

Strategies for Regional Regeneration: Learning from the Bergslagen Regional Research Centre

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Introduction

The research discussed here is a five-year research and development programme to support structural change in the region of Bergslagen, located on the European highway between Stockholm and Oslo. The name is derived from *bergslag*, which refers to the regulation of the iron and mining industry, of which the area was a centre for almost a thousand years.

The general problems are similar to those of other smokestack regions, e.g. the Midlands in the UK or the Great Lakes in the USA. Only that the industry, instead of being concentrated in large cities like Birmingham or Cleveland, is spread out over 20 municipalities in Bergslagen, each with only a few thousand inhabitants, and with a considerable distance between them. Unemployment is persistently two or three times the national average. The demographic situation is alarming, and the region has suffered a population decline of about 25 percent. The economic and social capital is being eroded.

In studying research in the field of structural change, job creation, etc., there is clearly a lot of ex-post theory. Any number of articles have been written about industrial districts in northern Italy, innovation systems in 'länder/country-regions' like Baden-Württemberg, and networking between firms everywhere, and so on. However, less has been said about how to design effective efforts to develop a depressed region into a bustling industrial district or resourceful network. Experience from regeneration policies in eastern Germany

indicates similarly that while there seems to be a fair degree of consensus about what constitutes a strong, growth-oriented region less is known about how to get there.

There is, we believe, a big gap between structural and systems analysis and process-oriented theories of how to actually support structural change. There are, of course, case studies of individual projects, and handbooks on project work. But we were invited to set up a programme for a region where we would be working on different structural levels and with politicians, public institutions, the business community and people in general. The traditional role of researcher or consultant following the established rules of detached research would not work. We agree with Gibbons et al. (1994) that the traditional academic role needs, if not to be shifted altogether, at least to allow for more experimentation (Toulmin and Gustavsen, 1996; Brulin, 1998; Nowotny et al., 2001). We concluded that there was no ready-to-implement 'package' waiting for us, but, however, that there were pieces of fairly well-documented empirical knowledge that could be moulded into a research-based, open approach (Senge and Scharmer, 2001).

A 'Real-Life Experiment'

To do so we needed to interact with different economic and political agents in the region on a fully realistic basis. Observations or interviews with key informants would not be sufficient. Rather, if we were involved with the agents in real situations to which they had to respond, we could share a reflective process, which was likely to produce more valid and trustworthy reactions than abstract interviews about hypothetical situations. We also needed to deepen our own experience and in a dialectic manner develop our perspectives on all levels – national, regional, local – and of structural and systems design and process support. We were confident that our theoretical understanding of social and economic processes should best be used as ad hoc analytical tools, rather than as postulates a priori for model design (Svensson, 2001).

To enter into this dialectic relationship between research and praxis and form a *reflective community*, we needed to be – and be accepted as – participants rather than observers. We had to contribute our ideas, constructive and critical perspectives, etc., as well as take responsibility all the way for our advice, workshops and

specific projects. We were there not to drop a piece of advice now and then, but also to help get things organized *as they developed* in real-life situations. We had to be on a reasonably level footing with the people of the community. Speaking from earlier experience, we felt a need to work from *inside* the culture, not from the outside, as this provided the best, perhaps the only acceptable learning environment for us.

We were, of course, well aware of the ethical problems involved. However, we resented adapting our strategy to a situation where we in the traditional academic way separated two strongly inter-related processes, research and development. Our position was then, and still is, that all research needs to be based on the honest and ethical behaviour of the researcher. This is best upheld, not by artificial institutional separation of what belongs together, and would likely affect the empirical process negatively, but by personal commitment to integrity and firm ethical principles. We have tried to abide by this code and feel we have come as close to a real-life experiment as we will ever get in social science.

In this article we describe how the programme originated, its contents, how it was organized, as well as some results.

The Theoretical Perspective

There is no paramount theory of social change – rather the field is brimful with different notions (Wilson, 1992). We saw, to start, three different strategies for working with projects (Svensson and von Otter, 2000).

