

Fabrication, Circulation and Use of a Supra-National Instrument of Regulation Based on Knowledge

EDUCATION SECTOR

Study on the Use and Circulation of PISA at the national Level

SCOTLAND

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1. The context of the study: the complexity of devolution

As indicated in the National Report for Orientation 1, studying the education policyknowledge relationship in Scotland presents particular challenges, in terms of identifying the precise locus of policy-making. Education in Scotland has been recognised historically as playing a key role in the shaping and support of national identity (McCrone and Paterson, 2002; Paterson, 1997), as one of the 'holy trinity' (Paterson 1997) of institutions-Law and the Church being the others- that encapsulated Scotland's 'stateless nationhood' from 1707-1999. Thus prior to political devolution, education policy in Scotland was permitted a high level of administrative separateness from education policy developments in the rest of the UK-for which the UK parliament and government at Westminster were responsible. So that even before political devolution and the (re) creation of a Scottish parliament in 1999, there was a legacy of 'separate development' that was evidenced in different structures of provision, and, importantly in differences in testing regimes between Scotland and England. Constitutional change has brought added complexity to the policy process (Jeffrey, 2007). Scotland has a parliament with primary legislative powers and tax varying powers. Scotland, Wales and Northern Ireland have different forms of devolution, and plans for English devolution have not progressed. The asymmetric nature of devolution, alongside the vagueness of the legislation which introduced the Scottish Parliament, has led to a complex policy environment (Arnott and Menter, 2007) in which to study the reception of PISA.

If we review research on post devolution education policy before 2007 it highlights pressures for both convergence and divergence in policy across the UK (Arnott et al, 2003; Arnott 2005; Humes and Bryce, 2003; Menter et al, 2004, 2006; Raffe 2005). The pressure for convergence comes from structural factors such as a shared UK labour market. In party political terms, convergent pressure followed from the fact that from 1999 until May 2007 the Labour Party was in power both in Scotland and at the UK level. From the establishment of the Scottish Parliament in 1999 until the second Scottish Parliament elections in May 2007 the Labour Party was the lead partner in a Labour/Liberal Democrat coalition. As a consequence there were common themes in education policy in both Scotland and England-themes such as choice, privatisation and standards (Arnott, 2005; Croxford and Raffe, 2007). These tended to be actively promoted by the Westminster UK government and reflected in policy in Scotland. However even with this close relationship there were divergences: policy texts in Scotland sometimes conveyed an uneasy blending of rather contradictory approaches: for example the 'Ambitious Excellent Schools' programme (Scottish Executive, 2004) echoed English based reforms in its apparent support for the introduction of more diversity in provision but within a framework that stressed the centrality of the principle of comprehensive provision. In fact comprehensive provision remains the norm in

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Scotland, and the various City Academies, Faith Schools and Specialist Academies that characterise provision in England have not developed.

For our purposes in making sense of the PISA reception, the key point is that the period on which we are reporting includes a period of shared party political control from 1999-2007 between both the relevant governments (ie Scotland's and the UK's) but with increasing pressure and tension between them. This situation contributes, we believe, to the differences we discuss below in relation to the reception of PISA. Put briefly, there is a shifting definition of the 'unit' whose performance is being judged by PISA, and also, inevitably, about whose performance is being reported on or received. This shift reflects a changing politics, about which we say more below.

PISA is administered separately in England, Scotland and Northern Ireland (Wales is included in the English sample), but the UK is regarded as a single country by the OECD for PISA purposes. This has implications for the study of the reception of PISA in Scotland, since-as indicated above-it has devolved powers in relation to education policy making, but is not an independent country and is regulated in many significant policy areas by the UK government. Furthermore, when we reach May 2007, the shared party political rule across the UK is disrupted by the election of a (minority) Nationalist government in Scotland. One of the key consequences of this, in terms of convergence and divergence in education policy, is that the new government sets out to build support through constant 'referencing outward' to (what was then described as) the 'arc of prosperity' of Nordic states, plus Finland, Iceland and Ireland. Leaving aside the consequences of the recent economic crisis, frequent reference to these selected states was intended to create an image of Scotland among them, looking like them, and with the same levels of prosperity and social cohesion-an imagined community of the future (Anderson 2006). This process also served to displace the historical 'other' of England, that has been the reference point for so long-either in terms of 'difference' or as a dominant, inescapable influence. This helps to explain the shifting terms in which PISA performance is described and debated in the period under review. It also points to a shifting definition of what is regarded as relevant knowledge, derived from PISA, in that there is a move from UK-focused knowledge about performance, with some inter-UK comparisons developing over time, to new definitions of relevant comparative knowledge.

As a result of this peculiarity of the Scottish case (which is quite different also from federalism or regionalism that countries such as Germany, Italy or Spain represent) we developed a slightly modified research plan, in which the research lens moves back and forth between looking at the PISA reception in Scotland to examining PISA in the UK as a whole. Part of the complexity described above in terms of government also relates to media-most of which are produced and sold in England rather than Scotland, and are regarded as 'British'. In fact there has been considerable controversy about the reporting of policy since devolution across the UK, and the tendency of all forms of media to focus

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on English news and developments, and to fail to distinguish between the different UK polities. The Scottish media is very small and often comprises British editions with additional Scottish reporting. In addition, the OECD presentation of the results always refers to the UK, and it is only in further, more specific, local (or requested) analyses that the results are broken down to the different nations.

1.1 Interpreting Complexity-intra-UK comparisons and developments

We suggest that this complexity is of additional value to the study since we can observe the politics of comparison internationally but also within the UK itself. Comparison with and reference to England as the significant 'other' has been almost intrinsic to Scottish education policy-making for most of the 20^{th} century, if only to underline difference. As noted above, there has been a distinct shift (a kind of discursive elimination of the 'other') since the election of a Nationalist government in Scotland in 2007 (Arnott and Ozga 2008). As we shift the lens of enquiry between an examination of PISA in the UK and PISA in Scotland we are able to reveal this slow but significant shift.

For the Scottish Education team therefore it is interesting to examine the reception of PISA in post-devolution Scotland both intra- and internationally. Scotland's position constantly changes as the PISA cycle unfolds: in 2000 the UK took part as one country (the Scottish and English/Northern Irish results were analysed separately later); in 2003 England failed to reach the response levels required for its participation in the test, whereas Scotland achieved them and took part; and finally, in terms of the PISA 2006 results, both England and Scotland administered and participated in the study separately, but were still officially presented as 'the UK'. The OECD has been negotiating its way through this tricky territory by skilfully using reporting methods which, on the one hand, reflect the constitutional position and, on the other, are sensitive to the emergent intra-UK differences, thus reinforcing OECD's position as a trustworthy partner for both governments and still the 'gold standard' of international education research. As we will discuss in the following section, evidence from our research on the PISA 2000-2006 cycle reception and use in Scotland graphically illustrates the points we are making here. Our interviewees describe Scotland's participation in the PISA roundtable debates in Paris as involving, over time, the gradual (literal) movement of the Scottish representative at the PISA roundtable from behind the UK/English representative to the front seat of the discussions, but always next to and in concurrence with their English counterpart.

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For the record, in the year 2000, the then Department for Education and Skills (DfESnow the Department for Children, Schools and Families [DCSF])¹ and the Scottish Executive commissioned the Social Survey Division of the Office for National Statistics (ONS) to carry out the study in England and Scotland. The Social Survey Division also conducted the survey in Northern Ireland, in collaboration with the Central Survey Unit of the Northern Ireland Statistics and Research Agency. ONS also managed the PISA round of 2003 in England and Northern Ireland, whereas the Scottish Executive commissioned the Scottish Council for Research in Education (SCRE, University of Glasgow) to conduct the study in Scotland. In 2006, the National Foundation for Educational Research (NFER) conducted the PISA test in England, Wales (for the first time) and Northern Ireland, while SCRE administered it for a second time in Scotland. Finally, NFER will solely administer PISA 2009 across the UK.

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¹ This is the government department responsible for education in England (and in England and Wales up until 1999, when the Welsh Assembly was created).

2. Policy debate: social networks and policy narratives

Sources:

We have conducted interviews and gathered material in relation to the PISA study reception in Scotland with:

- five members of the Information and Analytical Services (IAS) of the Scottish Government Schools Directorate;
- 2 Cabinet Secretaries (1 for Education, 1 for International)
- 3 Members of the Scottish parliament (MSPs)
- 1 senior policy adviser to the cabinet Secretary for Education
- two members of the Her Majesty's Inspectorate of Education (HMIe); and
- one with the Head of Corporate Analytical Services and one with the Chief Researcher (Analytical Services) at the Scottish Government.

Further, we are also able to draw on interview data from relevant actors at the Department of Children, Schools and Families in England, such as the Permanent Secretary, the Chief Adviser on School Standards, the Principal Research Officer and the International Comparisons Programmes Manager at the Office of the Chief Adviser of School Standards.

2.1 Context and PISA entry

The context of entry by the UK into PISA is one in which the New Labour government had just taken power, with a strong modernising agenda, and this is highly significant in understanding the reasons for participation. Modernisation of UK education policy tied education very firmly to the economy (DfEE 1997) and involved a shift towards 'implied consent' by the public to government's problem-solving initiatives. These also required the widespread collection and use of data in order to enable the public to be informed, and the displacement of expert or professional judgement. Managerialism reinforced a technical and pragmatic approach to policy-making, driven by a calculus of economy and efficiency (Clarke, Gewirtz and McLaughlin 2000). In education policy-making these developments promoted integration ('joined up policy making') and sought to involve new partners, particularly private partners (Jones 2000, DfEE 1998).

In England in the period from 1997, the policy focus is on raising attainment. The 1997 White paper 'Excellence in Schools' outlined an agenda for 'effective change [that] requires millions of people to change their behaviour'. In this narrative underachievement is the key problem; international competitive success requires that performance rises, and underperformance jeopardises that project. There is 'zero tolerance', to use a phrase

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from the text, of arguments connecting underachievement and material and social conditions, nor is there acknowledgement of the exclusionary effects of curricular and pedagogic practices of schooling. The focus on 'standards, not structures' provides a basis for the development of initiatives since 1997 that promote diversity and differentiation in provision. The preoccupation with changing attitudes and competition provides the space in which private enterprise is encouraged to play a significant role in the creation and delivery of education. Business is a model for promoting change and encouraging enterprise, including the enterprising self. All of these policy developments are made possible by the production of performance data, and the construction of a system of performance management in which the relative positioning of schools, teachers and pupils can be tracked year on year. Data are therefore absolutely central as a knowledge form, and comparative data shape policy interventions. Thus PISA entry is part of this development, but is rapidly overtaken by the sophistication of the data production system for statutory testing throughout schooling in England (Ozga 2009).

