

Innovation Policy Learning

Reflections on the Six Countries Programme Workshop on Innovation Policy Learning, 23-24 May 2006, Stockholm

Ken Guy, Wise Guys Ltd., Six Countries Programme Rapporteur

Introduction

The Six Countries Programme workshop held in Stockholm on May 23-24, 2006, tackled the topic of 'Innovation Policy Learning'¹. As noted in the background paper for the workshop, the importance of policy learning has been recognised widely for some time. This is due in part to the emergence of new perspectives on innovation and learning within the organisational and business administration literature, notably work focusing on public financial issues, evolutionary economics and firm-level and network-level resources and capabilities. In particular, the vast literature concerned with the development of 'innovation system' perspectives has led to a demand for greater policy learning within and across all components of the governance structures set up to influence the course of developments within regional, national and even international innovation systems.

The presentations made and discussed at the workshop reflected current experience with policy learning and explored ways of improving the structures and processes in place to facilitate such learning. The first presentation by **Ken Guy** of Wise Guys Ltd. attempted to set the scene for the workshop as a whole by providing a framework for conceptualising and discussing innovation policy learning. This framework distinguished between five different types of input required for policy development and learning to take place:

- Inputs arising from a consideration of **past practices**;
- Inputs from a consideration of **future visions**;
- Inputs from analyses of **current contexts**;
- Inputs stemming from a review of **parallel activities**;
- Inputs arising from existing **policy practice**.

These headings form a convenient framework for discussing both the contents of the introductory paper and all the subsequent presentations.

Past Actions

Scrutiny of past actions can and should inform policy development, and there have been many improvements over the last couple of decades in our collective ability to learn from the past. Our understanding of statistical trends has benefited from more comprehensive efforts to collect and analyse data on R&D and innovation-related developments, and concerted efforts have been made in recent years to stimulate policy learning via this route. In her Workshop presentation, **Mette Koefoed Quinn** from the European Commission described the recent evolution of DG-Enterprise

¹ The programme for the workshop is attached as Appendix 1.

initiatives in this sphere. Since 2000 we have witnessed the evolution of policy analysis under TrendChart, including the introduction of the European Innovation Scoreboard, and a number of policy development initiatives under the PAXIS initiative, primarily aimed at fostering cooperation between innovation stakeholders and boosting the transfer of innovation capability. She also described how these elements are now evolving into Pro Inno Europe, an initiative designed to link policy analysis elements (Inno-Metrics; Inno-Policy Watch; Inno-View; and Inno-Appraisal) with policy development strands (Inno-Actions and Inno-Nets) via a policy learning platform (the Inno-Learning Platform).

The use of evaluation results as inputs to policy formulation has also increased considerably over the last twenty years as an evaluation culture has slowly established itself across many parts of Europe. Starting with R&D programme evaluations in the early 1980s, evaluation practice now encompasses the evaluation of many R&D and innovation instruments. Current trends include spreading an evaluation culture more broadly; moving from the evaluation of single instruments to portfolio evaluations – even to the evaluation of complete policy mixes in regional and national settings; and to evaluations which focus on issues of particular interest to policymakers, e.g. impact assessment, especially the ways in which policy interventions permanently affect the behaviour of R&D and innovation actors (so-called behavioural additionality).

The policy lessons to be learned from impact assessments were the subject of the talk given by **Torbjörn Winqvist** from the Strategy Development Division of Vinnova. Using three examples of impact analyses commissioned by Vinnova, he demonstrated clearly how these analyses had both improved levels of understanding within Vinnova and, critically, provided the evidence needed by policymakers to shape future policy. The evaluation of the Swedish Competence Centres Programme, for example, had demonstrated a series of key success factors, including the need to involve industry right from the start when establishing such centres and the importance of long-term financing. It also provided evidence of the success of the initiative and subsequently influenced the priority given to these centres in current Swedish policy.

