but rather more akin to a process of acting to bring policy intentions into being. Enactment in this case requires teachers to be aware of the values and principles of CfE and create curricula that enable children to have educational experiences, which authentically capture the essence of policy intentions. In this sense policy could be considered as having a 'performative' function (Gergen, 1995) emphasising the interplay between policy constructors, policy text and the teacher where 'discourse presents a variety of representations from which action might be chosen' (Adams, 2011, p61). Typically in Scotland, value is placed on the role and professionalism of the teacher and as such CfE was designed in a way to encourage teachers to reflect on their practice and develop curricular approaches that matched the aims of CfE and the needs of the learners. This research is meaningful as it takes forward the international knowledge in the field of policy formation in the way that analyses teachers' capacity to embrace, translate and enact change within a flexible curriculum framework.

Within this paper and the analysis that follows, Bowe, Ball and Gold's (1992) concept of a '*policy cycle*', recently developed by Horrell, Sproule and Gray (2012), identifies '*contexts of influence, production and practice*', to help capture some of the nuances of policy implementation. Previous research conducted by (Gray, MacLean and Mulholand, 2012b), explored policy makers experiences of curriculum construction as they devised a vision for PE within CfE. The journey began by exploring the ways in which policy constructors involved in the *context of text production* in CfE understood and articulated the vision for PE. Interviews were carried out with the individuals (n=10) responsible for constructing the policy text and writing the experiences and outcomes for PE as part of HWB. It is interesting to note that the interviewees responsible for writing the HWB section of CfE were drawn from a range of careers and backgrounds, however operating at a tier above them were civil servants for the Scottish Government, without a background in PE. The findings highlighted that the government controlled the process of development, which limited the extent to which policy constructors could make a genuine contribution to shaping a vision for PE. As a result, PE was made to 'fit' into the CfE framework. Accordingly, policy constructors were concerned that teachers may misinterpret policy text, which could result in a narrowing of their vision of the PE curriculum. The research reported in this paper continues the journey into the *context of practice* to look at teachers' interpretation and understanding of CfE policy. In effect, we hope to uncover the factors that enable teachers to enact policy and then critique the extent to which there is congruence between the vision of PE expressed by PE teachers and policy constructors.

Policy as 'discourse'

Policy as discourse provides an opportunity to consider 'the interplay between policy creation and response' (Adams, 2011, p59). A managerialist view of policy focuses on the generation and then implementation, seeking to discover the effects of policy making. However, conceptualising policy as a process, rather than a text, a moment or an event, helps to capture the interaction between policy constructors and practitioners. The 'policy cycle' when applied to the development of PE within HWB, illuminates complex and contextualised policy processes that involve debate, conflict and a struggle for power identified as the 'context of influence', the 'context of policy text production' and the 'context of practice' (Bowe et al,1992). Horrell et al (2012) view the relationship between the 'context of influence' and the 'context of policy text production' as iterative, reflecting the complex interplay and relationship between stakeholders, and assert that;

.... the policy cycle is not one moment or turn, it is more a case of cycles within and between contexts and any attempt to consider a policy trajectory in terms of originating solely from the *context of influence* moving into *production* and then into *practice* is a simplistic reading. (Horrell et al, 2012 p167)

The 'context of influence' refers to the circumstances which shape the formation of policy, as the policy constructors are immersed in the circulating discourses which influence the role of PE within the curriculum. Research evidence, existing policies, political arguments (influenced by economic, national and global concerns) and consultation with stakeholders all shape the policy that is constructed. From the debates and dialogue within the 'context of influence' emerge policy concepts, which are then deployed into texts within the 'context of text production'. Policy analysis therefore, must be situated within the specific policy context and take account of the various influences that are mediated by individuals at each level. Utilised in this way the policy cycle provided a useful framework in identifying the various stakeholders involved in the policy making process and exposed the complexities and struggles within each context. In this case, policy as discourse attends to the interplay between the inscriptions of policy constructors and teacher response.

Enacting Policy

In terms of the enactment of curriculum policy Supovitz (2008) analysis anticipated that there will be 'gaps' between what was intended by policy constructors and what ultimately is translated into practice. Almost inevitably the process can bring about unintended results as policy aims and intentions are open to the interpretation of teachers. Policies migrating from one setting to another have been referred to as '*Iterative refraction*' (Supovitz, 2008), which often can lead to a distortion of policy intentions. Priestley (2010) viewed interactive refraction as potentially positive as teachers can actively engage in creatively applying policy ideas tailored to their school setting. Priestley (2010) emphasised the interaction of teacher's *agency*, within the *culture* and *social* and *material structures* of the school, would encourage change and enactment. Individual agency can be constrained or enabled, and is in part dependant on a teacher's prior experiences, knowledge and motivation. Agency has personal, social and structural dimensions which in combination influence the enactment of the curriculum. Within the educational setting, teacher agency is enhanced by collaboration, as ideas are shared within the school and individual departments. In fact, Adams (2011) state, 'that it is the very opportunities for conversation and professional activity that form policy' (p66). The cultural influences refer to the constraints and opportunities that are already in existence that shape the culture of the school. Shared values, knowledge and ideas that are predominant contribute to the school culture. Social and material structures in the school setting offer both opportunities and constraints for teachers. For example, the leadership team in the school may actively encourage curriculum innovation and seek to empower teachers by pursuing specific strategies, which enable them to be creative. Material structures include access to resources, finances and the layout of the school, which will contribute to the form