Having this political background in mind, Scotland's first participation in the PISA Programme was not decided independently but rather in close collaboration with England and Northern Ireland in 1997, as one national entity, the UK (Wales did not agree to participate fully in PISA until the 2006 study):

'It's all rather a long time ago and I wasn't around at the birth of PISA, but my understanding is that OECD countries, including the UK, agreed on the framework for the first PISA and decided on their participation in 1997.' (CP2E)

'We are treated by the OECD as one national entity, the UK. I would assume therefore that Scotland and England liaised very closely on the decision to participate (as we continue to do on all PISA-related work).' (CP2E)

'In the OECD they treat us as a national entity, they treat us as the UK and they look at other parts of the country as sub-national.' (CP2E)

Although in the first round of PISA testing in 2000 the UK took part with one national manager and one representative at the governing board, both of whom were based in England, the Scottish results were subsequently analysed separately, as was the case in the following rounds of 2003 and 2006. In the subsequent rounds (2003 and 2006) Scotland had gained the right to have its own national project manager and governing board member.

Since the entry in PISA was the result of close liaison, the decision was taken at ministerial level by all UK participating countries, 'based on advice from officials in the various education departments in each respective country'(CP2E). None of our informants were closely involved with the processes of decision making for entry into PISA – however, they stressed that both England and Scotland have been working closely

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in relation to PISA throughout the 12 years of its existence and that this was certainly the case at its birth as well.

2.2 OECD – the golden standard of international educational research

Interviews with both English and Scottish policy actors stress OECD's technical competence and expertise as best placed to deliver an internationally comparative study of the state of education systems in the industrialised nations and beyond. OECD is considered technically as the golden standard for conducting comparative studies like PISA: neither European agencies, nor other international organisations like the IEA, appear to our informants as having the expert capacity to deliver major comparative studies:

'OECD comparisons tend to be more influential to us than discussions in Europe' (CP3S)

'I think it would be fair to say that PISA is top priority, in a sense, because it's an OECD study. That, in itself, has given it a credibility that perhaps some other studies would have less of. The fact of it is it's driven by the OECD.' (CP7S)

'I think [OECD] was just the obvious one and I'm not quite sure what other kind of standards they would have to judge Scotland compared to a comparative bunch of countries. It seems the obvious one to go for.' (CP1S)

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Apart from the technical expertise, interviewees suggested that the impartiality of an external assessment carries particular value, especially when it is accompanied by scientific rigour and a consistency in relation to countries' positioning in each round of testing:

I spent a lot of time-an increasing amount of time-looking at PISA-because the OECD's reputation was growing and these stats were reckoned to be good and reliable-a lot of rigour lying behind the system, it was difficult to cheat the system it would appear to be fair (though some countries might be working the system...by narrowing the curriculum). I saw presentations from OECD officials who took out Scotland results and looked at them and thought this was really interesting stuff-they could be objective, they're coming from the outside, they've got no axe to grind. (CP9S)



On the other hand, English and Scottish actors are aware of the extent to which PISA has been branded through marketing techniques by the OECD to such an extent that countries are willing to take part on the basis of the media attention it receives. This rather undercuts their emphasis on the superiority of the OECD in comparison to other international organisations in terms of technical expertise, and may reflect a shift in attitude over time -as the costs of PISA have become more apparent, so our informants may adopt a more critical approach to OECD's 'spectacle'. In this account, PISA's acceptance is a result of OECD's masterful techniques of persuasion, or, as one interviewee suggested, even 'proselytization':

'I think PISA probably gets the most attention and that's not because it is any more valid or reliable, it is simply because OECD has done such a brilliant marketing job with PISA. So it is a real brand name, ministers are familiar with it, politicians generally are familiar with it, the press, the education press and beyond are all familiar with PISA, whereas TIMMS etc they do not get the same amount of attention. Now when the press takes up something obviously, ministers will be more inclined to pay attention in case there is any, if there are any traps, so I would say this is why PISA is until now has more of a share of the attention for these studies. It is not at all reflection of the quality of the other studies, it is just that OECD has made a very good job of this. Andreas Schleicher travels the world prosyletizing PISA and has been very successful.' (CP2E)

2.3 Comparison and competition

OECD's stamp of the club of competitive nations in addition to the government's direct association of improved educational performance with economic growth, were the two prime reasons for the participation of the UK in the study. English actors in particular emphasise comparison with other major economies as one of the main motives for entering into PISA, since other international studies (IEA's TIMMS and PIRLS, for example), according to them, did not offer the same basis for comparison:

'PISA was certainly the first large-scale international comparison study that would allow us to benchmark our performance against all of the world's major economies. England and Scotland had both participated in IEA TIMSS in 1995 but the range of industrialised countries involved was not as complete as for PISA.' (CP2E)

'This government's main focus is economic growth and economic prosperity. With issues of solidarity and cohesion [...] too. So from that perspective obviously when you're looking at your comparatives you start to think – well, what are you most interested in? you're interested in countries that have successful economic strategies, that have economic growth.' (CP7S)

'The thing that springs to mind is Peter Peacock's interest in PISA and the dimension of it and wanting to have a benchmarking group of countries we compare with.' (CP8S)

Above all, as stated earlier, comparison was key in the justifications for participation that actors gave: comparative knowledge is seen to be essential for the understanding of system performance (Jones et al 2008). OECD was able to offer a much greater spread of comparison, both for the more and the less successful education systems and hence economies. According to both Scottish and English actors, the indicators produced by the European Commission do not provide the same degree of commensurability across nations, and IEA's comparisons seem less relevant to the nations that England and Scotland consider as their comparator ones:

'Over the last four years I would say so. Up to 4 years ago I was asked to do a lot of comparisons with England and was constantly explaining the problems about doing that and advocating the use of PISA or something similar. And I think over, say, the last four years, there's absolutely been a move towards PISA and the OECD equivalences with England being one of those countries that we are comparing ourselves to but no different from any other countries.' (CP1S)

'Certainly since 2003 results of the last 3 or 4 years there's been an increasing interest in placing Scotland in international context primarily through PISA but also through other indicators such as the NEET indicators and things like that.' (CP1S)

'So I think there will be a great deal of interest in the PISA results and other international benchmarks. I think it's very much how Scotland fits in with the existing indicators that are there, for example, using PISA and just existing things rather than necessarily seeing Scotland's approach shifting towards a UK approach'. (CP1S)

Another Scottish interviewee described PISA as 'currency': although its data are barely used, PISA recurs in discussions by many policy makers and in a sense has become the symbol of international commensurability. The appearance of Scotland in the OECD league tables might be all that Scotland 'gets out' of PISA –but in the competitive global market, this could be of immense value:

But it is amazing how often PISA comes up in general conversations about policy. Having watched in my area, in all sorts of unexpected ways people talk about PISA, it is like a currency (CP8S)

I think that as long as we think it's international comparisons [...]. And the political importance of being able to say how well is Scotland doing in the world compared to other countries. And I think as long as there's an appetite for that kind of comparison then something like PISA will be used because it has got this kind of gold standard tinge to it because of the OECD attachment. But, I mean, you might say that ... is that the main thing we get from it. Is this kind of statement almost of – this is where you are? Possibly. (CP7S)

Actors who use it appear as able to place the nation and their own ideas onto a global stage of competition and 'cutting-edge' policy making. In the case of Scotland in particular, the emphasis to comparisons with competitor economies is explicit, since, as will be shown in the relevant section, in the 2003 and 2006 rounds the analysis of the

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country's position was in comparison only with the OECD member countries. However, there has been some scepticism in regard to the strategy that will be followed in the future:

'I've been making the argument that with PISA we would be comparing ourselves to OECD countries and we've not been comparing ourselves with ones out of the OECD. I think we should start really to look at some of the Baltic countries — say Estonia, Lithuania, Latvia — there are some other countries coming along.... how those countries are developing, their economies and developing how they operate. These are the countries that are huge competitors for Scotland. You know, so we need to be looking at them, you know. That's eh, I think the next round ... this round of PISA we presented the results very much looking just at the OECD countries. I think it would be safe to say the next round will be a broader look. (CP7S)

Interviewees suggested that moving the lens out of Europe and into the world might be more beneficial in securing competitive advantage for future generations. Although European organisations offer comparisons within the continent, PISA delivers a more global perspective. Learning from the best is crucial, even if in some cases they have little idea about what they should be teaching:

The second thing that I was acutely conscious if you look at education internationally the economies of the world have been globalised. This has profound implications for any individual system-your kids have got to be competitive in a global market. You see it in the European context very clearly with people moving around the European Union. So we had to know what was going on in the rest of the world so that we could judge the crucial skills our kids were going to need in the modern economy. Were we losing pace? What did we have to think about to address the deficits that were likely to arise? And PISA was an insight into that. And quite a powerful insight. (CP9S)

Another factor is if someone goes shooting up the league table you can guarantee they'll get hundreds of visits-I've been in Finland twice to ask what exactly are you doing. What is interesting is that they didn't always know. (CP9S)

On the other hand, some interviewees did not share the same degree of confidence in relation to the significance of PISA for Scotland. One interviewee in particular said that in a review of all international assessment programmes by the Scottish government, there was some consideration about the possibility of the country withdrawing from PISA altogether. The main reasons for this was its small contribution to knowledge about the system and the significant burdens regarding assessment placed on schools, as they became evident in 2003 in England and in 2006 in Scotland:

I think there was a ... it was a huge commitment to resource ... and in terms of personnel and I think, not just that, but the key point that we were coming from ... not we, I mean, we're talking about Scotland ... that it's in terms of schools that it's quite a burden on schools. I mean, schools are already doing

a number of things and they're already involved in the assessment achievement programme (CP5S)

2.4 PISA administration: challenges

Indeed, given that both the Scottish and to a much greater degree the English systems are highly demanding on schools in terms of continuous monitoring and assessment, reaching the desired response rates for every PISA round appears to be as a major problem for both countries. Some narratives are so telling, that they could explain the reasons for a relative apathy when the results are published; so much energy has been spent in making the test actually 'happen', that when the results are published, this signals the beginning of the next marathon in securing schools' participation in the next round. In the case of the following quotation from an English policy maker, we even witness internal UK competition —not about the results but surprisingly about reaching the required response rate! Reading about incentives for schools in England makes also for another striking PISA 'story':

Scotland had failed in 2006. I don't think this is public knowledge by the way. We have succeeded and we have succeeded because we gave schools 500 quid up front and 500 quid afterwards to pay for supply teachers that displaced time with their science coordinator, which is what it was because this was the major domain. The strategy managers in local authorities to act as advocates. We got permission to move the testing window away from spring because it is the time for the GCSE preparations and sort of drift off at the end of summer term to move it to the autumn term when things are quieter and, you know, between these measures it worked. And it is a really dramatic improvement, 64% to 86%, something like that. You know, very dramatic, very sort of dramatic that we've made that. Well, I suppose if schools were really really overwhelmed... (CP5E)

Scotland faced similar problems with achieving numbers, although the problem might not have been quite so acute, despite of the fact that incentivisation was not used as a strategy:

Response rates have been an absolute nightmare. For 2006 if you look very closely at the response rates you will see that we just about made it. In fact in one interpretation we didn't. So depending on how you want to look at it we had very very long discussions with the OECD because at one point they were ready to say that we hadn't made the response rate quite. (CP7S)

In Scotland we have no persuasive power other than it will be nice if you did it. Essentially. We don't fund them to do it, we don't pay schools to do it, we don't fund local authorities to do it, we don't give feedback at local level because it is not reliable data at local level. We have started looking at the possibility of giving them attitudinal feedback at the local level, so we would say this is the general feedback of pupils' attitudes in your local level.

