Introduction to 6th Cambridge Assessment Conference: 10 October 2012 Simon Lebus, Group Chief Executive, Cambridge Assessment

Ladies and Gentlemen, it is a great pleasure to welcome you here today for this Cambridge Assessment Conference on risk in examinations. We certainly hadn't realised, when putting our plans together eighteen months ago, just how topical a subject it was going to be.

However, although this has been an exceptionally eventful summer, the exam system is rarely out of the headlines even in normal times, and I thought I would start with a few reflections on this, and try to identify some of the themes that we will talk about in more detail during the day.

First of all, perhaps, why this level of interest? As Professor Alison Wolf recently observed, in modern societies one of the main purposes of "education is ... sorting and selecting", and exams are, of course, the principal device by which this process occurs.

Given this, it is essential to ensure that the exam system commands widespread trust and support. Alas, that has been eroded during the last twelve months, and we now face a major collective challenge to restore them, not just exam boards, regulators, politicians and administrators but also schools, colleges and teachers, as the system depends, in a sense, on their being consenting parties, and there is a whiff about the current crisis of that consent being withdrawn.

How did we get to this? The American sociologist Charles Perrow's 1984 study of living with high-risk technologies describes the phenomenon whereby tightly coupled systems, with high levels of interactive complexity, are subject to what he calls "normal accidents" – that is to say accidents caused by the interaction within a system in ways that are difficult to predict or anticipate of errors in different and mutually dependent processes, rather like the different numbers in a combination lock coming together. He argues that it is an inherent and normal (hence "normal" accidents) property of complex modern systems to experience such interactions, and (rather unsettlingly) applies the analysis to nuclear power, petrochemical plants and aircraft and marine accidents. However, much of what he says could equally be considered true of the exam system, and his description of the unpredictable way in which changes can interact goes to the heart of the issue of risk in exam systems that we are considering today, and how we seek to manage it, especially at a time when it could be argued that the system is already running hot.

Looked at in this light, some of the turbulence we are currently experiencing seems inevitable. I have just celebrated my tenth anniversary at Cambridge Assessment and during the ten years I have been here have had to manage the impact of a huge range of changes. To give a flavour, during this time there have been six Secretaries of State, the Department for Education has reincarnated itself three times, and the way in which School Performance tables are calculated has been changed nine times. We have also seen serial major changes to A levels and GCSEs, a drifting apart of the three country regulatory regime, the failed

introduction of the Diploma as a potential replacement for A levels, the expensive and bureaucratic introduction of the QCF and now the proposed introduction of the EBaC as a replacement for GCSEs. At the same time those charged with administering the system often do not stay for long – I think my own ten-year stint probably makes me something of a veteran- and this means, (which others have observed) that there is a loss of policy memory, something which can only serve to heighten risk.

This is all against a background of a system that has steadily tended anyway to grow more complex, in response to a variety of social and educational pressures. This has been at least partly in the worthy cause of promoting access and diversity and supporting increased learner choice, but it has had some striking effects. This is well illustrated in research conducted by a colleague that reveals that there were 21,672 possible combinations of texts in one of the English literature specifications replaced by the new English GCSE this summer, making it theoretically possible for every candidate in effect to have their own unique specification. This in turn creates major administrative, technical awarding and marking challenges and the question has to be asked as to whether the educational benefit justifies offering quite such extreme levels of choice, or whether we are just designing risk into the system.

There is also a financial dimension to this. Research published by Reform in 2011 reveals that the cost of A levels has increased from £9.2m in 1970 to £71m in 2008. At the same time the number of candidates has increased 149% to just over a quarter of a million though the number of papers they are sitting has risen by a much greater amount, from 644,000 to nearly 5.5 million. As a result, despite the rise in overall cost, the amount of money available per paper has actually declined from £14.29 to £12.96, a drop of around 9%. We therefore find ourselves in the curious situation where we are expecting more and more from our exam system, and where the results are becoming ever more high stakes, and yet where we are arguably spending proportionately less on individual exams.

So what does this suggest about our attitude to risk and our readiness or unreadiness to tolerate it? The current exam system actually compares very favourably with other high impact systems in which exposure to the risk associated with professional judgement plays a key part, and our speakers will no doubt touch on this. For example studies of hospital admissions show that around one in ten of all hospital patients suffer some form of adverse medical event, of which around half are preventable. Of those suffering such adverse events around 8% die and 6% suffer permanent disablement. This equates to a catastrophic error rate of around 1.4%, thus affecting more than one in a hundred patients. Although there are methodological difficulties about such comparisons, that is probably around fifty times greater than the error rate in the exam system as reflected in statistics deriving from the results enquiries and appeals process.

Even this error rate, however, represents an unacceptable cost in terms of its impact on candidates. We operate in a modern consumer culture where zero

tolerance of error sits side by side with the expectation of maximum levels of choice and personalisation, and our challenge in this very exacting climate, and while subject to high degrees of external scrutiny, is to try to identify what we can do to reduce error at both system and candidate level and to understand the extent of risk that it is acceptable for a system designed to meet these high and sometimes contradictory expectations to be exposed to.

A good example is the question of quality of marking raised by the recently published report by HMC. I have already referred to the multiplicity of options available in just one GCSE syllabus, and there is clearly a trade-off between the range of choice we can offer and the associated complexity of the assessment model with the ability to guarantee a high and consistent quality of marking. Getting agreement from the teaching community on how to manage that effectively has therefore got to be a key part of our approach to risk management. We can only achieve that (coming back to my earlier observation about consent) if we are able to reach a shared view on how to strike the right balance between a rules-based approach to marking and making sure there is sufficient room and expertise for the application of professional judgement.

Finally, we need to recognise the problem that an excessive preoccupation with risk management can stifle innovation and educational progress. The high stakes nature of assessment makes schools and colleges risk averse and encourages them (and indeed parents and pupils) to stick with what they know, not least because of the impact of accountability arrangements. One consequence has been that we have ended up with a highly predictable exam system, which has created disincentives for schools and colleges to innovate and experiment. Paradoxically, the resulting perception of system inertia has provided politicians – who because of the electoral cycle almost never have to live with the consequences – with a greater incentive to go for radical reform. The subsequent cycle in which ambitious reform proposals get watered down in the effort to make them more easily manageable ironically leads to an unhealthy combination of both disruptive and incremental change, and this invariably leaves the exam system more complex and risky than before.

These are complex challenges that affect all of us in education. We hope today to provide an opportunity to explore them with colleagues from a wide range of disciplines and to consider the lessons we can learn from risk management more generally as we embark on a period of major qualification reform. Thank you.

Simon Lebus 10 October 2012