policy takes. These factors together with the *capacity* of the individual school at the micro level to engage with new policy, will combine and contribute to ‘successful engagement with change’ (Priestley 2010, p32). From this viewpoint, teachers are considered as professionals mediating flexible policy frameworks, (Supovitz, 2008) and not as technicians carrying out prescribed policy. Teachers are required to exercise professional judgement as they engage in translating, moulding and enacting policy to uniquely fit within the opportunities and constraints of the cultural, social and material structure of the school.

Enabling curriculum innovation therefore, is perhaps less about the rigid adherence to policy as inscribed in texts, as one possible reading of enactment, but rather more akin to a process of acting to bring policy intentions into being. Enactment in this case requires teachers to be aware of the values and principles of CfE and create curricula that enable children to have educational experiences, which authentically capture the essence of policy intentions. In this sense policy could be considered as having a ‘performative’ function (Gergen, 1995) emphasising the interplay between policy constructors, policy text and the teacher where the discourse offers a variety of options from where action might be chosen (Adams, 2011).

Educators and researchers alike have long acknowledged the problems associated with implementing and sustaining curriculum change (Snyder, Bolin and Zumwalt, 1992; Bekalo and Welford 2000). A survey by Penney and Evans (1999) into the effectiveness of the implementation of the National Curriculum of Physical Education (NCPE) in England, found that teachers’ practice and pupils’ experience differed from the official aims initially intended in the policy documentation. Swann and Brown (1997) reported similar findings during their evaluation of the 5-14 curriculum in Scotland. They revealed that teachers did not change their current practice, but simply changed the curricular language and shaped the guidelines to ‘fit’ around their existing practice. In a more recent study Marshall and Drummond (2006) evaluated the implementation of the Scottish ‘Assessment is for Learning’ and discovered that only 20 per cent of those practitioners who claimed to have embraced the approach, were observed teaching in keeping with the rationale. These issues are not unique to the UK, Johns (2003) embarked on a post-structural case study of the Hong Kong Physical PE curriculum and noted that change could only be achieved by the ‘transformation of the subjective realities experienced by teachers and the willingness of policy makers to understand those realities and include teachers in the process’ (p345).

Transformational Change

Archer (1979, 1982, 1988, 1995) analyses the complex interactions that produce change in a system’s given form or social structure, by drawing on and developing Buckley’s (1967) concepts of ‘*morphogenesis*’ and ‘*morphostasis*’. Morphogenesis, describes ‘those processes which tend to elaborate or change a systems given form, structure or state (Buckley 1967, p58) in a way that ‘captures both the possibility of radical and unpredictable re-shaping and the fact that the genus of this reshaping lies in the interplay between structure and agency’ (Buckley, cited in Archer, 1995, p75). When applying this process to policy enactment, morphogenesis would describe a process whereby a new policy (CfE) entering the school system fully replaces the old processes and ideas previously in place. In contrast, morphostasis describes ‘those processes in a complex system-environment exchanges that tend to preserve or maintain a systems given form, organization or state’ (Buckley 1967, p58) in this case old ideas continue and the new policy is actively (or passively) rejected or resisted (Gilies, 2006). However there is a mid-way model, a *form of morphostasis*, where the new ideas merge with the old. Priestley (2011) suggests that this form is more common, particularly where there are either instances of agreement and dissonance in the new policy, or when the difference between them is not important enough to cause conflict. Archer (1988), although not specifically concerned with educational innovation, captures the tension that teachers may experience in the face of a discourse that espouses ‘transformational change’ in curriculum and the realities of continuing to work within the same temporal space and concludes that...

we can simultaneously feel bound to plod round the cultural treadmill yet also brim over with criticism and creativity – the tension between being conditioned to do things one way but being able to conceive of doing them differently. (Archer 1996, pxxiv)

Morphogenesis and morphostasis can only be apparent *after* there has been a disruption to the social structure and in this case it’s the educational policy that forms the structural conditioning designed to bring about change. Archer (1998) analysis of the morphogenetic relationship of agency and structure is concerned not only with the identification and elaboration of social structures, but in the cycles of structural conditioning, social interaction and structural elaboration. It is in the analysis of structural elaboration where judgements of morphogenesis and morphostasis or a form of morphostasis are rendered possible. As highlighted previously, the policy cycle is not seen as a ‘moment in time’ but rather a process which at various points will be interpreted, constructed and re-constructed by those engaging with ‘change’. Within this paper, we aim to analyse the processes that enable teachers to enact curriculum, focusing specifically on how the perception of policy in the context of practice plays a significant role. As a theoretical framework for this analysis we draw on Buckley’s, Archer’s and Priestley’s conceptualisation of organisational change and Horrell et al’s (2012) development of the policy cycle.