Both the government and the inspectorate were quite active in giving support to the National Project Manager in 2006, although as was suggested, the size of the country and the experience of participating in previous PISA rounds are more decisive factors:

SEED and HMIE were helpful in assisting in recruitment of schools by contacting all Directors of Education and local authority assessment coordinators in advance and informing them that the involvement of Scottish schools in PISA was supported by the Scottish Government. (CP10S)

The bonus is that knowledge and experience of taking part in PISA is widespread amongst Scottish schools. The negative side is that it can place a disproportionate load on some schools. We encountered at least one instance of a school which had taken part in every cycle of PISA, both field trial and main testing, and hadn't realised that this had happened purely by chance. In some cases schools have entirely legitimate reasons for refusing to take part (recent or impending change of head teacher, clash with an HMIE inspection, staff absence or illness). Some others are clearly reluctant to take part, but are initially unwilling to give an outright refusal. This sometimes led to them withdrawing at a comparatively late stage, when the demands of the project became clear to them, and could cause a problem in arranging late replacements. (CP10S)

According to the same interviewee, there is always a degree of uncertainty and risk, since unforeseen circumstances and last minute withdrawals could mean exclusion from the test:

There were some specific problems during the test period for PISA 2006 which very nearly led to disaster. In March 2006 there was a period of severe bad weather which led to the closure of schools in much of northern Scotland, including PISA schools. Towards the end of the test period there was also an industrial dispute which involved school janitorial and other ancillary staff. This also led to the temporary closure of some schools, and affected others (for example, some schools were unable to set up examination rooms for the PISA testing). Testing was delayed in quite a number of schools, though did eventually take place in them all. (CP10S)

We were also told by many schools that some students had simply 'voted with their feet' and not turned up for the tests, and that it was pointless trying to entice them in for a replacement session. Note that all of these students had been given the opportunity to refuse to take part in PISA. Few did so, as they were clearly reluctant to give an outright refusal, but many simply stayed away. The result was that our student sample was very nearly not up to PISA standards, and it was only after thorough additional bias checking that it was deemed to be acceptable. (CP10S)

Finally, for PISA 2009, there has already been some thinking in place in relation to offering incentives for participation, mainly light snacks for the pupils before or after the test, and, more crucially, attitudinal analysis at the level of the school:

Yes, we can do that analysis. So we have started to look at 2009 at that level. Our reliance is 'what if we did this', it gives us a good view about where we

stand in international comparisons, to the school 'you are representing the country'. Some schools are very willing, some schools are pleased almost, 'yes, we are representing our country', 'we are happy that we can do that'. Other schools obviously, it is just horrendous and they absolutely don't want to be involved. But we had some interesting ...This year we had, yes, it was in 2006, we had some schools asking why haven't we been included, we were always included. It is a random sample so they haven't and they are actually quite upset they haven't. Very strange, very different attitudes. (CP7S)

Other challenges to those administering the PISA tests have been the administrative and logistical challenges they present, alongside their highly bureaucratic and mechanistic character that leaves very little space for local adaptation:

The role of the National Project Manager (NPM) within PISA is largely administrative and logistical: there is very little scope for any individual input. All the major decisions about the test materials, processes and procedures are made either by the international consortium or the PISA Governing Board, and the national centres are left with the task of making the necessary minor adaptations, organising the testing and delivering the results. There is some scope within PISA for each country to suggest test items for inclusion but within the UK, this seemed to be happening through meetings of DfES and SEED officials, with no input from the national centre (CP10S)

PISA is also an incredibly bureaucratic enterprise: there are forms and manuals for everything, many of which are complex and confusing. This applies not only to the many forms, questionnaires and reports which the national centres have to produce, but also to those who are organising and conducting the tests within the schools (CP10S)

Finally, the National Project Manager for 2003 and 2006 talked about problems with definitions, especially in the case of scientific literacy in the last round, as well as problems with the interpretation of the results, which he found superficial:

There was also great debate amongst NPMs at one of our early meetings (Bratislava, 2004) about the meaning that each country attached to 'science'. It was clear that in some countries 'science' equalled the 'hard sciences', and that the inclusion of such things as earth science, social science, or technology, would not be recognised as coming within the domain of 'science' in their culture or language. Some NPMs claimed that they had no concept or term equivalent to 'science' in the way that it was used by PISA, and that this would cause them difficulties in explaining the tests to participants in their country. There were also some political and cultural sensitivities around the inclusion of certain specific topics. The environment and evolution were mentioned as problems for some. ... Much of the discussion about PISA fails to address the issue of what it is actually measuring. It is not just scientific knowledge (however defined), but also attitudes to science, and the value placed on science. There is rarely any discussion of the various sub-scales which are reported by PISA, rather it is often simply assumed that a good PISA score equals 'good at science' and it is by no means as simple as that. (CP10S)

2.5 Use and capitalisation of the results

In terms of the use of PISA findings in Scotland, interviewees suggested that it is difficult to be clear about what use is made of the PISA findings within the Scottish government, by either politicians or policy makers:

They are always, of course, glad to have any evidence to support what they see as Scottish 'success', but the ways that they use it formulate policy remain mysterious. Equally there are always others who are glad to have what they see as evidence of 'failure'. (CP10S)

However, there are a number of more implicit uses evident in the ways PISA is used within the nation. First, although comparison with the best is still considered a very significant factor, Scottish participation is mainly justified on the basis that, through PISA, Scotland acquires a role in the international education policy stage as a separate entity (from the UK/England):

"... it's gone through a number of iterations so I think it has improved over time. That's one point. The other point is quite literally there's so many countries have got involved. And so many of the countries that we're interested in have got involved in it.... So, for example, with TIMMS and with PiRLS there are a lot of countries involved. There are a lot of countries involved that are countries in the developing world or that are countries along that axis we're not interested particularly". (CP7S)

'I mean, obviously the other thing it doesn't show you what other countries are doing. You know, so you get ... you know, you get the scores from the other countries and you get that kind of breakdown from other countries as well. Sometimes the top performers, bottom performers and so on. And you can start looking at that. So that starts giving you some ideas and thoughts about other countries performances. What do they look like? Is it ... and again that's when you start thinking about – is this something we should be investigating and looking at in terms of these other countries as well'. (CP7S)

'The value lay on the ability of Scotland, Scottish ministers to play in an international stage, rather than the relevance to policy and practice... And sort of make contacts'. (CP8S)

'I think that as long as we think it's international comparisons [...]. And the political importance of being able to say how well is Scotland doing in the world compared to other countries. And I think as long as there's an appetite for that kind of comparison then something like PISA will be used because it has got this kind of gold standard tinge to it because of the OECD attachment. But, I mean, you might say that ... is that the main thing we get from it. Is this kind of statement almost of – this is where you are? Possibly' (CP7S)

'But I think it's partly about you know this is putting Scotland on the map. We do quite well in PISA so what more can we extract from that by way of evidence on our position in the world.' (CP1S)

Thus PISA enables Scotland as a system to be visible. Moreover, given that there is and was a relatively high degree of confidence in the performance of the education system, the participation was not seen as risky -Scotland could gain visibility and kudos on the international stage. The actors based in England did not make such comments about participation in the international policy arena, a point that may be related to the development in England of a massive complex performance testing machine, which provided reliable system performance knowledge. Furthermore, the UK/England system actors were confident of their visibility and 'place' on the international stage. Nevertheless, some Scottish interviewees made a case for Scotland participating in PISA due to its connection with England, rather than out of its own accord:

It would be going to far to say that Scotland only participated in PISA because England did, but I did sometimes have the impression that the attitudes to PISA within the two countries were very different, with Scotland being altogether more relaxed about it, and seeing it as just one more piece of evidence, while in England it seemed to be regarded as of primary importance. (CP10S)

The use of PISA for external recognition for Scotland is supported by the fact that PISA data are not analysed there. Although some interviewees suggested that they do see a need for some further analysis, given the useful material on school culture and management, this has not yet happened. So there was a general consensus that the primary purpose of PISA is to offer Scotland a place in the international stage of competitive economies:

'And it was always quoted as being a major area of concern. What we probably didn't do is explore and dig into the PISA data as much as we could have done at that point and we ... to understand better the detail of those results. We focussed very much on our national source of information on the lowest 20% and more or less left the PISA analysis, as the headline figure, without really digging into it. Not sure the reasons for that. Partly, I think because of resource issues and getting to understand the datasets. But also the lack of analysis we had at that time on the Scotland results. It was because Scotland was just an adjudicated region we didn't have the amount of detail that we had obviously at the UK level'. (CP2S)

'We just tend not to use them. Other countries would pay a lot more attention, I think, to some of those elements and [...] for us we might look at them for kind of, just general interest, if you like, but it's not ... it's not of huge interest. We don't see it as — there is a particular set of instructions and strategies that always seem to work and therefore we must adopt those. That's not where we want to go. So that hasn't been of great interest to us. That kind of side of things..... We have a lot of attitudinal data collected. I think it would be fair to say we've done nothing with it. It really hasn't been looked at very much. I've looked at it a little since I've started. And it's one of the things that I want, in the future, to actually be looked at much more appropriately' (CP7S)

'It's diagnostic' (CP7S)

According to one interviewee, if Scottish results had been low, this might have triggered a more serious consideration of the results, comparisons with other countries or even reforms like those that took place in other European countries:

'The only one I know in much detail before Scotland was Denmark, which had a bad set of PISA results a few years ago. And the Danish one was overtly a diagnosis with a view to remedial action being taken. Whereas the justification for the invitation for Scotland was of a high performing system in an evolving world, and to orient the country better to go ahead, as I have heard it explained. ...The PISA data I don't think could be seen as a huge driver in the inspection model, because it is favourable for Scotland. There wouldn't be any particular basis for saying, oh because of PISA we must do this or that...Yes, I think were there to be a very negative set of PISA results in a future round, then I think your second point is that comparison would then start feed into the process as it did in Denmark, as it did in other countries' (CP4S).

However, as long as the results remain fairly positive, PISA's influence in Scotland is like that of a meteor: despite causing some ripple effects and few discussions, and possibly a couple of media headlines as well, PISA is a spectacle that as quickly as it illuminates the nation, with an equal speed it is forgotten and passed by:

'It's mainly been used so far to measure ... to basically say – where does Scotland exist in the world compared to other countries.... We have come fifth, twelfth, whatever. That's been the main use, is that kind of idea of measurement. And then the idea of measurement just as an overall – there's where we are, and the other thing, I suppose, is using it to analyse different levels of achievement. So, in other words, how are our bottom performers doing, how are our top performers doing. But in terms of how are they doing, are they better or worse than others and do we have a higher percentage of children in these groups compared to other countries. It's very much those issues that it's being used for' (CP7S)

Moreover, since Scotland does not have such a testing-driven culture based on individual data for every pupil as is the case in England, PISA was described in several instances as 'a pat on the back', or as a 'reassurance', or another piece of evidence thrown 'into the pot':

'You would still want to have data available at the level of the individual institution, never mind what you say nationally about comparisons between institutions. And of course as you well know the way in which the PISA data is generated is quite different to the way we generate the other kinds and forms of assessment here'. (CP7E)

'Here I think the argument is that changes take a longer time to come through, and in any event, we have the reassurance of PISA for example, suggesting that overall our students are, on average reasonably pretty high performing anyway' (CP3S).