The *planning strategy* is a way to organize projects top-down, with planning techniques, tight control, systematic follow-up and so on (Engwall, 1998; Berggren and Lindkvist, 2001; Andersson et al., 1994). It is primarily used in concrete, result-oriented projects, which are carried out over a certain time period. Methods are well tested and total responsibility is taken for carrying them out. The participants are often accustomed to working with goal-oriented projects that have a deadline. Project management by planning has a tradition and is often appropriate in technological projects, the construction industry, etc. The criteria here are ‘hard’, in the form of a time schedule, cost frames, technical specifications (e.g. for quality, environment, sustainability). Rigorous planning is

often unjustly discredited for failures in implementation. In reality, the use of systematic planning is increasingly successful in different areas – in organizational development, community planning, social policies, etc.

However, the shortcomings of the planning strategy have become increasingly obvious when applied to areas which lack a firm social structure, which are not well researched and where individual agents and groups make behaviour and other responses unpredictable. In such cases, planning means allowing for flexible responses and interpretations of events. We soon found that there was less energy for development when methods were defined a priori, there was less learning and less responsibility taken for results. In addition, there was less learning taking place as the agents, having not been involved in defining the plan, tended to blame the lack of success on such exogenous factors, rather than on what they could have affected.

The *activation strategy* tries to stimulate changes from the bottom up (Angelöw, 1990). It was developed as a reaction to the rigidity of the planning strategy, to mobilize the full capabilities of the people involved. However, the activation strategy has other weaknesses, in the form of a lack of long-term sustainability and critical analysis and systematic coordination of efforts with growing size of the project. There is a risk that it is a model which encourages yea-sayers. It emphasizes participants' involvement with and influence over change; although a spirited leader is often needed to create sufficient momentum.

As an open model it often lacks well-experienced instruments for planning and implementation in detail – instead there is a lot of reinventing the wheel. This strategy is primarily applied in local developmental work in social communities, political organizations, in worklife-related projects for organizational development, etc. The insufficiencies of the activation strategy subsequently became clear – especially because of its pronounced vulnerability, lack of long-term thinking, tapering involvement, isolation from the surroundings, lack of support from higher up.

A *network strategy* can be seen as an attempt to combine the bottom-up approach with a wide-reaching, volunteer spirit of collaboration between different units (Chisholm, 1998; Philips and Gustavsson, 1994). The networking strategy builds on 'side-ways contacts', i.e. horizontal collaborative work, as an attempt to

TABLE 1
Different Project Strategies

	The Planning Strategy	The Activation Strategy	The Network Strategy
Control	From above	From below	Horizontal
Energy	Assignment of responsibility	Commitment	Common interest
Method	Ready-made solutions	Own solutions	Common solutions
Perspective	Closed	Open	Focused
Arena	Varying	Local development	Local or regional
Leadership	Bureaucratic	Enthusiast	Coordinator
Time-perspective	Often short	Short- or medium-term	Varying, often long-term
Theory	Rational theories	Individual, group-theories	Network theories System theories

reconcile the weaknesses of both of the earlier strategies. It is used when the projects are more open; i.e. the goals and the expected results are not as distinct as with the alternative planning strategy. The goals of the project can vary – including different forms of collaboration between companies; improving the climate for innovations; contributing to regional development; developing and testing new business ideas; and improving customer–client relations in a company or administrative organization. Table 1 lists the characteristics of the three strategies.

A large regional project, like the one in Bergslagen, needs to be organized and shaped according to a flexible model for change. As a project often needs to make use of a *tacit* combination of practical experience and theoretical analysis, it is necessary to adapt and change strategies all the time depending on the situation you are dealing with. We tried to organize the project as a *reflective community* for *organizational learning* (Argyris and Schön, 1978; Schön, 1983).

