

Innovatie als probleem

door roel in 't veld
e-mail: veld@nsob.nl

Reeks colleges over innovatie
11 mei 2004

Inhoudsopgave

1. wat is innovatie?
2. reikwijdte innovatie?
3. innovatie en leren
4. veranderingsprincipes
5. instituties
6. institutionele verandering
7. organisatieverandering
8. systeem- en productinnovatie
9. beleidsverandering door kennis
10. barrières tegen innovatie
11. wijze aanpak

1. Innovatie

- Vernieuwende verandering
- Gewenste vernieuwing
- Gewilde / bedoelde vernieuwing
- Voorbeeld van persuasive language: “je bent gek als je er tegen bent”
- Modernistisch begrip: past in vooruitgangsgeloof
- Vernietiging / nadeel onder tafel verdwenen: Schumpeter: creatieve vernietiging kernnotie

2. Reikwijdte innovatie

- Samenleving als geheel / wereld als geheel
- Instituties: zingevende arrangementen
- Organisaties: inclusies
- Voortbrenging: systemen en producten

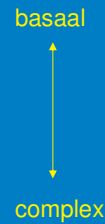
3. Innovatie en leren

Leren = verdisconteren van {resultaat leerproces} in {repertoire}

Repertoire als ondernemer, werker, burger

Niveau's beleidsproces:

- ❖ Feiten
- ❖ Verbanden, kennis
- ❖ Waarden over wereld
- ❖ Waarden over waarden



Meestal verondersteld: Tempo hoger en kosten lager naarmate leerproces basaler

4. Veranderingsprincipes

Veranderingsprincipes	Tijdoriëntatie	Toekomst-orientatie
Causaal	Lineair	Voorspelling
Dialectisch	Lineair	Voorspelling
Serendipiteit	?	- (ruimte maken)
“Chaos” Reflectie-afhankelijk	Circulair	Toekomst maken TO ₃

5. Instituties

Zingevende arrangementen

≠ organisaties

Zingeving → waarden-oriëntatie

Feodale economie:

centraal / insluitend / innovatie secundair

Kapitalistische economie:

decentraal / uitsluitend / innovatie primair

Instituties “stollen”

= Ontwikkelen weerstand tegen verandering

= Pirsig's statische kwaliteit

6. Institutionele verandering

“gaat van au”

- Exogene en endogene dynamiek
 - ↓ alles van buiten 1e en 2e orde leerprocessen
- Stolling leidt tot verlies veerkracht
- Steeds meer behoefte aan “dynamische kwaliteit”

7. Organisatieverandering

Organiseren = vorming configuratie



Gemeenschappelijk beeld v.d. werkelijkheid



Fixatie vervangt reflectie
"routines" = efficiencyverhoging



Afwezige reflectie leidt tot tekort dynamische kwaliteit



Weer oproepen door:

- Toekomstdenken
- Vernietiging routines

8. Systeem- en productinnovatie

Typen innovatie in relatie tot
veranderingsprincipes

	C	D	S	Ch
Oriëntatie R&D – afdeling				
Oriëntatie topmanagement				
Oriëntatie CFO				