'They're also slightly political in a pat on the back sense where – look, haven't we done well. You know. Scotland is up here in the top ten or whatever. And

government has certainly used it very much in that perspective as well. (CP7S)

There was considerable liaison between the national centre and SEED, both through advisory committee meetings, and through more informal contact. A member of HMIE who had a remit for the oversight of assessment was included in many of these meetings. The impression given was that PISA was one more piece of evidence, along with other surveys such as PIRLS and TIMMS, the Scottish Survey of Achievement, and examination and test results, which all went 'into the pot'. PISA was important in this context, but not overwhelmingly so. (CP10S).

The Scottish inspectorate (HMIE) are seen as a policy elite which could be making use of the PISA results, although interviewees' opinions are conflicting:

The PISA data I don't think could be seen as a huge driver in the inspection model, because it is favourable for Scotland. There wouldn't be any particular basis for saying, oh because of PISA we must do this or that (CP4S)

The inspectorate uses it most-they use a lot of data from different sources. They use it very scientifically in my view. It's not often seen that they do, but they do. But the general people out there in the education community? No. Why not-in the Scottish context-that's because the system has got a complacency problem. It's very insular, very inward looking. We're educating our kids for a world, not for Scotland-so I was trying to expose them to international things....And there's a deep suspicion inside Scotland about league tables. The way in which Scots educators see league tables comes from the Thatcher era; it comes from the era of using them as a simplistic device for exercising parental choice. So I made it explicitly clear that I would never publish league tables and no Scottish government has. But where the Scots have not been good in my view, and HMIe subscribe to this too, is that whatever data we have -whether its PISA or SQA data-using statistics of data in a professional capacity inside your own institution is hugely powerful but largely ignored....In the policy sense, at a government level, that's how PISA ought to be used. Not to score points off each other or to move up or down. It's much more important to ask yourself the underlying questions and use the data for that purpose. (CP9S)

To conclude, PISA is used primarily by the Scottish Government as a reference point for the country's global positioning and performance in comparison to other nations. Above all, according to one interviewee, former minister and supporter of OECD research in Scotland, PISA disrupts complacency. Scotland participates in PISA knowing that it will get a fairly positive profile of its education system –it is in the critical remarks and problems that it counts more on:

Well I suppose the thing you get from it-but you've got to heavily qualify this is A reference point-but only A reference point-but it would be wrong in any given year or even a couple of years where you're beginning to see results to suddenly shift policy on the back of that. Particularly when you're in a relatively strong position and you know what's going on around the rest of the world and people are investing heavily and trying to do certain things to try to

catch up with the best-so you're always under pressure unless you really keep ahead of the game.-So it's a reference point to give you what is happening in the world who's getting better, why, what are they doing that's different from us, what might we learn from that. (CP9S)

The danger in all that is that you get into quite significant policy ruptures-because you're chasing something –and the key thing is that it disrupts complacency. The standard speech from me is –we are strong internationally-how do I know that?-PISA tells me and PISA is reliable-but be very clear-we're no that strong and unless we change and develop and move forward all these other countries round about us who are investing in education and looking at science and technical skills and maths-will overtake us. And if they overtake us what does that mean? It means that our kids are potentially less marketable than theirs are in a global economy-we can't have that, so we've got to change. In that context PISA gives a very important reference point. (CP9S)

So I genuinely thought, without any fear 'cos I knew we'd get a generally positive report which would say some critical things that was what I was after. And it was those critical things that would help me win the next part of the change agenda. It wasn't just me saying it, it was an international study saying this-you haven't got this right-that's what I wanted. (CP9S)

2.6 Conclusions

In other words, interviewees suggested that PISA reinforces Scotland's distinctiveness (from England) by providing knowledge about the performance of the system that can be used internally (in the UK) to resist pressures (from the UK government) for more testing and for the publication of individual test results on a national comparative basis. PISA represents a complex new strategy based on international comparisons that enables and renews the Scottish tradition of balancing data and numbers with the distinctive Scottish approach of self-evaluation and independent judgement by experts (especially the Inspectorate) of thought, but on a global stage; this is congruent with the parallel development of Scotland securing recognition at the European level through the 'branding' of self-evaluation (in the HGIOS-how good is our school model HMIe 2002, 2007) which has been taken up as a 'travelling policy' (Alexiadiou and Jones 2001) for over a decade. In this case PISA results are interpreted locally as reaffirming local and traditional (or embedded) policy and educational knowledge production. This may be interpreted as exemplifying Jones and Alexiadou's (2001) discussion of 'travelling' and 'embedded' policy; in which travelling policy refers to supra and transnational agency activity, as well as to common agendas (for example for the reshaping of educational purposes to develop human capital for the information age). Embedded policy is to be found in 'local' spaces, (which may be national, regional or local) where global policy agendas come up against existing priorities and practices. This perspective allows for

recognition that, while policy choices may be narrowing, national and local assumptions and practices remain significant and mediate or translate global policy in distinctive ways.

Finally, in the case of Scotland, the need to appear on the international stage helps to explain why the country is willing to spend substantial amounts of money, to secure through very stressful and uncertain conditions the required response rates and -often just- manage to participate, although it does very little, if not absolutely nothing, with the findings.

The UK framework within which Scotland is located is significant in the narrative here. The justification and purpose of UK entry in 1997 is connected to the incoming New Labour UK government's determination to reform public sector provision and improve the performance of the education system as a way on ensuring competitive advantage. As the UK government becomes more and more determined to manage performance, and more and more sophisticated in developing monitoring systems in England, so the significance of PISA for the UK/England system may decline. At the same time, as Scotland diverges increasingly from UK/English education policy, so too does the significance of PISA for Scotland increase. In the first place it is important as reassurance that without a massive expansion of testing its system is performing well: it is an external validator of internal quality assurance processes. In the second place it becomes an arena for the promotion of Scotland as a separate and distinctive education system (and, by extension, a separate national presence in the international arena). This latter function becomes more important as internal UK politics become more divisive.

3. Policy debate: document analysis

3.1 Media reception and public debate

3.1.1 PISA 2000

OECD published the international report on PISA on 4 December 2001 with press conferences in a number of cities including London. Their report provided UK results; the Scottish report and press release, prepared by the (then) Education and Young Persons Research Unit in the Scottish Executive Education Department, presented the findings from a Scottish perspective. The press release -'High Marks for pupils in international study' - was published at the end of January 2002 (Scottish Executive 2002). It states that 'Scotland's performance overall was in the top ten for all the subjects assessed as part of the Programme for International Student Assessment (PISA) study, one of the main international comparative educational studies', that 'this report shows there is much to be proud of in Scottish education', but also that '...while we are doing well we can always do better' and '...there is clearly much to be done.' (Scottish Executive 2002).

The Financial Times published an article exclusively on the Scottish results, with the title 'Scotland shines in OECD education survey', stating that 'Scotland's long-held view that it boasts a superior education system to that of the rest of the UK has won statistical backing from a 30-country survey' (FT 2002). In a similar tone, the Daily Mail, another London-based newspaper, characterised Scottish children as 'world-class pupils' and as 'the most intelligent in the developed world' (Daily Mail 2002). The Herald (Glasgow) stresses that 'the education system is doing well against overseas competitors and Scottish pupils are out-performing their contemporaries in the rest of the UK' (Herald, 2002). Finally, another Scottish newspaper, The Scotsman, stresses competition and comparison with England, commenting that 'Scottish pupils have trumped their English counterparts in an international league table'. The article refers to comments made by the then oppositional to the New Labour government, SNP education spokesman, who said that 'the last thing we want to do is rest on laurels', that tests are 'ultimately incapable of measuring a healthy, rounded education' and finally that 'if we gave teachers more time to teach instead of tying them up with administration and assessment we could move up to positions such as first and second in surveys' (Scotsman, 2002). As with the official press release, some of these articles also emphasise that there is room for improvement in science education in Scotland; the then Scottish education minister, Cathy Jamieson, in direct response to these comments and the PISA results, suggested that the government would launch the Science Strategy for Scotland and would offer £5million to education authorities to meet the aims of the strategy.

The Guardian on the 30 January 2003 hosted two lengthy speeches developing around PISA. Both were delivered at a conference in London on the OECD PISA report in relation to education standards; these were Doug McAvoy's speech, the general secretary of the National Union of Teachers (NUT- UK body) and David Miliband's speech, the then School Standards Minister in Westminster. Andreas Schleicher from the OECD was also participating in the conference, alongside other teacher unions' members and DfES staff. Both speeches acknowledge OECD and PISA as the golden standards for comparative education research. More significantly, McAvoy suggests in his speech that

I can truthfully say that the NUT does not move on major policy issues without having the results of studies and surveys informing its decisions. This conference, then, is perhaps a logical outcome of our respect for high quality research. (Guardian 2003)

And further on

Making no bones about it, the PISA report has had a fundamental impact on the education policies of some powerful and influential countries. (Guardian 2003)

Using the PISA results, McAvoy moves on to make a case for improving teacher training and for the benefits of comprehensive education. Interestingly, it is in the PISA results and the statistics that he seeks to find firm ground to do this. Turning to David Miliband, he asks: 'If we are prepared to learn lessons from hard evidence, is he?' (Guardian 2003). McAvoy builds his argument about school workforce reform exclusively around the Finnish success; he stresses NUT's cooperation with OAJ, the Finnish Teachers' Union; he mentions Finnish teachers's autonomy in decision-making, their high qualifications and the support that they receive. He argues that, as a consequence, teaching is a valued profession in Finland, and this is reflected in the very positive results. He moves on to ask:

'Are these factors reflected in the heavy duty accountability measures we have in this country or, indeed, within the school workforce reforms?...Why, when individual professional development and teachers research are such strong factors in success, is the government dropping the individual professional development programme; a programme which includes research scholarships and bursaries?'

In a similar vein, he builds his argument about comprehensive education around the PISA results and policy recommendations and he concludes:

I want to close by saying this. It is not enough for you and I, David, simply to say that schools and teachers across the country are achieving great things for their pupils. Highly trained, confident teachers, with considerable autonomy, working in a comprehensive education system based on equity, is what we must aim for. Of course, there are uncomfortable lessons for us all in the PISA report. It concludes that a well-resourced system is not necessarily a

guarantee of quality. Then, neither are the current recipes of a multi-tiered education system and even more hard-edged performance management.

The second speech, by David Miliband, draws on international comparisons to make its case and in the most direct manner: 'If the Finns, and the Irish and the Koreans can do better, why not us?' (Guardian 2003b) Indeed, Finland, Ireland and Korea are Miliband's most frequently cited comparator countries in this speech, as is also the US which, although according to him has higher socioeconomic inequality, it has less educational inequality than England. Although Miliband's is a lengthy speech that would benefit from detailed analysis, here we can briefly comment on his choice of topics; these are quality and equity, the PISA two main pillars. Nevertheless, it is also interesting to examine that despite very few instances of mentioning PISA at the beginning of the speech, Miliband appears hesitant to use references from the PISA policy recommendations to back up government policy choices and initiatives. This is strange, given the context of the speech delivery (PISA conference); it is also very rare. Most political figures, not only during the PISA 2000 round but in subsequent rounds too, back up their statements constantly making reference to the international –England persistently does not.