Suzanne Håkansson, Director of Policy Intelligence at the Swedish Institute for Growth Policy Studies (ITPS), also considered the lessons to be learned from evaluations. She agreed that there was a generic need for more and better evaluations as the basis of evidence-based policymaking but, drawing upon evaluations of regional development initiatives, she pointed out that many challenges confronted evaluators – not least the difficulty of communicating the results effectively to policymakers.

In future, if policy inputs based on the analysis of past activities are to improve, a number of changes are needed. In the first instance, even though statistical and historical data on R&D and innovation activities and policies have improved, they need to be better. Similarly, even though evaluation practice is now widespread, it is still underdeveloped and needs to become even more systematic and comprehensive – avoiding the pitfall of becoming overly mechanistic by focusing on topics of major concern to the policymakers and stakeholders alike. Greater stress also needs to be placed on the communication of evaluation results to policymakers and to the

educational and training strategies need to create and sustain an evaluation community and culture.

Future Visions

Policy formulation cannot be based solely on lessons from the past. It also has to be informed by visions of the future. This is another area where our collective efforts to explore possible and desirable futures have improved considerably in recent times with the development of many sophisticated techniques and approaches. These range through statistical projections, *ex ante* evaluations of policy initiatives, foresight exercises, scenario building, road mapping, technology assessments and the ‘opportunity’ and ‘threat’ components of SWOT analyses.

Swedish experiences with foresight exercises were the topic of the talk presented by **Lennart Lübeck**, Chairman of the Swedish Technology Foresight initiative. The first round of activity in Sweden was a Technology Foresight conducted over the period 1998-2001. This set out, *inter alia*, to identify areas of expertise with potential for growth and renewal in Sweden. It established Foresight as a powerful policy tool for contemplating future directions and strengthened a future-oriented approach amongst both policymakers and other R&D and innovation actors. It also provided lessons concerning the conduct of the second round of foresight activity during 2003-4, including the need for a clear mission definition and ‘scientific guidance’ of the overall process.

In response, the second round of activity set out to address six clearly articulated topics, ranging from the selection of desirable images of the future to the identification of barriers and opportunities for the development of the Swedish innovation system. The main policy relevant messages to emerge from the exercise concerned the need for Sweden to prioritise and specialise in both R&D and regional terms, with choices based on a shared, collective vision of the future. **Lennart Lübeck** also pointed out, however, that an independent evaluation of the second round of foresight activity had been critical, arguing that the exercise had failed to address adequately all the topics specified in its mission statement. In particular, the process had failed to identify the most important strategic choices that Sweden had to make and threw little light on the main barriers and opportunities relevant to the development of the Swedish innovation system. The process still helped Sweden, however, to focus Swedish research policy on user-oriented R&D and the establishment of critical masses in key areas.

Another future-oriented exercise with implications for policy learning was discussed by **Tapio Anttila**, the Director of the Finnish National Fund for Research and Development (SITRA). He described Finland 2015, a programme aimed at developing knowledge and expertise within networks of senior decision-makers in Finnish society in order to prepare them for the challenges of the future. This involved a series of courses and seminars designed to provide a wide range of information on current affairs, national policies and issues critical to the future. In turn, these led to discussions of the main challenges confronting Finland and to suggestions concerning the shape and direction of strategies for the future. Overall the initiative succeeded in its aim of sensitising key stakeholders to the issues involved in policy making for the future, though it had less impact in terms of its

secondary aim of influencing government policy directly via the take up of suggestions contained within its final report. It did, however, influence the way SITRA thought about the organisation of its own activities and contributed to an eventual shift from a functional to a programmatic approach.

Just as there is scope for improvement in the ways in which the evaluations of past activities are conducted and organised, the ways in which we think about and plan for the future also need to be upgraded. This was one of the main points raised by **Mari Hjelt** of Gaia Consulting Oy. She argued that both Foresight and Evaluation are strategic intelligence activities that can serve as policy learning processes within policymaking systems. Concerning foresight, there is a particular need to evolve better ways of managing such activities. Some of the challenges here include finding new ways of broadening the stakeholder base to make the exercises more inclusive and authoritative; establishing foresight as a continuous process rather than a one-off process; and ensuring that interest levels remain high during foresight exercises of this nature.