Purpose

Our previous study examined the experiences and perspectives of the policy constructors charged with constructing a 'text' for PE within HWB. Findings provided some insight into the ebb and flow inherent to this 'context of text production' however, the intention at this stage, is to take the reader on a journey through the policy cycle as we give voice to PE teachers who are at the heart of the 'context of practice', within this Scottish setting. By directly comparing teachers' experiences of enacting policy and intentions or indeed aspirations for 'physical education', we hope to examine the interplay between policy creation and response and add to the discourses of policy and curriculum change. In effect, an exploration of the translation of rhetoric into reality may serve to provide a unique insight into the factors that enable policy to be enacted at the micro-level.

The responsibility for the 'implementation' of CfE is located with Scotland's thirty-two local authorities, with schools and teachers leading the development of curricula. The research study reported here was conducted in the first year of CfE's implementation at a time where teachers were developing the curriculum to achieve the 'learning experiences and outcomes' (Scottish Executive, 2009a) within each curricular area. This was particularly salient as it was anticipated that at this stage of enactment there would be evidence of change being built into the structures of the school through the school policy, budget and timetable (Fullan, 1982). The intention therefore was not to examine the 'practice' of teaching but rather to explore the structures that support change in creating a new vision for PE.

The research adopted a mixed method survey approach underpinned by the following research questions (1) What are teachers perceptions of recent curriculum change in Scotland and within PE. (2) What are the factors that enable teachers to enact policy within a flexible curriculum model? (3) To what extent are PE teachers enactment of policy congruent with the vision of policy constructors?

In order to address the research directives, a questionnaire was designed specifically to gauge general perception of 'change' within the school context. Semi-structured interviews provided a means of identifying and exploring further 'factors' that enable teachers to enact policy. While a comparison of teacher and policy constructor interview responses served to illuminate the extent to which teachers enactment of policy was congruent with the vision espoused by policy makers.

Method

Participants

Teachers

Ninety-six PE teachers from sixteen of the thirty-two local authorities in Scotland were invited to respond to the self-report survey questionnaire. The Eighty-eight PE teachers who completed the questionnaire (92 per cent response) were all involved, at varying levels, with mentoring PE students from the undergraduate ITE programme. The sample was representative of both rural and urban schools and included male and female teachers with a variety of experience and level of promotion.

In order to provide additional context for this study and to enable a comparison between teachers and policy constructors, seventeen PE teachers from the south east of Scotland, who had previously completed the questionnaire, took part in individual face-to-face interviews. Purposive sampling (Cohen, Manion, and Morrison, 2000) was utilised to include a range of individuals, (male and female) from the context of practice (rural and urban schools) for interview, thus ensuring the credibility of the data obtained (Silverman, 2000). Respondents included 8 females and 9 males with 4-33 years teaching experience ranging from 'newly qualified teacher' to 'principal teacher' of PE.

Policy Constructors

Snowball sampling (Noy, 2008) was utilised to identify key individuals who played an active role during the initial, interim and final stages of developing the experiences and outcomes for PE within HWB. This involved the identification of one member from each group, who then provided the names of other group members who, in turn, identified further participants (Cohen, Manion and Morrison 2000). Consequently, ten participants from the initial, interim and final stages of developing the experiences and outcomes for PE within HWB were identified for this study, five of which were involved in the initial discussions about HWB. They came from institutions such as Initial Teacher Education (ITE), Learning and Teaching Scotland (LTS) and Her Majesty's Inspectorate of Education (HMIE). As a group their areas of expertise included policy writing, curriculum design, health promotion and experience of primary and secondary education. The remaining five participants who were involved in the interim and final stages of curriculum construction (developing experiences and outcomes) included PE teachers, LTS representatives, individuals aligned to the 'Being Well Doing Well' initiative (Health Promoting Schools Unit 2004) and Sport Scotland's Active Schools initiative (Scottish Government 2003). One group member who was identified from the interim stage and three group members

identified from the final stage did not take part in the study for reasons that included retirement, geographical location and professional commitments.