Project Development

The problems of this depressed region were familiar and had been well documented – repeatedly – in previous research. There was little demand for the sort of descriptive studies. We know more about ‘what’ than about ‘how’, was a standpoint on which most agreed. We had been invited to discuss a new programme following an informal discussion where we had argued in favour of a concerted effort of industrial design as the ignition for local development. A centre for industrial design with the simultaneous purpose of education, support to firms and a museum would not only put the town on the map more visibly, but also in a general way the communicative skills of designers would help the traditional production-oriented firms to see the world differently. The industrial design process was also an exercise in teamwork and interdisciplinary co-operation (‘concurrent design and engineering’). This action-oriented plan, as well as the focus on communicative skills and networking, caught on, and we were invited to further discussions.

The aim of the work with design was not primarily to create a large number of new employment opportunities, but to show that it was possible to institute ‘spearhead efforts’ in a small municipality. It was a way of creating involvement, self-confidence and belief in the future in a vulnerable region, by stimulating reflection and a dialectic cognitive process. It was also expected that the outside interest and publicity generated by the design exhibition and related activities would reflect on the members of the local community, who would see themselves as more interesting and resourceful than they had been doing lately.

After the first discussion, we were invited by the regional officer of the European Structural Fund (Objective 2) to build a programme involving not only the first municipality, but also ten more. A pre-study was organized over eight months, preparing and developing the programme in close dialogue with politicians, union representatives and company representatives.

The approach was widened, from design to communication theory more broadly, strongly influenced by the researchers’ previous experience with interactive research and action research. The interviews and meetings showed the funding paradox: on the one hand, there were a great number of local people with ideas, who experienced problems with funding; on the other, there were the public officials, who knew there was plenty of money for develop-

ment not least from the EU, but who felt there was a shortage of good ideas.

Both were in a way correct. There were many local ideas, but they were often poorly developed and most conspicuously, not well modelled in terms of critical evaluation and implementation. Many of the would-be entrepreneurs lacked the skills needed to write a good project application, as well as contacts with consultants and others that could help. We also felt there was too much focus on ideas and innovative prospects and too little on the capability of the persons and on the model for implementation and formation of the change process. Most seriously, perhaps, there was too little broader analysis based on a theory of regional development of where individual ideas could fit in and produce synergies. We felt the authorities were laying the table for a kind of Swedish regional smorgasbord.

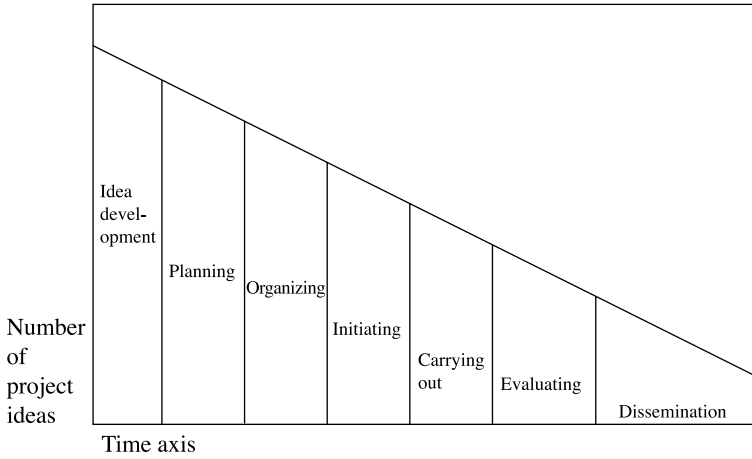
To remedy the obvious shortcomings we decided that we needed to set up a development network with sufficient theoretical and administrative know-how, as well as project developers – people who could develop, plan, organize and find financing for projects. The large number of ideas needed to be processed and evaluated and a plan and structure of implementation developed.

Figure 1 illustrates the process of project development and the goal we saw for ourselves to flatten the steep line indicating the survival rate of projects over time: to be more selective in picking, planning and organizing ideas; and more supportive in carrying out, evaluating and disseminating projects. We felt that it was one of the shortcomings of the official funding system, that it was not selective enough, actually overoptimistic about the power of ideas. At the same time, it was negligent of the difficulties projects were likely to encounter in implementation, and uninterested in the latter stages of a project. Our aim was to employ and educate project developers in order to soften the pronounced decline in the number of projects progressing successfully from one stage to the next, as illustrated in the diagram.