Current Context

As much as a consideration of past activities and future visions can help shape new policies, these are also governed to a large extent by policy inputs that take contextual factors and conditions into account. Analyses of contemporary political realities determine courses of action that are both feasible and desirable, and the 'strength' and 'weakness' components of SWOT analyses improve understanding of capacities and potentials.

An increasingly common feature of modern policy making and policy learning processes in the R&D and innovation sphere is the 'Innovation Policy' review, typically a broad consultative exercise that attempts to assess needs and suggest policy prescriptions across whole 'innovation systems' at regional and national levels. One exercise of this nature was described by **Duff Mitchell** from Industry Canada. The Federal Government of Canada, acknowledging the important contribution of innovation to economic well-being and wishing to be recognised as one of the most innovative countries in the world, sought in 2002 to devise an appropriate innovation strategy. Critically, the government also recognised the need to incorporate stakeholder perspectives into the policy formulation process. It thus launched a National Engagement Process, circulating a series of Innovation Strategy Papers and asking for reflections on targets, priority actions and recommendations. In so doing, the exercise not only led to a number of modifications to targets and milestones and to shifts in the focus of policy initiatives, it also reaffirmed the importance of engagement as means of enhancing policy learning across a broad spectrum of actors and, critically, increased the readiness and willingness of these actors to embrace the drive for a more innovative economy.

Within modern innovation policy-making systems, an overview of current contexts cannot be complete without an appreciation of the scale and nature of the range of policy instruments being deployed by all ministries and government agencies with a stake in the development of national innovation systems. The sharing of information between these bodies thus becomes an imperative, as does the need for mechanisms facilitating inter-ministerial communication within modern governance structures.

Without them, there is little prospect of the policy coherence and coordination needed to ensure that overall policy mixes adequately catalyse the development of whole innovation systems.

Issues of this nature were touched upon at various points during the workshop. In particular, **Svend Otto Remøe** of Prokontra AS summarised the findings of an OECD project (MONIT) concerning governance and policy learning. This set out to explore the ways in which policies could be co-ordinated across institutional boundaries in different contexts and the mechanisms available to improve policy learning between agencies and ministries. Arguing that horizontal policy integration is becoming a prerequisite for the attainment of broad, innovation system level goals, the project developed a ‘policy co-ordination’ scale to illustrate the wide empirical diversity between practices in different countries and analysed the factors accounting for the persistence of low levels of co-ordination in most settings. Foremost amongst these were the pervasive focus on operational pragmatism within individual institutions (short-termism) and the correspondingly limited emphasis on the development of broader strategic visions across institutions (long-termism). This led in some instances to problems at the nexus of different policy areas being conceived and tackled in completely different and often contradictory ways – a situation warranting the introduction of much stronger knowledge sharing and policy learning mechanisms across institutional boundaries.

Many of these points were also taken up by **Erik Arnold**, Managing Director of Technopolis Ltd. He asked whether policy learning could exist within innovation governance systems, or whether the ‘irrational’ aspects of ‘politics’ would always overwhelm or negate attempts to strengthen the ‘rational’ aspects of ‘policymaking’. Providing an affirmative response, he argued not only that the need for greater policy learning was firmly on both contemporary political and policy agendas, but also that it was possible to introduce it via changes to the form and nature of governance systems, structures and processes, particularly those facilitating the creation, transmission and absorption of ‘strategic intelligence’ across whole governance systems. Even more interestingly, he noted that many of the policy learning mechanisms now being put in place across the EU by the European Commission, notably those under the flags of the Open Method of Co-ordination and ERA-Nets, were actually routes to the realisation of the long-term structural objective of creating a new European Research Area (ERA). Rather than being simply tools to improve policy making *per se*, policy learning instruments have become one of the means to effect long-term structural change in the organisation of science, technology and innovation in the EU.