Finally, other articles that further strengthen the 'world-class' image of the education systems in the UK, include a Guardian article of 2001 ('UK pupils move close to the top of world class, survey shows') and one from 2002 ('English pupils among world's top'); in the first one, Estelle Morris, the then Education and Skills Secretary, is reported to have 'warned against complacency' and stated:

...but challenges lie ahead. The 21st century demands even higher standards and other nations are not standing still' (Guardian 2001)

Therefore, summing up, although the media reporting of the first PISA round was not as extensive as in the following rounds, nevertheless it can be characterised by three main elements: a. praise for education systems that, through PISA, are competitive and of high quality, indirectly approving governmental policy; b. warnings against complacency and assertions that there is always room for improvement (leaving thus space for further reform); and c. using PISA policy recommendations by teachers unions and opposing political parties in order to achieve own political goals (mainly criticisms against hard performance management and teacher autonomy).

3.1.2 PISA 2003

The British media reporting for the PISA 2003 round mainly focused on England's failure to meet the required response rate to participate in the PISA country performance tables. In comparison, the Scottish results had little coverage. Although a big part of the media tends to report sharp decline in all countries, another cluster of media reporting seems to

find the news confusing and sometimes even 'suspicious'. In all cases, 'embarassment' is the word used for a country that failed to be part of the 'latest international league tables' (Guardian 2004).

The Telegraph was one of the first newspapers to report on the results: 'UK slips in the world education league' (Telegraph 2004). The article describes the findings as a 'blow to the Government, which hailed the 2001 results as a triumphant vindication of its policies'. Although the article suggests that maybe this 'blow' could be 'softened' by the fact the country only appears in the report's annex, nonetheless, two 'striking' facts are emphasised:

First, in only three OECD countries - Turkey, Luxembourg and Mexico - were more pupils handicapped by a shortage of well-qualified and experienced teachers....Second, the advantage of being educated at an independent school was greater in the UK than in any other country except Uruguay and Brazil, both sharply unequal societies with wide disparities in income and wealth (Telegraph 2004).

In another article ('E for execrable'), two days after the publication of the results, the Telegraph asks for 'a great deal of explaining to do' from the education minister, suggesting that 'doubters' of the rise in standards 'have been right all along'. The article finished off with the strong claim:

Any government can make itself look good, by fiddling its own figures. By the objective standards of the rest of the world, however, this Government's record on education is a disgrace (Telegraph 2004b)

Professor Alan Smithers, University of Buckingham, in his article in the Guardian (2004), comments on the confusion for the press in the country, since the 2003 response rate was not lower than the one in the 2000 round, and not lower than that of other countries, like the US; as a result, according to him, 'the press has felt justified in comparing the results and has reported a steep decline'. (Guardian 2004). Nevertheless, Smithers doubts that the government's and teachers' efforts to improve maths performance failed and suggests that, rather, the failures have to be located in the test instrument itself:

A lot turns on how much credence is given to the OECD results. Pisa is a major international quango employing some of the best brains in the business, so the presumption has to be that they know what they are doing. But there are reasons for seriously doubting the 2000 maths results. Maths was only a small part of the 2000 study and coverage was superficial. The way the questions were spread around meant that a young person might be assessed on just two. The questions themselves are suspect (Guardian 2004).

In an article in the Guardian in February 2005, David Hopkins, the then education secretary's chief adviser on standards, commented on England's failure with the following: 'This was a situation that we were not happy with. It is quite embarrassing for

a country such as ourselves not to be included in such a publication' (Guardian 2005). He added that 'The Office for National Statistics, which was responsible for gathering the data for schools in the last Pisa study, will not be given the contract next time', whereas, according to the article, ONS declined to bid for the PISA study again. Interestingly, the analysis of the UK results were to be done in June –'a month after the expected May 5 general election' (Guardian 2005).

The Telegraph reports extensively on the Finnish success in PISA with a lengthy article on the reasons that contributed to the 'exceptional' results in both the 2000 and 2003 rounds (Telegraph 2004c). Following the numerous teams of education staff and journalists traveling to Finland for a first-hand experience, the author follows a route to a number of Helsinki schools, discussing with teachers and pupils about their success.

Finally, the Times also reported on the results ('The Issue Explained- PISA, Times 2004) suggesting that England's failure to participate suggests that 'We are nowhere'. The article is one of the few that refers to the Scottish participation with overall results above the OECD average but does not go into any more detail. It reports that 'ministers must be bitterly disappointed' and that they have commissioned a survey to find out 'what has gone wrong'.

The PISA 2003 media reporting presents little information about how the results were received in Scotland. Rather, the focus seems to be far more on England's failure to participate, which is characterised as 'embarassing', 'disappointing' and even worse, taking the country out of the map of international league tables. The comment above - 'We are nowhere'- is more than telling: countries need to be part of the PISA spectacle, even if their results are not positive. For an OECD country, being excluded is unacceptable for both politicians and journalists alike.

3.1.3 PISA 2006

The British press covered the announcement of the PISA findings extensively and, in some cases, in combination with the announcement of the IEA PIRLS² results –also quite negative- in late November. Interestingly, the topic was covered by both broadsheet newspapers, as well as tabloids. Newspapers of all political allegiances presented OECD PISA as the most objective, trustworthy and indicative source of information for the position of the country's education system in international comparisons. There was extensive coverage of the results by financial newspapers like the Financial Times and

² This is the International Association for the Evaluation of Educational Achievement Progress in International Reading Literacy Study

the Economist, which, in contrast to the rest of the British press, presented articles which did not centre on the UK as the main point of interest; topics such as the performance of Taiwan, the 'Asian tiger' (FT, 5.12.2007) in a 'cut-throat world' (The Economist, 5.12.2007) seemed to be more relevant to the business audience of those newspapers.

The focus of the media coverage was as much in science, which was the main subject tested in PISA 2006, as in reading and mathematics. The decline of the performance in all three areas was to give the press its main headlines: in the following day after the announcement of the results (5 December 2007) the Guardian reported that 'Britain slumps in world league table for maths and reading' (Fig.1), the Evening Standard commented that 'Billions spent on education, but British schools slump in the world league' (Fig.2) and the Independent reported that 'Reading and maths standards falling in Britain, says OECD' (Fig. 3).

In more detail, starting from the centre and centre right newspapers, the Evening Standard was one of the first newspapers to report results which had leaked: 'Britain tumbles 10 places in the world's most important school league table' (29.11.2007). 'Plummeted down', 'beaten' and 'falling behind' described UK's position in the article, which concludes by stressing the 'concern that Britain is falling behind other developed nations in producing scientifically literate school leavers vital for the future economy'. The day after the announcement of the results the same newspaper reported that Britain has 'nosedived' down the international education league tables (Evening Standard, 5.12.2007). According to the Telegraph of the 30 November ('UK schools beaten by Estonia in science skills'),

'a study has revealed that standards in British schools for science are plummeting and are worse than those of pupils in Slovenia and Estonia. The news has been touted as wake up call for the Government, whose education policies saw the UK slump from its previous third place ranking to 19th for reading. The rankings are well-regarded as the most comprehensive international yardstick of secondary school pupils' abilities'.

The same newspaper reported on the 6th of December that 'Britain nosedives in education league tables' and, on the same day, in the online version of the newspaper, a note posted with the title, 'What happened to "education, education, educ

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³ "Education, education, education" was how Tony Blair set out his priorities for office in 1997, as Labour campaigned to put classrooms at the top of the political agenda.

reported by the government when international tests show mostly negative findings: 'Pressure is now mounting on the government to show it can find an approach to teaching basic skills that works – and to stick to it, instead of the constant, expensive and ineffectual upheaval' (The Times, 9.12.2007).

Newspapers of a centre and centre-left political allegiance extensively covered the announcement of the PISA results, too. Although most of them followed lines broadly similar to the more conservative press, some of them criticized international rankings as unreliable means of judging education systems. On the 30th of November, The Independent reported on the leaked results, with the headline 'UK children plummet down science league table'. The article stated:

The Government faces further embarrassment over standards of education, after Britain plummeted down yet another international league table – this time for science. ...The ranking puts the quality of science taught in Britain's schools behind Slovenia, Estonia and Liechtenstein but still in the top third of world nations.

On the 5th of December the same newspaper published a leading article with the title 'The lesson is clear: there is no room for complacency' (Fig. 5) showing some skepticism but also condemning 'failing institutions':

It would be wrong to attach too much weight to these surveys. International learning comparisons can never be an exact science. Tests can play to the strengths of a certain country's system. But they are still the best tool we have....Ministers are justified in pointing to some real improvements in primary school literacy rates. But this does not seem to be enough to keep up with other developed countries; something we can ill-afford in an increasingly competitive global market for skills....What these surveys also demonstrate is that there are wide disparities in student performance within countries. And this is certainly true in the UK. Our best schools, both primary and secondary, are world class. But we are tolerating too many failing institutions. And those are bringing our international ranking down.

Finally, The Independent published another leading article on the 6th of December headed 'Put poor scores into perspective', which interestingly states:

The fact is that the experts believe there are reasons why we don't do brilliantly. For a start, teachers in the UK do not teach to these tests, as they do with GCSEs and A-levels. If they did, there is little doubt we would begin to improve. But we would then find that the results were becoming detached from the education we wanted to put in place. It is easy to read too much into these scores. Such international comparisons are a valuable research tool, but if we start to celebrate when we do well and despair when we do badly, we are missing the point of them.

The Guardian first reported on the PISA results one day after their announcement (Fig. 1). The article, written by Will Woodward, chief political correspondent of the paper, after

briefly describing PISA as the 'most authoritative international study', reports that 'Britain is sliding down the world league table'. The article includes opinions by Michael Reiss, the director of education at the Royal Society (the UK's national academy of science), the thinktank Civitas –the Institute of the study of the civil society, and a comment by Richard Lambert, the director general of the Confederation of British Industry (CBI) –all of them being highly critical of government policies on education. According to the newspaper, the prime minister's spokesman persisted that 'our own curriculum tests and GCSE results tell us that standards are continuing to rise', whereas representatives of the oppositional parties, the Tories and the Liberal Democrats, called for a fundamental review of education policy. In contrast to the national political parties, with an article on the 6th of December ('The truth about the tables'), the Guardian appeared much calmer about the results:

The collection of data about the things that schools and universities do... is useful in principle. But if in practice the material is presented in the form of who's-up-who's-down league tables it frames the argument in a misleading way. Statistics about children's achievements can shed light on many things, but cannot definitively settle the quality of a school....Our problem says the report, is not variation between schools but the variation within them. That is not to say that our performance is a cause for complacency. But it is to say that the only definitive league tables are in sports, not in science.