Procedure

Teacher Questionnaire

The questionnaire was developed in line with literature relating to PE curriculum policy (Scottish Executive, 2004; Scottish Government, 2009) and curriculum change (Curtner-Smith, 1999; Humes, 2003; Scottish Executive, 2004b). The questions were developed collaboratively by the researchers involved in this investigation. The initial draft of the questionnaire was then sent to an independent researcher experienced in the development, administration and analysis of curriculum-related questionnaires. The feedback from this process was discussed by the main researchers and, subsequently, minor changes to the format and wording of some of the questions were made. Additionally, three items that were deemed to lack relevance were removed from the questionnaire. The adapted questionnaire was sent to a sample of ten PE teachers for further piloting who were informed about the purpose of the study and were invited to comment on language used, meaning, presentation and the length of time it took them to complete the questionnaire.

The final questionnaire comprised four sections designed to gather biographical data, explore participants' perception of curriculum change in Scotland, curriculum change within PE and finally, factors which enabled teachers to enact policy. Participants were invited to respond to a range of closed, open and forced choice (likert) questions. For example teachers were asked to respond on a 5 point likert scale to the question: *to what extent do you support the main aims of curriculum for excellence? 1 - Strongly disagree, 3 – agree and 5 strongly agree.*

To ensure a high response rate and enable teachers across Scotland to participate in the study, school experience tutors delivered and collected questionnaires from the schools in which their students were placed. A 92 per cent response rate was achieved with the main reason for non-completion being 'lack of time'. The data generated from the questionnaire was predominantly nominal /ordinal in nature, therefore descriptive statistics were computed, for example frequency and percentages of participants supporting the goals of a CfE.

Teacher and Policy Constructor Interviews

The teacher interviews that followed adopted a protocol similar to the policy constructor interviews that sought to understand perceptions of curriculum change and teacher enactment (Gray et al 2012b). The questions centred around; curriculum change; CfE; PE within the domain of HWB and curriculum organisation. This approach enabled us to place teachers' experiences of enactment alongside the views of the policy makers in an attempt to gauge level of congruence. Consequently, the teachers' interviews were analysed in the same way as the data previously collected in interviews with the policy constructors.

Focused interview schedules (Cohen et al., 2000; Gordon, 1999) were developed in a semi-structured interview format with themes, questions and probes (Gilham, 2000). During the interviews detailed field notes were taken and checked with participants in the study for accuracy. All interviews were recorded and transcribed verbatim.

Analysis of the interview data, were conducted in five phases. Firstly, the transcripts were read and re-read in order to become familiar with participants responses (Dye, 2000). The second phase involved grouping the responses according to the research questions to provide a context specific and focused framework for analysis (Taylor-Powell and Renner, 2003). This enabled a preliminary process of identifying emerging thematic categories. This entailed considering the 'text' and developing phrases that explained key issues within the data in order to summarise their meaning and identify the emergence of categories (Glaser, 1965; Podlog and Eklum, 2006). Reference to the field notes taken during the interviews further supported the initial analytical process. The third phase involved identifying and further refining the categorisation of key issues discussed by individual participants. This categorisation procedure was independently carried out by all researchers to ensure investigator triangulation. The fourth phase of this analysis involved testing the authenticity and robustness of these categories across the interview responses. At this point, the features of all categorical instances were discussed at length until appropriate categorisations were agreed (Sproule, Kinchin, Yelling, McMorris and McNeill, 2002). The final analysis involved identifying commonalities and differences of teacher and policy constructors' responses. This process of data analysis enabled the perceptions of policy constructors and the teachers, tasked with translating and enacting policy, to be compared.

Results and Discussion

The following themes emerged as significant in examining the intersection between the context of production and the context of practice; Teacher agency, cultural structures, social structure, material structures and capacity. These themes

will be discussed under the following subheadings; *perceptions of change; good practice; broadening the horizon; enable enactment; flexible policy framework.*

Perceptions of change

Understanding teachers' perceptions of the reasons for change to the Scottish curriculum was important as this can impact on their ability to interpret policy documents in an informed and critical manner. The results indicated that teachers were unclear about the aims and intentions of CfE with 59 per cent of participants rating their understanding of the new curriculum as less than satisfactory. However despite this lack of knowledge, 77 per cent of teachers reported supporting the goals of CfE. Further, 66 per cent of teachers believed there was a need for change within the Scottish curriculum, although some reflected that the change was 'forced', 'imposed' or 'inflicted' upon them. In terms of understanding the impetus for change, participants cited a diverse range of factors pertaining to economic and political pressures to concerns relating to health and coherent educational experiences. Moreover there was a consensus that the Scottish curriculum needed to be 'fit for purpose' and prepare young people for the future. Teachers' perceptions of the main factors that influenced current changes to the Scottish curriculum can be summarised under the headings of, 'external', 'internal' and 'systemic' factors (see Table 1.0).

