Across Europe there has been an explosion in the amount of data about performance required by governments from and about schools. Policy-makers say that data provide evidence that can help improve the quality of education. But quality in education is being defined by data in quite narrow ways: so are data shaping and governing education? The research reported in this is *Briefing* explores the extent to which data may be understood as a form of 'governing by numbers' in Europe.

- ► Audit, inspection, evaluation and regulation are all creating a demand for more data from all levels of national education systems in Europe and beyond.

- ► The European Commission's indicators and benchmarks promote the Lisbon 2010 goals of becoming the most competitive knowledge based economy as well as the most inclusive society in the world.

- ► These indicators and benchmarks signal a shift in education policy from contributing to a Europe of 'culture' through promoting shared understanding to contributing to economic growth and competitiveness through performance measurement and constant comparison.

- ► The need to produce data to international requirements may be shaping national education systems to make them more similar and more focused on economic outputs.

- ► Different national systems receive and respond to steering through data in different ways: England locates itself in a global competitive world, Scotland promotes self-evaluation in Europe.

- ► There is a gap between the 'dream' of data flowing smoothly through systems and the reality of data loss, confusion and misinterpretation.

CENTRE *for* EDUCATIONAL SOCIOLOGY

A Research Centre within the **DEPARTMENT *of* EDUCATION *and* SOCIETY**

CES Briefing

Introduction

Audit, inspection, evaluation, regulation and testing of performance of systems and individuals have become the norm in much of Europe and beyond, demanding ever more data production from national systems. This growth of data and its use to make constant comparisons between nations and to audit performance is now widespread and much effort and expense is devoted to producing more and better data. We have become so used to data and demands for data in education that the recent explosion in its production and circulation may seem to be a natural phenomenon. This massive growth in the centrality of data to policy has not happened simply because we have new technologies that allow (in theory at least) the processing and flow of large databases but constitutes a major policy development in itself, and one that requires investigation through systematic research.

This *Briefing* draws on a current study (FabQ) that examines the production and use of data in quality assurance and evaluation (QAE) systems in England, Finland, Denmark, Sweden and Scotland. It argues that data production and use are related to changes in the *governing* of education/learning in national systems that promote a shared policy agenda across Europe through targets linked to learning outcomes. These learning outcomes prioritise education/learning for economic growth and employability, and they act on national systems to produce policy convergence. The *Briefing* also considers the role of trans-national organisations in promoting data, and on the production and use of data in the project countries.

The Measurement Agenda

At Lisbon in March 2000 the European Union member states agreed to the aim of becoming: 'the most dynamic and competitive knowledge-based economy in the world'. This is known as the 'Lisbon Strategy' because education policy remains the remit of the individual member states of the EU (the principle of subsidiarity). This means that convergence of European policy in education/learning must come about through guidance and co-ordination, and the use of benchmarks and indicators, rather than legislation. This guidance or steering role is exercised through the 'Open Method of Co-ordination' (OMC) which sets guidelines for the EU combined with specific timetables for achieving the Lisbon goals. Because the OMC can only work through indicators and benchmarks, the production of common data becomes highly significant. The OMC requires the production of quantitative and qualitative indicators and benchmarks that assess EU member states against the best in the world. In order to produce these indicators, national systems have to adjust what they do and how they measure it to conform to EU requirements. Furthermore the OMC requires constant comparison through periodic monitoring, evaluation and peer review that are promoted as mutual learning processes: compliance is encouraged through this 'soft' or persuasive form of governing.

The emphasis in the Lisbon Strategy is on what can be measured and educational attainment and achievement are understood as essential in building economic prosperity. Those aspects of education that are more difficult to measure, or that do not seem to have a direct relationship to economic prosperity are less visible. The focus is on improving the quality of attainment rather than the quantity: improving quality in education is seen as a priority as expansion of quantity has been achieved and is now beginning to produce diminishing returns. Quality is defined through measures related to competitive performance and economic capacity. Driving quality through constant assessment and comparison of educational performance is, therefore, a high priority within the EU.