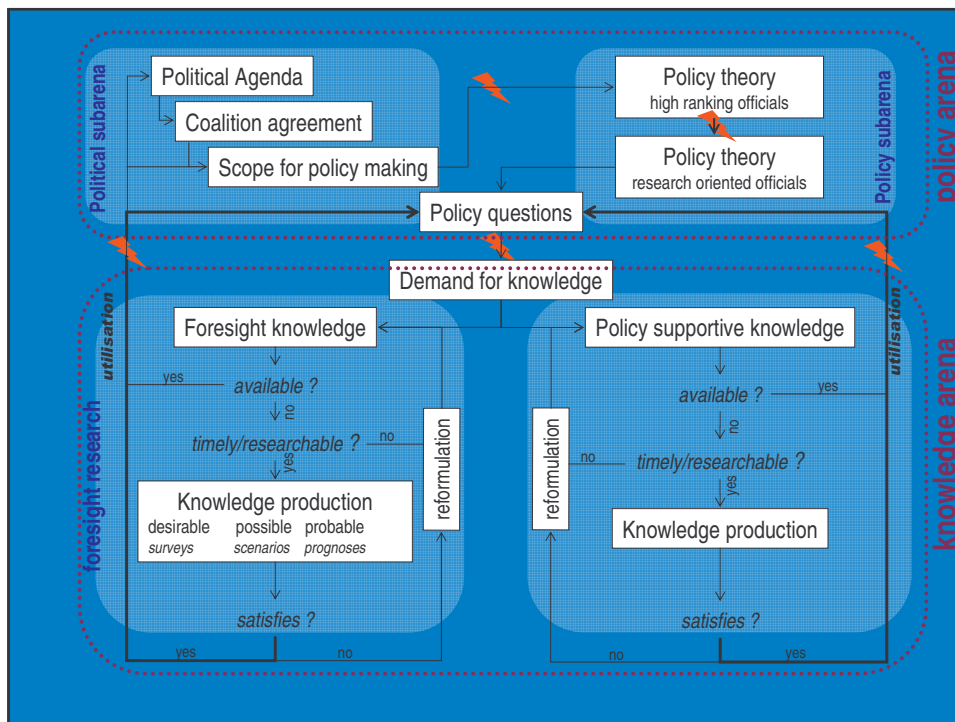
In te vullen tijdens college

9. Beleidsverandering door kennis

- Ook door relatie met veranderingsprincipes
- Uitwerking

Do we need more communication?

- Policy frames or policy theories
- Unwelcome knowledge will be discarded
- Credibility knowledge producer
- Analysis communication between scientific and policy-making areas



The question is...

Under what circumstances will scientific knowledge be used or discarded by policy-makers?

The role of knowledge not only depends on the interactions marked in the scheme, but is also linked to the nature of the problem and the discourses behind these interactions.

Problem Analysis first: Structured and Unstructured problems

Unstructured problems

- Different perceptions of the problem
- Different kinds of knowledge
- Uncertainties due to the complexity

Common knowledge base

- Negotiated truth (Jasanoff)
- Knowledge and values link one to the other:
How deep do you dig?
- So, first analyse the nature of the policy problem

Consensus on relevant values		
	Yes	No
Consensus on relevant knowledge	Yes Structured problem Method: matching supply and demand, translation, contextualisation	Badly Structured problem Method: make value orientations explicit. Find means of pacification
	No Moderately Structured problem Method: expert hearings Joint Fact Finding	Unstructured problem Method: (learning) dialogue (process) Joint Fact Finding, etc.

Additional analysis: A Typology of Interactions

- Interactions between policy-makers, scientists and society
- Discourses: who has primacy?
Examples discourses and primacies.
- Scheme Hoppe, Huijs (2003)

Discourses on boundary work between science and politics, politics

Operational code	Primacy for science	No primacy; dialogue	Primacy for politics
Diverging Functions	(1) Enlightenment Discourse (science as a provider of new ideas)	(2) Advocacy Discourse (science as a provider of arguments)	(3) Bureaucratic Discourse (science as a data provider)
Converging Functions	(4) Technocratic Discourse (science as a [virtual] power)	(5) Learning Discourse (community of researchers as a political role model)	(6) Engineer Discourse (science as a market for [social] technologies)

Explanation

- When dealing with unstructured problems Enlightenment Discourse, Bureaucratic Discourse, Technocratic Discourse and Engineer Discourse (1,3,4,6) are of no use
- Iteration between Advocacy Discourse (2) en Learning Discourse (5) is worthwhile

How to combine?

- Combining problem typology and interactions typology when dealing with unstructured problems is necessary.
- Advice:
 - an approach, emphasising process architecture
 - dialogue setting (between policy-makers and scientists)

The role of Boundary Organisations

- RMNO is an intermediary organisation performing its boundary work under different conditions
- Before you choose the role of an intermediary, be sure an analysis of the problem is at hand (continuous interactions necessary)
- neutral mediator, specialised in:
 - finding the relevant knowledge
 - transdisciplinary research
 - mediation techniques

Future Scenarios for Boundary Organisations

- From classic role tot subtle ways of interaction
- Articulation of knowledge demand is a special sport and specific skills are needed
- If problem is unstructured, an interactive and iterative process is needed

Future Scenarios (2)

- The most interactive intermediaries work in a transdisciplinary way, producing “Mode-2” science
- From classic to “Mode 2” (Regeer, forthcoming)
- Other factors:
 - Is there a clear-cut science policy?
 - Is interactive policy-making winning ground?

Future Scenarios (3)

- If there is no science policy other than subsidising scientific research, self regulation will be the panacea
- What role may boundary organisations play then?
Grabbing floating proposals (Rip, 2000)
- Policy-makers are not conscious of the pitfalls in this field of 'science – policy – society' interactions. So, even in a "self regulation scenario" some of them prefer a neutral auditing body

10. Barrières tegen innovatie

- Het goede in plaats van het verkeerde verleden
- Gestolde elementen in instituties en organisaties
- Onmacht en onwil
- Verkeerd begrepen veranderingsprincipes

11. Wijze aanpak

- Bepaal welke mix van veranderingsprincipes in Uw omgeving dominant is
- Operationaliseer dynamische kwaliteit
- Analyseer de stollingsprocessen
- Kies een contingente innovatiestrategie