In comparison, even though there have been many changes at a national level in terms of new governance structures facilitating policy learning, there is still scope for measures in many quarters to reduce the tunnel vision and institutional isolationism that has characterised innovation governance structures in the past.

Parallel Activities

The contextual and historical specificity of national innovation systems in large part governs both the types of policies that can be implemented in these settings and the

prospects for their success. Much can still be learned, however, from an overview of policy developments in other contexts, and the gathering of policy intelligence on R&D and innovation activities in other countries – as emphasised by **Suzanne Håkansson** in her talk – constitutes an important input to policy formulation. Simple benchmarking exercises can increase awareness both of the relative performance of different innovation systems and the range of policy instruments applied to them. In the past, benchmarking efforts of this nature have occasionally led to the blind ‘copying’ of policy prescriptions, but the thrust of contemporary thinking has moved away from ‘naïve benchmarking’ to ‘intelligent benchmarking’, where the emphasis is on understanding why some instruments work in particular settings and what factors might influence their applicability in other settings. The emphasis has shifted, in other words, to a focus on shared knowledge and mutual learning, with policy actions predicated on a deeper understanding of the comparative dynamics of innovations systems rather than on the mechanistic application of formulaic remedies that have worked in other, often vastly dissimilar, contexts.

A number of policy learning mechanisms geared towards mutual learning across multiple innovation systems have evolved in recent years, often taking the form of networks of policy practitioners and analysts and peer reviews of policies and policy making practices. As noted earlier, **Mette Koefoed Quinn** described some of the learning platforms being implemented by DG Enterprise in her workshop presentation. In a similar vein, **Peder Christensen** of the European Commission described some of the activities being implemented by DG Research and CREST. In particular, he concentrated on the Open Method of Coordination (OMC) in the field of R&D. Within the context of the Lisbon Agenda and the Barcelona objective of raising investment in R&D to 3% of GDP by 2010, the OMC attempts to help Member States converge to this goal via the promotion of mutual learning, concerted or joint actions between Member States and Commission initiatives designed to complement the actions of individual Member States.

Specifically, the first and second annual cycle of the OMC involved the setting up of five Expert Groups composed of CREST representatives (i.e. policymakers from national administrations). Their aim was to share experiences and learn from each other about a vast range of policy instruments via presentations at Expert Group meetings and, notably, a series of peer review exercises in which senior policymakers from different countries visited a select number of other countries to exchange experiences. In the third cycle, just about to commence, the work of these Expert Groups will continue and will be complemented by the establishment of a specific ERA-Net (OMC-Net) dedicated to mutual policy learning.

Another ERA-Net dedicated to mutual learning is the VISION ERA-Net. This was described by **Hannes Toivanen**, the co-ordinator of the initiative from the Finnish Ministry of Trade and Industry. Composed of representatives from national and regional innovation policy agencies, the aim of VISION ERA-Net is to pool the expertise in innovation policy gained via strategic research initiatives conducted on a national or regional basis. In the past, such research initiatives have provided intelligence for policy makers and fostered national knowledge bases on innovation. By teaming together, the VISION ERA-Net partners hope to develop a comprehensive European perspective on innovation. Moreover, based on a keener

understanding of shared knowledge needs, the partners hope to design cross-national research mechanisms on select strategic issues, with cross-national research calls, policy outlines, expert networks and learning platforms.

The rise in the number of networks oriented to mutual learning in the innovation policy area is evidence of the general interest across Europe in consolidating, expanding and sharing know-how in this sphere. Care will need to be taken, however, to ensure that the sharing taking place within these networks is subsequently shared more broadly within national and regional administrations. Weak internal transmission and learning mechanisms and the absence of well developed knowledge management strategies within national and regional administrations could undermine all the benefits of mutual learning at an international level.