We decided that there should be one project developer for each municipality (in total 11 people). In addition, an interdisciplinary doctoral programme with ten students from the two neighbouring universities in Örebro and Karlstad was established.

Financing was secured from the EU Structural Fund, the municipalities, universities and the Arbetslivsinstitutet. In all about SEK 35 million was raised for the programme, covering five years.

FIGURE 1
The Different Phases of Project Development



The project, which had commenced in 1996, reached its formal conclusion by the end of 2001; however, many of the structures and projects initiated remain and prosper today. During its peak some 30 people worked in the programme. The target established by the EU fund for 200 new ‘real’ jobs was reached with a satisfactory margin. In addition, educational programmes with approximately 100 pupils have been established in the region, covering industrial design, e-learning, IT, etc.

The Contents of the Programme

Ideas for new projects were compiled and sorted into four programme areas:

1. Marketing,
2. New entrepreneurship,
3. Adult education,
4. Flexible labour market.

Furthermore emphasis was placed on three focal themes:

1. *Relating to local praxis*: what is suggested needs to be connected to local events, traditions, etc.; it is local practice rather than attitudes or some lofty superstructure that should be affected and is the base for action.
2. *Conceptual development*: it is important to reflect constantly over practical experience in theoretical terms, and to organize the process such that conceptual elaborations are stimulated and fed back into the development process.
3. *Communication*: images that provoke visions of future developments or options inherent in existing structures are important instruments to further cognitive and emotional processes of development.

This combination of four programme topics and three methodological themes ('the 4×3 model') provided structure for the work and focus for the emerging development networks.

All the municipalities were interested in adult education, especially when integrated on-the-job. The focus in one programme was on flexible forms of learning in working life – forms which were adaptable both to the individual and the ongoing work process in the firm. With one of the country's foremost municipal learning centres, Masugnen in Lindsberg, methods for demand-led training connected to the workplace were developed. A network of the different educational centres was developed within the framework of the programme, Bergslagen in Collaborative Learning (BUS).

A specific educational centre (APeL, or Centre for Learning at Work) was organized in 1999 with researchers and practitioners in a collaborative partnership, to evaluate experience and develop new methods. One idea was to produce and distribute means of learning with the help of interactive ICT. The learning centres in the municipalities were too small to be able to organize this type of training on their own. Collaboration in the form of networking was therefore particularly suitable for the type of effort.

The programme area new entrepreneurship and company development included the largest number of projects. The results varied, with the most significant achievements in telemarketing and call centres (in terms of new employment opportunities in the region). An R&D centre (CENIT, or Centre for IT Services) for education, information and recruiting for the call centre industry was

established to enhance the reputation of the region as a cluster for the industry.

In other areas projects were by and large less successful. A lack of entrepreneurship in tourism could not be resolved, in spite of consistent efforts. Marketing and business development was seen as a key area to focus on in the region, with its history in bulk production and the exploitation of natural resources, rather than consumer goods. However, it proved to be difficult to engage companies in marketing projects, possibly exactly because of this lack of marketing tradition, and perhaps also a mistrust about working in networks, which was also in contrast to a tradition of more hierarchical coordination.

The successful exception in marketing and business development was the industrial design centre, which had been established in 1997, with a remarkable museum (hailed by critics as the best of its kind in Europe), education and consultancy. Classes in industrial design had been established and attracted students from across the country, and some products manufactured locally were radically improved, in one case leading to 25 new local jobs.

A project focused on introducing e-commerce barely got off the ground, and a programme for teaching entrepreneurship within a technical college became a one-off event, in spite of excellent ratings from the students. Our attempt to support labour market flexibility, by inviting employment agencies to establish in the region was deflected because of union resistance. Since then, however, some of the firms with which we conferred have established branch offices in the region.