INSERT TABLE 1

Our findings indicated a discrepancy between the knowledge of CfE policy constructors and teachers. Policy constructors closely aligned their thoughts with policy text and had a clear picture of the overarching aims and vision of the new initiative. This was not surprising since they were closely involved in the process of text production. The policy constructors' views on the aims of HWB were consistent with each other and also closely aligned with official policy text. Reasons for change to the Scottish curriculum were regarded positively; stating that PE within HWB would help teachers 'showcase' what they can do.

If it is delivered in the right way we could have a fantastically rich and diverse subject (Policy Constructor 7).

It's about the celebration of how much contribution PE makes, not just to physical development but the cognitive, social, emotional and mental which to me, makes sense (Policy Constructor 5).

Teachers were asked to reflect on the extent to which they felt there was a need for change to the PE curriculum in Scotland, 63 per cent reported 'yes', 22 per cent were 'unsure' and 15 per cent did not feel there was a need for change. Of the 63 per cent who felt change was required the main concerns were regarding health and lack of participation. Around 80 per cent of participants 'strongly agreed' that concerns regarding child/adult obesity, poor health (86 per cent) and lack of adult participation in physical activity (76 per cent) were behind the drive for change. It was interesting to note that only 39 per cent of teachers 'strongly agreed or agreed' that poor results or improvement in performance acted as an impetus to change the PE curriculum.

Good Practice

In relation to the need for change, it was important to evaluate if teachers understood *why* the curriculum had changed as this would have a direct impact on the extent to which they would engage with the new curriculum (Fullan, 2000). Teachers were then asked if the new position of PE within HWB would change the way the curriculum is organised, 44 per cent reported 'yes' with 18 per cent 'no' and 38 per cent 'unsure'. The teachers who indicated that they would change the PE curriculum stated that the following changes had already been enacted; interdisciplinary work across 'subjects'; increased focus on literacy and numeracy; increase in health based / fitness courses with a focus on recreation; increased time for PE, improved links with outside agencies and better links to Primary Schools. However, it is important to note that many reported 'minimal change', 'tweaking', 'little' or 'no' change, indicative of Cuban's (1998) *first order changes*. The teachers who reported 'no' or 'little' change also felt they did not have an acceptable level of knowledge and understanding of CfE and were not clear on why the curriculum had changed.

At the moment we haven't made any changes...I don't disagree with it, I don't think there is very much to it...I don't think it's anything different (PE Teacher, 14).

Good teachers and good lessons probably incorporated all these things anyway. And so I think it was very much about making it more public, making it more quantifiable so that everyone was doing the same thing (PE Teacher, 12).

Similarities were found with the policy constructors views who had experience of teaching PE, they stated that the aims of PE within HWB simply reflected good practice, and as a result many teachers were already adopting good practice, this is in part reinforced by the report produced by the HMIE (2008) prior to the publication of CfE (Scottish

Government, 2009). In addition, one policy constructor viewed the experiences and outcomes as being synonymous with the learning outcomes of one of the certificated courses in Scotland alluding to the notion that PE within HWB is not fundamentally different to other forms of PE.

These key elements of performance, of knowledge and understanding, and of affective development are still there, they are still three key drivers within the experience and outcomes (Policy Constructor, 3).

If PE teachers believe that CfE is synonymous with good practice and teachers believe that they are currently demonstrating good practice then this leaves no incentive to embrace change. However, one teacher was critical of this view and stated;

No-one can argue that the Curriculum for Excellence is sound educationally and should allow pupils more chance to be responsible for their own learning and attitudes. This will all count for nothing however, if the quality of the experience does not improve. The mantra 'it's nothing you are not already doing' is no good! (PE Teacher, 2)

Broadening the Horizon

All of the policy constructors believed that many teachers would have to change their mind set and 'broaden their horizon' about teaching PE within HWB in order to be able to facilitate development in pupils' health and wellbeing through the practical setting. As a result many policy constructors were concerned that teachers may adopt a narrower view of PE, reducing it to activities that focus on fitness and health.

I guess my concerns are people's interpretation and not looking at the wider issues, for people to have a narrow perception and think it's about health and fitness and where that's coming from (Policy Constructor, 8)

Similar concerns were expressed by the teachers;

Although it sits in health and wellbeing as a subject, I am a bit concerned it might lose its focus ...I'm concerned that PE might get lost within health and wellbeing. I think sometimes we think too much about the health and wellbeing experience and not enough about the skill development and the improvement as an individual taking part in that activity (PE Teacher, 17).