Policy Practice

Policy inputs from the formal evaluation of past activities, *ex ante* assessments of future actions, analyses of current contexts and comparison with parallel activities all have an influence on the development of policy. So too does the actual experience of implementing policy, so-called ‘learning by doing’. **Per Eriksson**, the Director General of Vinnova, discussed the ‘learning by doing’ associated with Vinnova's Vinnväxt programme, an initiative supporting regional growth via competitive funding for R&D and innovation system development. In terms of policy learning, he distinguished between lessons for the design of programmes, lessons for the implementation of programmes and lessons pertinent to the development of regional innovation systems. Major lessons for the design of similar initiatives included the importance of ‘branding’ as part of a strategy for communication; the importance of working closely together with other stakeholders in the design and piloting of initiatives; and a readiness to absorb lessons from abroad via international benchmarking exercises.

In terms of implementation, major success factors included the establishment of ‘learning platforms’ involving workshops and interactive research; continuous process support in the form of coaching and the provision of self-evaluation tools; and the use of international and hence independent evaluators to assess the merits of the programme. Finally, at the level of regional innovation systems, **Per Eriksson** emphasised the crucial importance of ‘learning by writing’, i.e. using different types of analyses, forecasts, indicators etc. not only as strategic tools but also as a means of communicating ideas both internally within the initiative and externally with the ‘outside world’; and ‘learning by fighting’, i.e. facing up to differences of opinion in heavily contested stakeholder arenas and resolving conflicts via creative problem solving rather than timid compromise.

Peter Biegelbauer of the Austrian Institute for Advanced Studies also reflected on the learning associated with the development and implementation of an innovation policy instrument – the Austrian Competence Centre Programme. Tracing its historical origins, he tracked the different types of learning, knowledge sources and actors associated with various phases in the policy life-cycle. In particular, he distinguished between the ‘policy learning’ necessary at an early design stage, when inputs are needed to help define problems and suggest policy solutions (with these

inputs stemming from a scrutiny of past practices, future scenarios and parallel activities); the ‘political learning’ needed when devising the strategies and tactics necessary to build support for and launch new policies (with inputs from analyses of current contexts); and the ‘managerial learning’ associated with the implementation of initiatives (with inputs from ‘learning by doing’ and, eventually, from formal evaluation exercises). The Austrian experience, he noted, had taught the necessity of political learning as a precondition for broad-based policy innovation, especially in the context of governance structures characterised more by the independence of institutions than by their strong linkages. In such contexts, learning at all levels is facilitated by creating spaces for communication and by adopting flexible approaches that allow institutional routines to be disturbed and organisational innovation to occur.

Flexibility of this nature is an imperative if learning from policy practice is to improve. So too is a willingness to experiment with different policy approaches and to evolve efficient and effective communication strategies linking different public and private sector stakeholders, linking different ministries and, last but not least, linking policy formulators and policy implementers in separate ministries and operational agencies. Put simply, effective knowledge management strategies within flexible and adaptive governance structures are a precondition for enhanced innovation policy learning.

Ways Forward

The structure of the workshop allowed for a rich discussion of the papers presented throughout the course of the whole two days. There was no formal attempt to arrive at a set of agreed conclusions at the end of the proceedings, but some points of convergence did become apparent, especially concerning the barriers to policy learning and ways forward. Many of the barriers reflected those described in the presentation given by **Wolfgang Polt** from Joanneum Research. He summarised these as a reluctance within many institutional settings to confront, reflect on and learn from past experiences; the absence of adequate communication strategies between many of the stakeholders involved in innovation policy development; a lack of absorption capacity limiting policy learning within policy-making institutions, often due to lack of financial resources, human resource deficiencies and information overload; and the persistent problem of lack of institutional memory, with few mechanisms in place to retain acquired knowledge even when policy learning does take place.