Some project developers had been working more individually with different ideas which were nicely elaborated but failed to go from a 'project phase' to a 'market phase'. After a while we concluded that this was not all unintentional. In some cases working on a project was an attractive lifestyle, neither the worker nor the principal of the project was fully dedicated to moving the idea ahead. There had been other social or political reasons for endorsing the original idea. In other cases it was clear that the environment was not right, even if the idea was viable.

The Model Revised

Thus, half-way into the programme we concluded:

1. The idea that an agglomeration of new firms and other resources in the region would initiate a development spiral was not realistic. Instead of 'fortifying' Bergslagen, it needed to open up. The pre-conditions for a dynamic economic region were not there; rather, we should try to link firms and communities to different resource centres wherever they were to be found. There were too few 'weak ties' between growth centres in the country and Bergslagen and its business community. Thus, the new call was, 'Tear down the walls; build new bridges!', or more exactly: We should build *virtual* networks, not inside Bergslagen, but by extensions in any useful direction.
2. We concluded that the likelihood that individual projects would succeed in the transition from the project phase to permanent existence on the market was small, unless it was linked to a specific network which provided business support, links to metropolitan regions, R&D advice, etc. We therefore decided to focus our resources on establishing nodes that would be interesting to significant actors outside the region. The communities needed to become more visible nationally, and whatever strengths they had should be identified and promoted. Clearly, what had been done in industrial design and at the centre for learning at work had those qualities. In addition the home of Alfred Nobel, the founder of the Nobel Prize, should be established as an attractive locus for meetings in the business and research communities and for tourists.

The presumption that a viable economic region needed to have a functional system of institutions, and that we should focus on projects that contributed to a successful local innovations system was abandoned. We had arrived at the conclusion that the region no longer was a region. The history and the traditions of the area had led us to believe that there was sufficient homogeneity and interaction there, to qualify as a region. Rather the towns and villages were isolated enclaves, without the necessary institutional prerequisites for harbouring entrepreneurship locally, or they and their businesses were oriented towards bigger outside metropolitan centres, or national networks. Attempts to reconstitute Bergslagen as a strong region would be futile, while attempts to create functional virtual networks were more likely to be successful. Thus 'bridge-building' became the focus of the programme, with local R&D centres featuring the three themes, local praxis, conceptual

development and communication, as material manifestations of the new model. We soon learned that there are numerous institutions – national, public and private – existing to promote different skills and views which find it difficult to relate effectively to their local constituencies. Thus, reducing transaction costs for networking in the broadest possible sense became a major mission for us.

The project organization had been decentralized from the start, with a project developer in each municipality. However, we soon learnt that it was difficult to provide qualified support for the project developer. There was a lack of critical scrutiny and feedback, both on the part of the project developers and those locally responsible; and the feeling of urgency which is necessary in projects that aim at financing through the market was absent. Our strategy for dealing with these difficulties involved regular meetings with the project developers and a six-month training programme for project managers. But clearly the public sector atmosphere was not ideal for project development, and our power insufficient.

Another problem was establishing meaningful collaboration between the doctoral students and specific projects. Even though the students chose relevant local themes for their thesis, this was not sufficient for shared generation of knowledge with the practitioners. In some cases successful spontaneous collaborative efforts developed, but in others the research was traditionally academic and failed to ‘click into’ the development projects, also passing by a unique opportunity of interactive learning.

Thus, integration of research and development and teamwork between researchers and practitioners became a field for conceptual development and central mission for the programme, especially for the educational centre, APeL. To introduce the student to the special themes and methods of a development project, occasional seminars and a committee of advisers was not enough. We concluded that the students needed to be brought out of their academic environment on a regular basis, to a meeting place that was equally attractive to the doctoral students and their relevant counterparts in praxis. The meeting place needed to be a unique, resourceful, well-connected place, where interesting meetings happened.

Reappraisal of Strategies

At the beginning of this article, we introduced three developmental

strategies: a planning strategy, an activation strategy and a networking strategy (Table 1). How does our experience relate to the models?