Policy constructors valued the holistic development of the individual child and embraced the established values of PE in developing the psychomotor, cognitive, social and emotional domains. When asked, one policy constructor placed value on the broader view of the HWB of the child but equally placed emphasis on three lines of development;

To improve the physical competency of children from three through to eighteen so that they can access practical activities. Develop interpersonal skills, reliance, self-esteem, and confidence, working with others, co-operating, taking a leadership role, respect and appreciating other people. Evaluating, cognitive development, appreciation involving literacy, listening and talking, being able to critically evaluate and suggest how to improve performance. (Policy Constructor, 2)

Policy constructors were concerned that given the strength of the health discourse permeating Scottish society, that teachers may interpret the policy text in relation to improving health and fitness and increasing physical activity levels, in keeping with health agendas in New Zealand where fitness is regarded as the core business of PE in schools (Burrows, Wright and Jungersen-Smith, 2002). One policy constructor commented on the opportunities that are available for PE within CfE;

We have a place in the sun ...it's working with practitioners to say that if we don't get this right; if we don't take this opportunity to make sure it's more than just movement skills, what a wasted opportunity that would be (Policy Constructor, 8).

Confirming this view, the teachers interviewed had in fact interpreted the placing of PE under the umbrella of HWB as a directive to improve children's fitness. As PE teachers wrestled with 'fitting' PE into their translation of the policy text, changes were being made to the PE curriculum to increase time on the health and fitness aspects of physical activity. The danger in emphasising a fitness prescription for PE results in health behaviours becoming the focus, which potentially diminishes the value of pupil enjoyment and meaning from activities (McNaughty and Rovegno, 2001).

This assumption was not surprising as our previous study (Gray et al, 2012b), concluded that the government controlled the process of development which limited the extent policy constructors could make a contribution to shaping the vision

for PE. The meaning and purpose of PE was not debated prior to these developments and therefore was not clearly articulated in the policy documentation. PE, therefore, was being made to 'fit' the CfE. What surfaces in the analysis of the policy constructors interviews, is that there is limited social interaction between them and the teachers, the policy text that enters the 'context of practice', is a poor substitute for extended dialogue. It is evident that morphogenesis requires the teachers and schools to engage in structural elaboration to enact change and this is perhaps only possible if teachers feel that there is a need for change. One factor that might have limited teachers' perceptions of PE within the context of HWB, is the strong message about the role of PE and the development of physical health (Scottish Government, 2009). Lack of communication and involvement between national-level policy constructors and local level teachers clearly has the potential to result in a form of PE that is far removed from current good practice/models of PE.

Enabling Enactment

When teachers discussed 'enactment of policy' it was clear that a range of factors that acted as facilitators and inhibitors. In the absence of opportunities for *collaboration*, teachers acting as agents of change, mediating flexible policy frameworks, became problematic. Teachers required discussion on constructing policy ideas with other colleagues, through the school creating opportunities for collaboration. These findings further emphasise the findings of Bowins and Beaudoin, 2011, Armour and Yelling, 2007, Fullan 2003, Johns, 2003, which emphasise the importance of teacher collaboration to adapt and embrace change. However this research takes this notion one step further and reinforces Adams (2011) research which emphasizes the importance of 'teacher conversation and professional activity' as crucial in assisting teachers to create policy. Individual *agency* was enhanced in the schools that provided the social structure for innovation, reinforcing Priestley's (2010) notion of the important role of teacher agency as crucial in encouraging change. Teachers who were actively making changes to curriculum organisation referred to an improvement and increase in collaborative practices throughout the whole school. Schools that embraced change contained a social structure that sought to improve external links to *professional learning communities* and internal links between subject areas in *interdisciplinary work*.

Interdisciplinary learning was advocated by policy constructors as an area that would require change in schools, particularly within secondary schools. However, there was a concern that interdisciplinary learning may not be organised in a way that would be meaningful for learners.

I guess the thinking here is we have to be clear about, it's not interdisciplinary learning just to say we can tick the box (Policy Constructor, 1)

However, due to a lack of collaboration, the reality of creating communities of practice became problematic and as a result the interdisciplinary learning was reserved by many schools to an annual event.

Yes, interdisciplinary happens once a year and so it doesn't have an influence on the curriculum running from day to day (PE Teacher, 4).

It became clear that the *cultural influence* of the school, already in place before the introduction of CfE, had the potential to place constraints on the teacher to fully embrace interdisciplinary learning as intended in the rationale. In this respect Archer (1996) *morphostasis* was evident where teachers were rejecting the new policy ideas in favour of continuing with the old. Times of change were generally times of uncertainty for teachers and as such their typical reaction was to resist change and hold onto existing practices (Johns, 2003).

Policy constructors envisioned more meaningful links with PE teachers in the department, teachers within the school and neighbouring schools. Policy constructors discussed the idea of developing pedagogy by improving communication between teachers and creating 'communities of practice'.

Some teachers saw the value of working together but were concerned about the authenticity of the experience.

Yeah there is a big emphasis on cross curricular links and I think done right it could be fantastic. It'll save time you know if the topics don't have to be repeated...I think it should be delivered in a joined up fashion. But I think we have almost gone too far. And possibly, it's only in the pilot format, but certain projects that I have heard of are completely contrived (PE Teacher, 8).