The 'Spectacle' of International Comparisons

How is this improvement in quality in education to be achieved? As we have noted, the OMC works through indicators and benchmarks and not through legislation – education is retained as a 'national' policy area - but this may conceal the fact that the OMC has considerable effects. A key element in all of its processes is the visibility of performance and as different systems are measured against one another, so the visible outcomes increase peer pressure. The OMC processes require indicators and data sets that are public and that are reported in the media, they thus create pressures on policy makers in national systems, anxious to score highly in public rankings. This use of visible measures and indicators of performance at national level has effects throughout the system: on education authorities, schools, teachers and individual learners.

At the global international level, the most powerful and visible indicators are those produced by the Organisation for Economic Co-operation and Development (OECD) in its PISA (Programme for International Student Assessment) tests, the results of which have major impacts on national policies. It is argued that such activities produce "definitions of 'good' or 'bad' educational systems, and required solutions" and that the mass media promote compliance with these solutions because they report the results 'in such a manner that reinforces a need for urgent decisions, following lines of action that seem undisputed and uncontested, largely due to the fact that they have been internationally asserted' (Nóvoa and Yariv-Mashal, 2003; 425).

Within Europe, the Lisbon Council set ambitious targets in education and training and quantification of targets expanded greatly from 2001 onwards with the agreement of 'concrete future objectives' for education/training in Europe and the subsequent agreement of benchmarks for European education to be achieved by 2010.

As suggested earlier, these indicators not only create data demands within national systems for the production of data but they define what counts as 'quality' in education within and across national systems. Moreover, they also have an impact on the shape and form in which data are collected. Data have to 'flow' and have to be understandable in different contexts. Thus their production may shape national policy and provision, which may become more comparable and so more homogenous - in this way a 'European' policy agenda for education is created and disseminated.

Data and Governing

The capacity to shape and steer national systems through the 'spectacle' of international comparison and the requirements of data production is a key aspect of the FabQ research which is concerned with examining data as a technology or instrument of governing. We want to draw attention to the capacity of apparently neutral and objective 'data' to steer system and individual behaviour in particular directions, indeed, to instil in the system and the individual (policy makers, teachers and learners), a sense of being held up to scrutiny that encourages self-regulation. In this way data acts to discipline - or govern - the system or individual so that they conform with the agreed norms, in this case, the norm of education/learning tied to economic growth.

Data now seem to be moving into the place that might once have been occupied by policies or values. Thus 'Europe' in the past, and certainly post-war, was a cultural project with a strong emphasis on culture and education as transmitters or promoters of shared values. This European project is now expressed in terms of achievement of the Lisbon objectives, as measured by the relevant indicators and benchmarks. The new Europe of lifelong learning is projected as a community of responsible learners (at all levels of their systems) constantly monitoring their performance, and investing in learning to minimise risk and maximise human capital. This is a project that places data at the heart of the process of governing.

The response of different European Countries

There is, of course, a gap between the creation of this agenda and its take up in different national systems. Although the demands on national systems for data production and use are fairly uniform, different countries view themselves differently in relation to Europe. They have histories and traditions that influence how they understand 'quality' in education, and so they respond to demands for data harmonisation, and to the pressures to shape systems in particular ways. Research by our project partners in Sweden - a late entrant to the EU – finds no enthusiasm for the European Commission's efforts to achieve policy convergence through data. QAE is defined in Sweden for Swedish purposes - there is no straightforward 'translation' of EU indicators into the Swedish system. Instead equality, critical thinking and independence are identified as characteristics that should be highlighted. However it must be noted that there is a growing awareness that quality in these attributes is not easy to test or measure, and that they may be displaced by the more easily measured attributes associated with economic benefits.

