Integration in DPMP: an organising principle and an expanded set of tools

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Rationale

DPMP involves various levels of integration:

- across law enforcement, treatment, harm reduction and prevention, as both approaches and sectors;
- across global, national, state and local scales;
- between research, policy and other practice; and
- across an array of disciplinary and epistemological research approaches.

Although the need for integration to better deal with complex problems, like illicit drug use, is now widely recognised and discussed, formalised processes for achieving this have been slow to develop.

A unique aspect of DPMP is its close link with the new cross-cutting specialisation of Integration and Implementation Sciences. The specialisation draws from a range of disciplines, such as political science, systems thinking, complexity science, participatory methods, management, and information science, and aims to help make better-founded decisions on complex social problems by applying integrative methods to:

- tackling problems systemically;
- deepening understanding of problems based on all the relevant disciplines and interests;
- applying knowledge management strategies to cope with both information overload and diverse epistemologies; and
- applying understanding of how action occurs, in other words how policy is made, how business operates, how activism succeeds; as well as how action can be influenced by evidence.

Thus the new specialisation provides theory, methods and skills to facilitate comprehensive examination of issues and problems, as well as effective mobilisation to action. Integration and Implementation Sciences also seeks to incorporate the effective use of research-based knowledge to help bring about change.

Specifically, Integration and Implementation Sciences is developing theory and methods for:

1. Comprehensive scoping of problems and issues.
2. Application of appropriate integrative concepts and methods.
3. Involvement of the strengths of different research epistemologies.
4. Attention to emergent properties, i.e. to identifying and understanding properties that disappear when a system is studied in disaggregated segments.
5. Understanding of policy, product development and action and how these can be influenced by research.
6. Application of knowledge management concepts and tools.
7. Development and application of expanded ways of taking uncertainty into account.
8. Managing the inevitability of less than perfect outcomes.
9. Application of concepts and methods from change management and innovation, including developing new roles such as boundary spanners and knowledge brokers to apply research to changed practice.
10. Development and application of collaborative processes.

DPMP has built on the insights gained as Integration and Implementation Sciences have developed. This has allowed some of the best leading edge ideas and methods developed in other areas to be introduced to the illicit drugs field.

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DPMP
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Approach

Integration and Implementation Sciences have underpinned the design of the feasibility phase of DPMP and have specifically sought to develop new ideas and methods that will strengthen the further development of DPMP.

The conceptual development has been assisted by scanning new insights being gained in other areas of application, especially in environment, public health, security, management and technological innovation. Analysing the skills and interests of members of the Integration and Implementation Sciences network has been a major source of information, as has the literature. Significant leverage has been gained from involvement in non-DPMP projects funded through other sources.

Key findings

Four key elements of the feasibility phase of DPMP arise directly from the association with Integration and Implementation Sciences. They are the complexity science approach leading to the agent-based model, the systems thinking approaches, the uncertainty project, and the exploration of Executive Sessions and other forms of dialogue for generating new ideas.

DPMP has benefited from and contributed to the development of a database of integrative researchers and skills through the Integration and Implementation Sciences Network (http://i2s.anu.edu.au).

A summary of how Integration and Implementation Sciences and DPMP have influenced each other is presented in Table 1. A technical report is available.

Implications

DPMP has built on Integration and Implementation Sciences as a conceptual base and is providing a test-bed for the refinement of key elements of Integration and Implementation Sciences in both the feasibility phase and in Stage 2. In Stage 2 the main Integration and Implementation Sciences focus will be on the integration of research and policy.

Research Team

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Table 1: The relationship between Integration and Implementation Sciences and DPMP

Integration and Implementation Sciences element	DPMP application
Comprehensive scoping of problems and issues	Multi-disciplinary and multi-sector involvement. Consolidating access to data and knowledge about heroin use in Australia, including knowledge about the success of interventions; and trying a range of methods which are rarely used in the drugs area.
Application of appropriate integrative concepts and methods	Use of two of the key approaches to integration – modelling and common group learning. A range of models - economic, system dynamic, agent-based – have been tested. Dialogic approaches that involve influential leaders have been explored.
Involvement of the strengths of different research epistemologies	Different epistemological strengths are included in the DPMP team. Early collaborations between different approaches have commenced.
Attention to emergent properties	Agent-based modelling.
Understanding of policy, product development and action and how these can be influenced by research	Focus on better understanding how illicit drugs policy is made in Australia. Development of a project to explore ways to enhance formulation of evidence-based policy through comparative analyses to discern patterns of interaction.
Application of knowledge management concepts and tools	Conduct of systematic reviews of different aspects of illicit drug policy. Building and seeking access to databases.
Development and application of expanded ways of taking uncertainty into account	Seeking to integrate different approaches to uncertainty and apply this to better understanding and managing uncertainty in drug policy.
Managing the inevitability of less than perfect outcomes	Sketching out how there is no one optimal drug policy, but that different combinations of law enforcement, treatment and education strategies are required depending on the desired social outcome.
Application of concepts and methods from change management and innovation	Exploration of the transformative aspects of Executive Sessions. Development of close links with policy makers.
Development and application of collaborative processes	DPMP has involved wide-ranging and highly successful collaboration.