Concerning ways forward, many of those discussed by presenters and attendees at the workshop echoed the recommendations made by **Ken Guy** at the end of his introductory presentation. These called for:

- More systematic use of key strategic intelligence components (evaluation, foresight, benchmarking etc.);
- Continued experimentation in terms of both new policy instruments and the use of new and refined strategic intelligence instruments;
- Better internal links between policy formulators and implementers and improved knowledge management and career development strategies within policymaking institutions;

- Better external links between relevant indigenous and exogenous ministries;
- Better external links between the political, policy and stakeholder communities;
- Greater emphasis on educational strategies to nurture both specialists in innovation policy and generalists capable of appreciating the importance of science, technology and innovation in the development of knowledge economies and societies.

Appendix 1

Innovation Policy Learning

Workshop Programme

Six Countries Programme Workshop

23-24 May 2006, Stockholm

May 23, 2006

Moderator: Ulf Wickbom

Registration and Coffee

10.30 Paul Zeeuwts, IWT, Chairman of the Six Countries Programme
Introduction

10.45 Ken Guy, Director, Wise Guys Ltd.,
Experiments in Policy Learning

11.15 Dr. Per Eriksson, Director General, VINNOVA
Case study: The VINNVÄXT-programme – policy learning in programme
management and programme management in policy learning

12.00 Dr. Hannes Toivanen, Senior Researcher, VISION ERA-Net Coordinator,
Finnish Ministry of Trade and Industry
Case study: Policy learning and development of European knowledge bases
for innovation policies: Vision ERA-Net

12.45 Lunch

13.45 Tapio Anttila, Director, Finnish National Fund for Research and
Development, SITRA
Case study: Learning for policy - the example of the SITRA 2015 programme

14.30 Duff Mitchell, Senior Officer, Manufacturing Industries Branch, Industry
Canada
Case study: Implementing the innovation strategy in Canada – how to
involve stakeholders in the policy learning process

15.15 Coffee

15.45 Mette Koefoed Quinn, European Commission, Directorate-General
Enterprise and Industry, Innovation Policy Development Unit
Case study: Innovation policy learning at the European level - developments
from TrendChart to the PRO INNO Europe initiative

16.15 Peder Christensen, European Commission, Directorate-General Research
Case study: Open Method of Coordination as an example of policy learning
at the European level

17.00 Dr. Peter Biegelbauer, Institute for Advanced Studies, Austria
Case study: The Austrian Competence Centre Programmes: The Sometimes
Unexpected Pleasures of Learning in Politics

18.30 Dinner at The Vasa Museum

May 24, 2006

Moderator: Ulf Wickbom

09.00 Svend Otto Remøe, Director of Prokontra AS, Co-ordinator of the MONIT
project
Governance and learning in innovation policy – lessons from MONIT

09.45 Wolfgang Polt, Head of Vienna Office, Joanneum Research, Institute for
Technology and Regional Policy
Case study: The role of policy advisers in policy learning

10.30 Coffee

11.00 Parallel session 1: Lennart Lübeck, Chairman, Swedish Technology
Foresight
Policy learning from two rounds of Swedish Technology Foresight

Parallel session 2: Torbjörn Winqvist, Analyst, Strategy Development
Division, VINNOVA
How a long-term perspective in evaluation contribute to policy learning

11.45 Plenary discussion:
Introduction: Dr. Mari Hjelt, CEO, Gaia Consulting Oy, Finland
Shaping the future through learning from the past – Evaluation and Foresight

12.30 Lunch

13.30 Suzanne Håkansson, Director of Policy Intelligence, The Swedish Institute
for Growth Policy Studies (ITPS)
Learning from Policy Intelligence and Evaluation – ITPS' role in the
Swedish Innovation System

14.15 Dr. Erik Arnold, Managing Director, Technopolis
Governance as a continuous learning process of adopting organisations and
practices to external and internal challenges

15.00 Conclusion