Finland is more responsive to the international agenda set by OECD than to that of Europe. Because of its spectacular successes in PISA, Finnish education politicians and officials have a strong sense of the 'market value' of international comparisons. Interview data make it apparent that OECD is seen as enabling Finland to 'sit at the same table as the G8 countries'. Finland is, in effect, the OECD's 'model pupil'. In this context, then, the competitive, economically-focused definitions of quality are being strongly endorsed by national policy makers.

Turning now to the UK, the English and Scottish approaches to QAE through data production and use have a rather different focus. As in the Finnish case, English policy actors at the national level embrace the education-knowledge economy relationship and position England in a framework of global competition. In doing this they underline the importance of their own 'world-beating' data production systems:

> '*Because we have all this Key Stage Data and because it is longitudinal, we are practically, without boasting, we are probably the leading administration in the world as far as value-added measures and schooling are concerned*' [senior policy maker]

They '*keep an eye*' on Europe but '*it doesn't drive our thinking*': they assert that: '*our national data is a far surer measure than any international study*'. There is a very strong sense in England of moving beyond generating data to using it throughout the system to inform practice:

> '*more significantly than just the generation and analysis but the actual USE of data and trying to feedback into the system and enable not just schools at the institutional level but head teachers and teachers to use that data in making judgements on what students need to learn next*' [senior policy maker]

Scotland does not have resources to match England's massive investment in data production but it has a particular tradition of QAE that centres on self-evaluation and the importance of contextualising data:

> '*we put data within the context of other schools and the way it's operating with the context of learning and teaching, for example, social context and so on, is not something that's necessarily the case elsewhere*' [senior policy maker]

Furthermore for national policy makers in Scotland, Europe is an arena that allows the promotion of this distinctive tradition in a collaborative rather than a

competitive way; for example they describe their work in promoting 'How Good is Our School' as a methodology in the Accession countries:

> '*And this commitment to the particular areas that were identified as areas for improvement. I don't think there was any ... ever been a discussion as to will we participate or not. I think the question would really be how can we best participate. What can we contribute? Or what do we give back'* [senior policy maker]

The Data Dream

As well as identifying differences in the ways that national systems respond to and mediate data demands, there is a further factor that complicates the use of data to govern and steer education and learning. This is the gap between the ambitions for data and the difficulty of getting data to 'flow' in smooth and efficient ways. An excerpt from the research in England, which has the most developed system, illustrates this point. The interviewee – a local government officer with data management responsibilities – explains that before the 1990s if Key Stage 1 results had not turned up she would phone the school:

> '*hello, we haven't received your KS1, is there a problem?' 'We posted them a fortnight ago'. Nobody knew it hadn't arrived. We didn't know they had sent it, they didn't know we hadn't had it. So you would be phoning the post office – that takes time.*'

Are things easier in 2007? It seems not - but now the problem lies not with a breakdown of communication between people, but with the 'interoperability' of different software systems, which are incompatible with one another, and thus do not record when a task is complete:

> '*We started* contacting *the schools we didn't receive teacher assessments for - they would say 'we sent this file off 3 times on StoS'.*

Conclusions

The findings of the research so far indicate that data are being used to define quality in particular ways throughout Europe and beyond. But this does not always

translate into 'Europeanisation' in education through data production and flows that create constant comparison across national systems. Some systems position themselves globally; others maintain national traditions that modify the impact of European and global agendas. Our interviews with national and European policy-brokers suggest a complex interaction of global, European and national pressures and effects. Furthermore there are gaps between the dream of data flowing rapidly and smoothly around and across systems, and the messiness and fragmentation of data at different levels. Nevertheless, the research as a whole underlines the scope and ambition of the attempt to define quality through data, and draws attention to some of its effects at the interface of 'Europe' and the national education systems discussed here. In the remainder of the project, we explore the production and use of data at local government levels, and its impact on teachers.

References

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About this study

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For more information and working papers see www.ces.ed.ac.uk/research/FabQ/index.htm

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