The British Broadcasting Corporation (BBC) covered the OECD PISA study extensively with several online articles on the day of the publication of the results (4th of December). Some of the headlines included: 'UK slips down global table'; 'Schools face up to global leagues'; 'Finland stays top of global class'; and 'Scotland slips in schools league'. Using subheadings such as 'Downwards' and 'Overtaken', BBC reported that the UK was 'the only country which was in the top-performing group in 2000 to have slipped down into the lower group' (BBC, online, 2007a), whereas in a different article it states that 'Finland and South Korea remain among the superpowers of education' (BBC, online, 2007b). In terms of the Scottish performance in PISA, BBC reported on the response from the Scottish government, which, through the words of Maureen Watt, the Minister for Skills and Schools, stressed that 'we have inherited a situation' and that 'this, taken with the information from the recent international literacy study and the forthcoming OECD review of school education in Scotland, provides us with valuable insights into our strengths and weaknesses' (BBC, online, 2007c).

Finally, the Financial Times was one of the newspapers with the widest coverage of the PISA results from as early as the 30th of November, when the first leaked results came out ('UK teenagers plummet in world science league' FT, online, 2007a), and then on the day of the official announcement: according to the newspaper, the 'OECD gives UK teenagers only "average" marks' in a survey that is 'statistically robust'. Despite the mediocre results, the article stressed the difficulties that the UK had in getting the

response rate necessary to participate – the article states OECD's 'praise of the role of the UK government in making schools take the test'. Most other articles of both the FT and the Economist focused on global rankings and their significance for the future of global markets: 'Asia Pacific teenagers top OECD tests' (FT, online, 2007b); 'Taiwan tops the league for school maths' (FT, online, 2007c); and 'The race is not always to the richest' (The Economist, online, 2007). According to this last article, 'money and effort aren't enough to impart the skills and knowledge needed in a cut-throat world....Letting schools run themselves seems to boost a country's position in this high-stakes international tournament: giving principals the power to control budgets, set incentives and decide whom to hire and how much to pay for them. Publishing school results helps, too' (The Economist, online, 2007).

In conclusion, the UK press coverage of the PISA study was substantial. The British media unequivocally accept OECD as the major intergovernmental organisation for conducting reliable and robust statistical analysis of education systems' performance. Further, many newspapers stress the need for such analysis if countries are to predict and hence attempt to improve their short- and long-term standing in the competitive global markets. OECD numbers do travel well; in fact, as they go along they produce more numbers and tables of their kind. Although the OECD is 'shy' (FT, 2007c) to make comparisons with previous PISA studies, league tables, rankings and graphs of the 2000-2006 performance decline were dominant in the UK press. The ranking presentation of the results attracted journalists who were keen on making populist and catchy sporting equivalences of being 'beaten', 'overtaken' and 'failed'⁴.

Another key feature of most —especially right wing leaning- newspaper articles was their focus on the disparity they perceived between the large scale investment in education spending and the disappointing results. Political opponents appear to grasp the opportunity PISA offers to criticise the government and demand radical action, whereas media more favourable to government policies are rather more cautious in their analysis of the results. Financial newspapers comment on the state of the education system but seem far more interested in pointing out to their business readers which economies are expected to perform better in the future; with global markets being borderless, capital investment targets the best wherever they are located.

Finally, part of the UK press also seemed to portray some degree of critical distance from the spectacle of PISA: although rare, there were some press articles which questioned the need for immediate action on the basis of the negative results. Perhaps the publication of league tables in the English education system for over a decade now might have generated some cynicism of even experience in reading and analysing comparisons

⁴ According to Mike Baker, education journalist in the Guardian, it was not just the England football team that failed to qualify for Euro2008 –English schools have also failed 'to make the grade in the latest international competitions' (BBC, online, 2007d).

across institutions – in this case, countries - with some detachment and open-mindedness.

Nevertheless, above all, there is a single dominant reality evident in journalists' writings as well as in the reactions of policy makers, educators and politicians to the study: PISA is an event that no-one can afford to miss –it requires answers and demands action. It has become the major international tool mobilising interest and debate on the relation of education with the knowledge economy agenda. No matter whether the response is critical or approving- of PISA, there is certainly one position no media, policy maker, politician or researcher, for that matter, can take – that is, to ignore it.

3.2 Education popular dissemination journal: Times Educational Supplement Scotland

In Scotland the major source of reporting on PISA effects and impacts on policy debates is the Scottish edition of the Times Education Supplement, the TESS [the TES deals with education in England and Wales, and with some aspects of UK policy]. Every issue of the TESS from late 2002 until late 2008 was examined for references to PISA and its results. These TESS reports can be divided into the following sections – the first element was reports or statements made by Government Ministers or officials (for example research analysts in government departments); the second element comes from the Educational Institute of Scotland (EIS), the long-established professional association of teachers, which is also the largest teachers' union in Scotland and quite powerful in policy terms; the third element consists of TESS Comment on a government or academic report, using PISA evidence, and or its own journalistic investigation around performance issues; and finally, articles reflecting academic comment or inquiry into related Scottish performance in education issues, using PISA data.

In this timeframe, these kinds of reports or comments are clustered around a major and a minor period. The first period is December/ January and the latter is June/ July. The winter clusters are related to PISA reporting times [December 2004 and 2007] the summer reporting appears to be an end of academic year summative opportunity.

There is a little cluster of reports from EIS events in 2003. The EIS was determined to push an agenda for the reduction of class size and used PISA data consistently to support the case for smaller class size. They even invited Andres Schleicher, from the PISA team at the OECD, to speak at their annual conference. This was a tactical move and does not reveal consistency: the EIS does not report or make use of PISA data again in the press, though it does use it in evidence to the parliamentary committee on education.

3.2.1 Patterns

PISA data are used as a constant source of legitimate and trusted data within Scottish education policy discussions throughout the sample period:

(1) to point out the tension between the government policy goals of social inclusion and the increased use of setting (pupil differentiation) in comprehensive schools, especially in the early secondary years. There was a lot of policy activity around social inclusion in the post 1997 period, with differences in emphasis between England and Scotland. In Scotland there was stronger emphasis on structural barriers to progression, in England the focus was more on improved performance as a way of reducing exclusion. It was argued that increasing setting would enable enhanced performance: the extract below shows the use of PISA data to oppose such a development in Scotland:

The gap between the least and most socially advantaged students at the end of schooling tends to be wider than average in the countries that still divide pupils early in secondary education. Countries that divide students also have, on average, lower student performance [Setting widens the gap on inclusion 3 January, 2003]

Comparisons with other countries are used to stress the need to retain comprehensive provision and not allow 'selection by stealth'. Comparative data are mobilised in this debate –

'Top-performing countries such as Finland, Japan and Korea all have comprehensives that combine high achievement with small social differences. Hungary and Germany are below-average performers and separate pupils into different schools at the start of secondary education'. [Setting widens the gap on inclusion TESS, 3 January, 2003]

PISA became useful in the policy tensions with the UK government. It could be used to slow pressures on instituting a setting policy in its schools, something which Scotland did not want (A TES Scotland survey in November 2002 found that the majority of secondary headteachers were not convinced about the merits of setting).

(2) to recognize the social values expressed in Scottish education ie the PISA report [2000] was used to show that teachers helped pupils in lessons to a greater extent than in most countries, showing an interest in their work, and allowed opinions to be expressed etc. Pupils felt comfortable at school [School is far more fun in Scotland 21st November, 2003][this information was published a month in advance of the formal PISA report in December 2003 by a principal research officer in the Scottish Executive Education Department].

(3) PISA data were used to embarrass the Scottish government: large class sizes led to poorer performance [PISA stated that there was a marked dip in performance where classes numbered over 25 pupils].

Government representatives for many years have pointed to a lack of research evidence to support the case for a reduction in class sizes. Increasingly, this research evidence is becoming available and the PISA evidence is perhaps the most powerful evidence currently available. [Scotland 'lags on class size' 3rd January, 2003]

"Countries such as Poland, Portugal, the Czech and Slovak republics, Belgium and Spain all have lower class sizes than Scotland," [3rd January, 2003]

These countries, chosen by the EIS spokesman, had not been usually used as comparator countries in relation to Scotland.

3.2.2 Comparison Fatigue

Too much data about comparisons and rankings confuses the commentators, and they find it difficult to explain their value to their readers. As the decade progresses and rankings, comparators, and grouped results grow, and the position of Scottish education moves about, it becomes difficult to establish a clear 'line' on international assessments. This is especially true when PISA and TIMMS data, and locally produced data [the AAP], are published at the same time: the commentators note, somewhat despairingly-'three separate reports produced different findings about the state of science attainment in schools'. Results were deemed 'significant' and 'highlighted' or described as 'disappointing' and the government was caught between 'performing well', 'no room for complacency' and 'meeting the challenge' [17 Dec 2004]. The Scottish Executive attempted to inform readers about the way each survey [or 'trail'] worked —

It says the assessments used in Timms were constructed on the basis of an analysis of the intended curriculum in each participating country. By comparison, Pisa looks at students' ability to apply their skills in real-life situations. [Dec 2004]

The TESS Editor commented that

International surveys are wonderful things when the results are in our favour; when the outcome is less favourable, they are suspect. Either way, however, the latest studies, on reading, maths and science (p4-5), cannot be a conclusive verdict on the quality of any school system. They are subject to the vagaries of national policies and practices: if the inputs are inconsistent, the outputs will be the same [Editor's Comment 7th December 2007]

3.2.3 Shift to Comparison

By 2004, a 'comparison' state, meaning a condition [or frame of mind] and a particular governance turn, was beginning to emerge. Previous reports using PISA data contained opportunistic or responsive insertions in Scottish accounts of education or commentaries on rankings. By 2004, the idea of using PISA data to steer the system of education was emerging; it was associated in these reports closely with the then Education minister, Peter Peacock:

The international PISA survey is a very important benchmark for us and how we are performing internationally. I want to see Scotland firmly in the top flight of nations, and with our performance improving all the time.

Benchmarking Scottish performance against other nations was becoming institutionalized. His strategy was to respond by demonstrating how problems revealed by PISA comparisons were being addressed by direct government initiatives on class size, literacy and maths. [Rising up the Rankings 11 June, 2004]

Peacock was responsible for inviting the OECD to undertake the review of education in Scotland. In the parliamentary debate on that report (by which time there had been a change in government) he indicated unease with reliance on PISA:

As minister, I was concerned whether we really knew how we were doing in the world context. The PISA results showed that we were strong and doing well—as Bob Doris and others have pointed out, we were in the top third—and, despite recent challenges, we are still in that position. However, PISA is only one measure of how well an education system is doing; for me, a more important consideration was how well our policies were doing. How did we compare with our world competitors? Was our direction of travel the right one? Could we innovate more?

3.2.4 The Inherited Challenge

A new Scottish government came into office in May 2007. It was an unusual government; it was a Scottish Nationalist administration, with the stated and explicit goal of achieving Scottish independence. However as a minority government it was dependent on the support of a range of other small parties (not Labour, which constitutes the opposition). The minority administration functions on a case by case basis-each policy development has to be negotiated through Parliament with the support of a fluctuating and unstable coalition of quite divergent interests.

The new government has a very strong emphasis on economic growth, as it sees a healthy economy as a precondition of support for independence (and recent events may

have weakened this agenda). As part of the new focus on wealth production, PISA data are used to identify a policy problem: Scotland might be getting smarter but it was not getting wealthier!