Flexible Policy Framework

Teachers reported a lack of knowledge of the policy document and policy intentions and were confused by numerous interpretations of the policy text. As a result they required clearer guidelines and direction from senior management in the school to support them in their development of curriculum policy. Limited teacher *knowledge*, lack of *support* and an

increase in *workload* were stated by many teachers. It became evident that teachers felt that they required greater supportive *leadership*, combined with *guidance* and *feedback* on individual curricular design. In particular, they emphasised a need for feedback and support on the courses they had created to reassure them that they were interpreting the text 'correctly'. Teachers talked about 'reassurance', 'being correct', and 'consistency' with the policy, subject areas, and other schools.

There is a lack of steer from our own national authority I think. And it seems very, very autonomous. Now in one hand that's quite a nice thing to have, you know you can work with your own pupils in your own environment and do what suits the needs of your pupils. But on the other hand there's something in the back of your head saying 'am I doing the right thing here, you know and that kind of sits a bit uneasy with me'. (PE Teacher, 7)

Teachers struggled with the notion of policy as 'performative', dismissing the idea that policy should not be seen as an accurate portrayal of some pre-existing status, but 'a social construction given legitimacy through the permission it gives to speak' (Adams, 201, p60). Some teachers found the level of autonomy difficult and expressed concern over 'too much freedom', without moderation and feedback and sensed they were 'stumbling around in the dark' (PE Teachers, 12 and 16).

The main weakness is not necessarily on the concept itself but on the amount of support being given to develop (PE Teacher, 1).

Black and Atkin (1996) in their analysis of school change reform in mathematics, science and technology found similar findings to our study and revealed, where teacher support is lacking often feelings of failure, conflict and frustration arise. It became clear that teachers not only require support but also affirmation that their translation of policy into practice was appropriate. Fullan (1982) proposed that the translation of policy intentions into classroom practice required multi-dimensional changes in technology, pedagogy and ideology. However, Fullan (2000) added a further requisite for achieving lasting change by suggesting "high quality teaching and training materials (combined with) a highly interactive infrastructure of pressure and support" (2000 pp23-24) that would help *accelerate* and *extend* the implementation process faster than a change in teachers belief and values. Whilst teachers were willing to change the PE curriculum to align with CfE there were teachers who were resistant to change, they reported feeling unsupported in their development of PE policy and as a result were meeting the targets of the new rationale by doing 'a lot of paperwork and auditing...make sure that everyone is ticking the right boxes' (PE teacher, 6). Or alternatively, they changed their rhetoric to fit the 'jargon' of the new policy.

Where the change will come is when we're reporting to parents, the jargon, we have to use the experiences and outcomes as an umbrella through which to report to them (PE Teacher, 3).

Teachers involved in the process of redeveloping curriculum policy in line with CfE reported an increase in their workload and there was a sense that many teachers all around the country were 'reinventing the wheel'.

I've never entered any initiative with so little information, so much, but so little as well in terms of exactly what you're meant to be doing. It's been very poor really. And the persuading thing I think, when you're in the profession, is that everyone in every school all over Scotland is all doing the same (PE Teacher, 5).

It is perhaps not surprising that the teachers who reported that that they felt 'unsupported' were not able to transform their practice, as morphogenesis, requires not only personal agency but structural support. Enabling curriculum change requires teachers to act, however, simply being able to think that it is possible to do things differently is not enough in itself. The 'emergence' of curriculum change requires an interplay between structure and agency for structural elaboration to result in morphogenesis.

Concluding Thoughts

This research sought to understand the factors that *enable* teachers to initiate curricular development and enact government led policy in a climate which provided schools and teachers greater autonomy, flexibility and responsibility. The teachers that appeared to enact the policy rationale of CfE tended to operate in an environment that placed value on teacher agency within a cultural setting that embraced interdisciplinary learning. The social structure of these schools provided support, guidance and feedback on teachers' efforts to engage with and enact these new curriculum initiatives. Although this process was time consuming and involved an increase in workload, teachers felt part of a team developing curricula in an atmosphere of collaboration, where conversation and professional activity helped them to 'form' policy. Change in these schools was somewhat reminiscent of what Archer's (1996) defines as a *form of morphostasis* where, rather than the emergence of a transformational curriculum change, rendering what existed before unrecognisable; new

policy ideas were mixed with ideas from existing practice. The result is not a replacing of curriculum structures and practice but a pragmatic accommodation of the interaction of teacher's *agency*, within the *culture* and *social* and *material structures* of the school setting (Priestley, 2010). However, this account only represents half of the data collected. Many teachers reported 'lip service' changes to current practice with little or no change, consistent with Archer's (1996) morphostasis, where the new is rejected for the old. In the climate of change some teachers expressed feelings of uncertainty, which resulted in individuals clinging onto existing practice (Johns, 2003). Despite the Scottish Government's (2009) and policy constructors intentions of a flexible curriculum framework that recognised teacher autonomy, the teachers that resisted change, expressed a view that the CfE had been imposed on them. Teacher's insufficient knowledge of *reasons for change* may have contributed to a lack of motivation to implement new initiatives effectively and as such enactment was subject to first order changes, (Cuban, 1998). However, crucial to this resistance was not the teachers themselves, but rather the social and cultural pressures on their practice that limited their capacity to embrace change. Teachers required facilitative leadership, guidance and direction to empower and buttress their decision making process within a supportive and collaborative culture. As information migrated to the context of practice there were some concerns that without the interaction of individual *agency*, *culture* and *social* and *material structures* (Priestley 2010) change would be reduced to a tick box exercise or limited to a one off timetabling event.

The values outlined in a Curriculum for Excellence may not serve as foundations for what will be built in schools but have, perhaps, at best a fenced off plot within which such structures could emerge" (Gillies, 2006, p35).

An important factor that seemed to restrict teachers' attempts to develop PE curricula, which could be considered to be morphogenic, was that there appeared to be a view that there was a 'correct' response and reading of policy. Teachers appeared to be wary of the autonomy that the schools had and as a result it may take more time for the social structures to move through cycles of structural conditioning, social interaction and structural elaboration before their new roles in the policy process can be realised. It became clear that the envisioned transformational change would be limited if teachers did not fully support and understand the intricacies of the CfE framework.

The second part of the analysis embarked on a comparison of the data from the perceptions of the PE teachers to the data previously collected from the policy constructors. This was crucial in analysing policy constructor intentions as they were translated into the context of practice. In this stage in the process clear discrepancies between the knowledge of policy constructors and teachers were identified, particularly in relation to the nature and purpose of PE within HWB. Policy constructors were concerned that given the strength of the health discourse permeating Scottish society, that teachers may interpret the policy text exclusively in relation to improving health and fitness and increasing physical activity levels and as such they emphasised the necessity for teachers to broaden their vision of PE. The government controlled the process of policy text production, which limited the extent policy constructors could make a contribution to shaping the vision for PE, as a result the meaning and purpose of PE was not debated prior to these developments and therefore was not clearly articulated in the policy documentation. PE, therefore, was being made to 'fit' the new curriculum. This was further compounded by the strong message about the role of PE and the development of physical health. There was evidence to suggest that teachers' understanding of PE's purpose within HWB was to improve children's fitness, distorting policy intentions. Lack of communication and involvement between national-level policy constructors and local level teachers clearly has the potential to result in a form of PE that is far removed from current good practice/models of PE. Without a clearly communicated vision for PE, there is a danger that PE may be reduced to a vehicle that attempts, in vain, to improve the health and fitness of the nation.

Scotland has joined the global, relatively dramatic shift, in worldwide policy to incorporate complex and contextualised policy processes into curriculum design. In the wake of policy as process where teachers are actively involved in the design of curriculum innovation, structures need to be put into place to increase the *capacity* of teachers to take forward the government proposals to create ambitious programmes of educational change (Scottish Government, 2008). This research has implications not only for national curricular but also for any reform initiatives that involve teachers in the devise and development of curricula. Enactment in this case requires teachers to be aware of the values and principles of policy and increase their capacity to create curricula that enable children to have educational experiences, which authentically capture the essence of policy intentions. As educational policy moves from a prescriptive model of 'a curriculum' to a model that draws on professional capacity to translate and adapt curricula, it is crucial that policy intentions, aims and values are not lost in the process. As PE teachers' act as agents of change, translating, moulding and recreating policy uniquely to fit within the opportunities and constraints of the cultural, social and material structure of the school, there is a genuine fear that policy intentions may mutate as they percolate into practice. Transformational change in educational provision may be the aim of governments and policy constructors, and entrusting teachers and schools to enable curriculum change is laudable. This research indicates that there are possibilities and opportunities to make substantial progress to ensure an education that is 'fit for purpose'. The caveat appears to be that, without shared vision curriculum development is unlikely to move beyond morphostasis or at best a form of morphostasis. It would

appear that for curriculum change and development to be considered morphogenic then those concerned with PE at the school and policy level need to be clearer about the educational 'purpose' of Physical Education.

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Table 1.0 summarising PE teachers' responses for reasons to change the Scottish Curriculum

External	Internal	Systemic
Fit for purpose	Lack of Attainment	Transition Primary to secondary
Relevance to society	Individualised Learning	Coherence / Continuity
Government Driven / Political	Inclusion	Dissatisfaction of Current curriculum
Globalisation	Rounded Citizens	Cluttered curriculum
Increased obesity rates		