Its overall score in the recent international PISA survey ranked it second highest among the countries belonging to the Organisation of Economic Cooperation and Development - but its wealth in terms of income per head, at \$30,816, was the lowest among the so-called "arc of prosperity" nations (the Nordic countries and Ireland). [Voice of business gets more say on qualifications 2 May, 2008]

At that time, mid 2008, TSG wished to compare Scotland to the Nordic countries, and especially Iceland and Ireland. They drew closely together with the Business councils to problematise the use of comparative data; arguing that on their own, such data do not reveal how wealth grows [although the normative assumption was that high PISA results would create a high achieving economy]:

high academic and vocational achievement in Scotland had not led to high productivity and economic growth [Voice of business gets more say on qualifications 2 May, 2008]

Comparison was also becoming widened across social policy areas as more general OECD data, and not just their PISA data, were used to create an independent research report the Index of Children's Well-being in Scotland. Categories included suicide rates, dental health, child poverty; teenage pregnancy rates etc and Scotland came almost last of 24 OECD comparator 'western' countries. Thus although PISA data looked healthy, other OECD derived data showed the severe problems in Scotland and the need for a more considered approach to Children's services as a whole. [The kids aren't all right 6 July, 20071

The Cabinet Secretary for Health and Wellbeing said she was going to make "early years" intervention a priority and would invite ministers from other countries to discuss ideas. The development of that focus on early intervention can be seen in the report on parliamentary debates (below).

Finally, in terms of TESS and related reporting, when the December 2007 PISA survey was published, it showed that Scottish 15-year-olds were performing better at science than maths or reading. They were continuing to perform above the OECD average but their ranking had dropped. Other countries were improving at a faster rate.

Maureen Watt, the Skills and Schools Minister, said the findings represented an inherited challenge which the new Scottish Government was determined to tackle. [The rise and fall of achievement 7th December, 2007]

3.3 Teacher unions

Teacher unions' websites covered the three PISA rounds sporadically in the period 2000-2008 and mostly in relation to the publication of the findings, to conferences they organised on the PISA findings or to unexpected events, such as the English failure to participate in the 2003 testing round. As with the media, teachers unions are usually UK bodies, therefore the distinction between the different nations is difficult. When the findings relate specifically to a Scottish teacher union, this is going to be detailed at the relevant place. In general, we witness an unequivocal endorsement of the PISA study by all unions, which use the findings as international evidence of their improving work and the need for the government to proceed to reforms in favour of the school workforce, with less performance management and more room for teachers' autonomy. In fact, teacher unions do not appear simply to use PISA to their own 'benefit'; they require that the government secures the country's participation and offer their full support.

For example, the National Association of Schoolmasters and Union of Women Teachers (NASUWT), the largest UK-wide teachers' union, in collaboration with the National Union of Teachers (NUT), organized in 2003 a conference on the PISA 2000 study⁵, which, according to the website, was 'the most extensive survey of the literacy, numeracy and scientific understanding of 15 year olds ever conducted' (NASUWT 2003). The General Secretary of NASUWT, Eamonn O'Kane, after having praised UK teachers for their good work ('This high position contrasts sharply with the picture of educational doom and gloom painted by some and reflects well on the work of Britain's teachers and pupils'), he adds:

The Report reveals the entirely unsurprising fact that there are three aspects of school policy and practice which have a significant impact on student achievement: good school discipline; high teacher morale; more school autonomy. These are precisely the issues which the NASUWT has consistently highlighted by calling upon the Government to support schools totally in maintaining high standards of pupil conduct, improving teacher morale by reducing excessive workload and freeing schools from the tyranny of league tables (NASUWT 2003)

NUT, in an article in its website in November 2004, comments on the English exclusion from the PISA round in 2003, stating that it is the 'most important international study' and that it is a 'major disappointment' that England was excluded, especially since 'this country did so well in the last report' (NUT 2004). However, the article goes further to criticise the government for failing to ask NUT's help to increase the response rate:

The Government must have known about the low rate of return from schools. It should have come to the NUT, expressed its concerns and asked for our

⁵ The same conference is mentioned previously at the Guardian 2003 article, where the general secretary of NUT, also addressing the same audience, refers to PISA's 'fundamental impact' and suggests that his union never proceeds to policy issues without the backing of robust research (for more details, see page...)

help. Dedicated funding and supply cover should have been in place to enable teachers to provide the information required for the research. This must not happen again (NUT 2004).

In another article in 2005, NUT's general secretary Steve Sinnott moves along the same lines, and backs his argument with PISA policy recommendations. Indeed, he aligns NUT's positions with the PISA findings, allowing himself and his union with an air of international credence:

I was encouraged by the fact that the latest Organisation for Economic Co-operation and Development evaluation of the effectiveness of industrialised countries' education systems, the Pisa 2003 report, contained further evidence that our proposals are right. The report's evaluation is based on the question: how well is each country doing by all its young people? The question is a premise based on equality. I wish England and Wales had been included in the report. Had we known about the difficulties in gathering data, the NUT would have done all it could to encourage schools to return the information to OECD. Nevertheless, the premise behind Pisa is the same as the one which underpins our own document.

During the same year, a number of teachers' unions (NUT and NASUWT, together with the Association of Teachers and Lecturers [ATL], the National Association of Headteachers [NAHT], the Professional Association of Teachers [Voice] and the Secondary Heads Association [SHA]) made a joint statement against Key Stage 2 assessments in primary schools. The primary source for supporting their argument was the OECD PISA findings, which appear at the very first paragraph of a long text (5 pages):

International research (OECD/PISA) demonstrates there is no evidence that high stakes testing leads to improvements in pupil achievement. On the contrary, the evidence shows that it is high quality inputs into qualifications and teacher development, backed by supportive systems of accountability, which lead to high standards for all pupils (Voice 2005).

Voice and other unions, as they had already promised following the English exclusion in the previous round, endorsed PISA 2006 by actively encouraging teachers and headteachers to participate:

We, as unions and associations representing teachers and head teachers, support PISA as being of real interest and relevance to the teaching profession. Given the enormous influence that PISA is starting to have on education policy world-wide, we are keen to ensure that England is at the centre of the debate but we recognise that this can only be assured if enough English schools agree to participate (Voice 2005b)

Moving to the Scottish scene, the General Teaching Council for Scotland (GTCS) were very willing to welcome and give a seminar to an OECD team, who visited the country in

spring 2007 in order to write a diagnostic report for the Scottish education system (OECD 2007)⁶. GTCS's chief executive, Mathew MacIver said in relation to the event:

We are pleased to welcome the OECD to Scotland for what is an important and, indeed, groundbreaking visit. Scottish education is already highly regarded by the OECD as it is across the world – Scotland recently appeared fourth in a list of highest performing education systems across the globe (GTCS 2007).

In another article, in the same website and in relation to the same visit, Mathew MacIver noted:

We receive regular enquiries from abroad about our work and in particular the Teacher Induction Scheme which was recently described as 'world class' in an OECD report. This is a further endorsement of Scottish education and the standards that the GTC Scotland, as the regulatory body for teachers in Scotland, strives to uphold (GTCS 2007b).

The Educational Institute of Scotland (EIS), Scotland's largest teaching union, published an article on the PISA 2006 report, celebrating the Scottish success, 'a credit to the work that goes on in schools across the country', but warned against complacency, and suggested that 'other countries are improving faster'. Ronnie Smith, EIS general secretary, proposed that there are lessons to be learnt, and that these are not always located within the nation:

While our system is performing well, we can learn lessons from other highly successful comprehensive education systems such as that in Finland – a highly inclusive system which has benefited from significant government investment in highly professional teachers and top-quality resources over the years (EIS 2007).

To sum up, although one would expect teacher unions to be fairly reluctant towards further assessment of their work, the global stage of the Programme gives them the opportunity to ask for reforms that would work in their favour, following the examples of other countries, like Finland. UK's fairly positive results are another 'pull' factor for the teachers' unions in the country, since this way they can demonstrate improvement in their performance against international competitors, especially in an age that the teaching profession is increasingly losing kudos as an attractive career in the UK.

3.4 PISA National Official Documentation

The original report published by the Education Department of the Scottish Executive in regard to the PISA 2000 findings for Scotland (Executive 2002) was a relatively brief document. It offers more of a general analysis of the PISA results and recommendations for all the participant countries, rather than an analysis specific to Scotland. After an

⁶ A great deal of the report is backed up by the PISA 2006 findings.

introduction and a short explanation of the PISA design, the report gives a description of the general, global results in terms of performance in reading, mathematical and scientific literacy, as well as the factors contributing to this performance. Although the Scottish position is often mentioned in relation to the OECD average and the position of the UK overall, comparison of the country's position in relation to others does not appear to be of primary interest. Rather, the report discusses 'performance' and the factors affecting it in a more global, general interest, sense:

The following is based on the analysis of data from all the countries that participated in PISA and the associations identified between different factors and student attainment may not pertain in the UK. However, they do provide interesting insights into what factors may be influential in particular circumstances (Executive 2002; 11).

In contrast to the rest of the report, the Scottish results are given more attention at the conclusions, where Scotland's positive performance is mentioned - 'Scotland was in the top third of OECD countries in all subjects assessed in PISA'. However, comparison with other countries is still not of interest here. The report discusses the PISA policy recommendations and refers to specific policy measures and reforms that were taking place in Scotland at the time. It implies the Scotlish reforms' alignment with international research findings through referring to specific measures that correspond to the PISA proposals. For example, in terms of absenteeism and behavioural problems, it is mentioned that 'clearly the work of the Discipline Task Force will be important in this context' (Executive 2002; 18); in terms of school climate, it is mentioned that 'the work that continues to be done on improving the ethos of schools is clearly important' (ibid); in regard to competitive and cooperative learning, the report suggests that 'advice has been issued by HMIE on the need to use a variety of teaching approaches to meet the learning needs of all students' (Executive 2002; 19); in terms of homework, it comments that 'it appears that the encouragement given in Scotland to homework and supported study has been well directed' (ibid). Finally, it is worthwhile to note that the report comments on the performance gap between high and low-achievers but presents this as a UK, rather than exclusively Scottish, problem.

Two years later, in June 2004, and after the PISA 2003 study (but prior to the study's publication of the findings) the Scottish Executive published a second report on the PISA 2000 study, the 'PISA 2000- Scotland analysis' (Executive 2004). This is a much more exhaustive report, with numerous tables and graphs analysing specifically the Scottish results, this time with a far more comparative dimension. The focus here is not simply on comparisons with the rest of the UK and the OECD average, but also on comparator countries, such as Belgium, Germany and Ireland. The reason for publishing this report is to offer 'further interrogation of our data' (Executive 2004; 4), while it also encourages researchers to undertake more analysis of them. The report is a long list of introductory

paragraphs summarising charts and tables provided underneath them, which show variations in scores amongst all countries, between Scotland and the UK and Scotland and the OECD average. The report continues with the same pattern in all its 54 pages. Therefore, whereas the previous was much more a discussion paper, focusing on policy advice and general findings, this piece has more of a statistical focus, however attempting to address a wider audience by often explaining statistical terms in useful terms. No policy dimension is discussed and there are no conclusions reported.

As previously mentioned, the SCRE centre was responsible for the 2003 study in Scotland. They published an 'initial' -as the title suggests- report, in collaboration with the Education Department of the Scottish Executive. The document reports on results of the OECD member countries only -also, there is no reporting of the results from the rest of the UK due to the unreliability of the response rate in England. This decision (to limit the comparison to Scotland with the OECD world) was, according to the report, 'one of expediency' (Thorpe 2004). The report explains in detail how mathematical literacy is measured according to PISA and continues in offering comparison tables for almost all aspects of the test, including tables with country names that have performed 'significantly higher', 'not significantly different from' and 'significantly lower than' Scotland. Indeed, comparison with other competitor OECD economies appears to be very important in this report - this is enhanced by the fact that the usual comparison with the rest of the UK is not there. Similar to the more extensive statistical report of the same year for the 2000 round, this report does not refer to any policy initiatives in Scotland that relate to the PISA 2003 recommendations. It is largely a report on numbers, comparisons and score variations in relation to the 2000 results.

Finally, the Social Research Unit of the Scottish Government published the results of the PISA 2006 study in December 2007 (Scottish Government 2007). This report follows the same structure as the one from 2004, with table comparisons with other OECD countries; non-OECD members are excluded. An interesting novelty this time, given the nationalist character of the Scottish Government since 2007, is that the comparison to the rest of the UK is not with the UK average as in previous years. This time, the English, Welsh and Northern Irish results are presented independently and although, depending on the table, the report makes a point of stressing that the Scottish results are either not significantly different or significantly better than with the rest of the UK countries, the UK appears nowhere in the report as a single entity. Again, despite its statistical focus, the report attempts to be reader-friendly; it explains statistical conventions, like the 'inter-quartile range' and other similar terms. Apart from comparisons with other countries, the Scottish performance is also compared to the previous testing rounds. Finally, a new feature to this report is the final section 'How will the results of PISA be used?'; although the question is not answered directly, information is given on how readers could find out more about other internationals studies, the Scottish Survey of Achievement, the

Scottish Inspectorate (HMIE) and information about the Parentzone website, for data regarding checking on one's own child progress.

In conclusion, one could argue that the national official documentation of the PISA findings shows a gradual shift from reporting about international research on student performance and its lessons for Scottish education to an increasingly wider and deeper comparison spatially with other competitor countries and education systems, as well as temporally with the Scottish results of the previous years. From discussion papers, the reports have gradually become more and more focused on numbers and statistical information, nevertheless aiming at a wider audience of researchers and parents who are encouraged to search for more data through other studies and sources.

3.5 Educational policy documents: parliamentary debates

The debates of the Scottish Parliament, the proceedings of the Education Committee and written answers to Parliamentary Questions are all available on line, and have been searched for references to PISA. We see a similar tendency in the use of PISA in such debates to that noted above-that is that comparative data are brought into play to make political points and in attempts to make rival political parties uncomfortable. The content of the reports is not substantially engaged with.

In December 2007 there is a clear example of the use of PISA data by the cabinet Secretary to support the Nationalist government's policy shift towards investment and intervention in early education. The same speech underlines the SNP's focus on the economy and addressing problems of poverty and society-again, a shift in emphasis towards provision for the 'whole' child rather than focusing on education as a separate policy sphere:

Finally, only yesterday, the programme for international student assessment—PISA—report was published. It showed that Scotland's reading and maths scores have experienced one of the highest drops of all the Organisation for Economic Co-operation and Development countries. Scotland also has one of the biggest gaps in performance, which can be identified as related to poverty and deprivation.

She goes on to reference PISA directly in explaining the new early years strategy:

By 2006, Scotland was outscored by four countries in science, five in reading and eight in maths. We are determined to reverse that trend. If we are to tackle Scotland's challenges as identified in the international PISA survey and to climb back up the international tables, we must deal with poverty at its roots and tackle the impact that it can have on families.'

In early January 2008 there was a debate on the OECD country review in the Parliament. As indicated earlier, this review draws on PISA data. The Minister for Schools and Skills declared:

I am pleased to say that there is much in the review team's report that aligns with this Government's strategic priorities, such as our commitment to tackling education inequalities from the earliest stages, our new relationship with local government, the skills and vocational learning agenda and the reform and modernisation of the curriculum through the curriculum for excellence. I also welcome the positive things that the review says about some of the key strengths of our system. For example, 'Scotland is a well-schooled nation by international standards'...and, she went on 'the report commended our consistently high standard in the OECD's programme for international student assessment, or PISA'

Concluding with a fulsome compliment to OECD:

In Scotland, we are in the vanguard of leading education nations. We are a learning nation—and it is reassuring to be told by external, impartial examiners from such an august body as the OECD that that is indeed the case.

The debate largely displays inter-party differences, however the Cabinet Secretary for Education and Lifelong learning, in her concluding speech to the debate, makes some interesting references to the need for international comparison and uses the 2006 PISA data to claim that:

Scotland has one of the lowest levels of poorly performing pupils among the OECD countries. Only Finland outperforms us significantly.

PISA data are also mobilised in the Committee debates on class size, on pupil motivation and reform of the curriculum. In most of these cases the data are being referenced by particular policy actors-often opposition politicians but also headteachers and the EIS-in order to support a particular development-the reduction in class size is one example. This is an interesting use of PISA data as robust and reliable knowledge, which appears to 'trump' or displace nationally-produced research on class size, that is altogether more cautious about the relationship between performance and size of class. PISA data perhaps lend themselves to being mobilised in this way, precisely because they are decontextualised, and because they eliminate complexity in relationships: data presented as correlations become translated into explanations of relationships.

In all of these cases, there is a selective use of parts of the data to give a scientific basis to the argument, or to underline problems in Scotland by comparison with other nations. The content of the material is not debated or closely scrutinised-these are examples of data being used to legitimate positions that are already clearly established.

4. Conclusions

There are issues and challenges in this task in relation to locating the 'national' case, given the changing nature of Scotland's representation in PISA. In order to understand this fully we have had to move to the wider UK frame of reference to provide more contextualisation of the production of PISA in this case. We believe that this lens has allowed us to see the way in which the changing politics of devolution in the UK has been linked to a changing representation of Scotland in the international and transnational policy space (Arnott and Ozga 2008).

In addition, we believe there is evidence from our analysis to date on PISA and the knowledge contained in PISA (but not used or discussed) to support Nóvoa and Yariv-Mashal's powerful reading of such developments as part of creating the 'society of "international" spectacle'. They go on:

Politics is influenced, and in a certain sense constructed, through a systematic exposure to surveys, questionnaires and other means of data collection that would, or are perceived to have the ability to, estimate 'public opinion'. This ongoing collection, production and publication of surveys leads to an 'instant democracy', a regime of urgency that provokes a permanent need for self justification. Hagenbüchle (2001) rightly points out that 'the mediatisation of political life reduces politics to a public spectacle', impeding any critical discussion (p. 3). We argue that by using comparable measures and benchmarks as policy we are, in fact, creating an international spectacle, one that is deeply influencing the formation of new policies and conceptions of education. (Nóvoa and Yariv-Mashal 2003: 427)

PISA appears to occupy an important symbolic space and to establish significance without being backed up by extensive analyses or in-depth discussions of its content. Its production seems to centre on a ritual of participation that does not offer many opportunities for real debate and input from the national level. But this is not experienced by Scotland's actors as a significant issue. Provided they are there, and provided that PISA is successful - a 'pat on the back' as one interviewee put it, it serves its purpose. In other words, PISA's most dominant use in Scotland is discursive; it appears and re-appears whenever a debate takes place in which statements or judgements need to be backed by some justification, argumentative or evidentiary support of an 'international research' nature. As the former education minister in the country succinctly summarised it, it provides a reference point for a small, peripheral nation like Scotland, attempting to escape from the shadow of the 'other', England, both in the immediate context and beyond.

Above all, in Scotland and beyond, PISA has pushed transnational education governance, or Europeanization processes for that matter, through a significant transformation: the

'international' arena of monitoring of system performance has moved from being an event that took place behind 'closed-doors', involving only national representatives at the EU level, benefiting from their special information sources, in order to strategically influence domestic policy. In effect, it was an instance of 'high' politics, that is a closed event involving important people who worked together to protect and enhance their individual interests. Now we confront a public issue, where national performance and its international comparisons have come into centre stage. In this new realm, more diverse actors, such as the media, teachers' unions, academics, and even including those pupils that were described as willing to represent their country on the international stage, have come to participate in an event which conceptualises education not merely as within a national arena but as part of a global, inter-connected world. OECD, through its history in developing international education indicators and comparisons, and crucially through its careful and thorough orchestration of a test on such an enormous scale, has become the 'obvious' international organisation to trust and choose in promoting national policy at the global arena. The promotion of the national within the international sphere of comparison also raises issues about the ordering of significance of nations. We have seen the ways in which the UK as a nation has been re-defined (in part) through the PISA 2006 national report. In the same period, it is evident that other small nations, (for example some of the accession countries) although non-OECD members have taken on increased importance and interest in trans-national scrutiny because they are improving very rapidly (unlike Scotland). Thus what was invisible, or peripheral, becomes central as offering models of rapid improvement to Europe. Thus we suggest that the specific case of Scotland shows the ways that a nationalist government may draw systematically on the 'international' in order to reinforce its local cause, but it is also redrawing its relations (for example by looking to Poland or Lithuania) in order to benefit from the new interest in what was the periphery of Europe. Old national borders in Europe thus gradually lose their former status (the UK) and local policies and choices appear as flexible, intelligent and more networked than ever before. In this context, policy learning broadens its scope from the imposition or promotion of ideas by the putative 'centre', and becomes, perhaps, more uncontrolled, more open, and more volatile.

However, the fact that Scotland is relatively successful in PISA has to be taken into account here. There is a symbiotic relationship between PISA and the education system: Scotland needs PISA and PISA needs cases like Scotland –cases of nations that have positive performance but could and should, according to the official (both OECD and Scottish) discourse, improve more quickly and more efficiently. OECD is considered as highly competent and provides a 'spectacle' of recognition that comes with high levels of visibility and reputation. At the same time, it offers critical comments that can act as leverage for further reform. One could speculate that the Scottish model of policy making at the international stage (which of course includes work with both the EU and the OECD

as well as other multi-lateral or bilateral international cooperations) is one of pushing innovative ideas abroad, in order for them to eventually return to the domestic as necessary reform measures, backed with global credence and 'robust' evidence. Policy teaching and learning are not in any way separate or dichotomous strategies in this model: they operate together, simultaneously, in a complex mix of policy actors' and evidence data inter-relationships and dependencies.

To conclude, the production of PISA provides little evidence of attention to its content and to the problems of construction of comparative assessment. The process is ritualistic and symbolic. By these means the local policy actor signals, to an international audience, through PISA, the adherence of their nation to reform agendas (Steiner-Khamsi 2004, p. 76), and thus joins the club of competitive nations. As already suggested, this is especially important for a small, peripheral nation, attempting to model other small, successful nations. However this process may not be directly 'convergent', as we have seen, it may, indeed, produce new 'centre-periphery' relations.

In this perspective, as Appadurai (1996) argues, we can recognise 'vernacular globalisation' in which there is change and reconfiguration not just in or from the global but in global, national and local interrelationships.

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