An individual project cannot be constructed from one particular theoretical model – rather, it develops in a process where experiences lead to new strategies, compromises, etc. This does not prevent the person responsible from having a particular point of departure – a perception, a point of view, a method, a strategy and so on. We discussed the three strategies parallel to developing the project (von Otter and Svensson, 1998). Theories about resource agglomeration, local activation networks, learning and institutional collaboration were constantly in our discussions. In practice, however, it was specific events – of an economic, social, political and cultural character – which most strongly affected the mixture of strategies that were applied. In that sense, it was a conscious choice to allow ‘the terrain’ rather than ‘the map’ to guide our progression.

Having said this, we should also comment on the respective strategies, what they contributed and what were their shortcomings.

There were several good reasons for us to apply an activation or ‘bottom-up’ strategy. We had come ‘top-down’ to the region, with ideas for a large developmental programme. It could clearly not be implemented without first establishing a relationship with the community and relevant businesses. A ‘top-down’ idea has to be implemented ‘bottom-up’, or not at all. The activation strategy was further expressed in the frequency of meetings during the initial planning phase for the whole programme. A hundred meetings with around 500 persons were held during this rather short period. In addition, we tried consistently to use interactive methods. We listened to the ideas that existed, we compiled, analysed and structured those ideas within the framework of the ‘4 × 3 model’ (see earlier).

Another problem associated with the ‘bottom-up’ idea was an unwillingness to make use of external experts, both as critics and as guides. Now and then there was conflict over the ‘ownership’ of projects. It was not in the tradition of public administration in the municipality to invite critical judgement or questioning. For this reason, it was difficult to form a *reflective community*, i.e. a critical and open search for knowledge between practitioners and experts.

The problem illustrates the traditional conflict between participation and professionalism in projects that are managed bottom-up. When participants ‘close ranks’ and feel a personal rather than

collective proprietorship of a project, then they are likely to close the door to criticism and external advice. Thus, the activation strategy became more and more problematic. To a degree, this was also caused by our inability as programme managers to create a sufficiently open and confident atmosphere in the group. We mostly communicated for practical reasons by phone and email (the distance between the far ends of 'our district' was more than 200 km), and it happened more than once that discussions grew out of proportion.

Our criticism of the lack of systematic project development and strategic analysis in the municipalities was accepted, as well as our observation that there was very little systematic organizational learning going on, with regard to the many projects (several unconnected to our programme). Actually, projects had been developed to satisfy many diverse local interests, many of which hardly served the purpose of regional regeneration or creation of new jobs (apart from those held by the project managers).

This type of critique affected our programme and eventually led to a new balance between activation and the two other alternative strategies. Metaphorically, we described a change of strategy in accordance with the 'affordance' concept (Gibbons et al., 1994). While initially we had gathered the travellers, to decide where to go and then embarked on a journey, we now said, here is a voyage set for X, who wants to join? This 'spearhead' strategy, which we applied in reference to the regional learning centres, was not based on wide 'participative mobilization', rather on 'mobilization through interest'. We offered expertise and established in each case a small and highly committed group.

The industrial design centre, call centres, e-learning, etc. were established by this 'external strategy' with support from experts. The important thing was that efforts made should be credible, forceful, effective and interesting, and of course possible to veto by the representatives of the local community. But in some cases active collaboration all the way is important in itself even for the busy entrepreneur, e.g. when participation is needed to create commitment and credibility.

A specific network strategy gradually gained in momentum in our programme. The basic thought behind networking was that a small community or municipality could not by itself regenerate its own economy, industry and commerce (Gustavsen et al., 2001). Neither

is it likely, we concluded after some time, that a small region would be able to agglomerate all the necessary institutions, services and economic agents to become a successful innovation system or industrial district. Rather it needs to gather sufficient strength to make itself attractive as a partner in other networks (Svensson et al., 2001). As it was, most of the neighbouring or more distant, economically successful larger cities knew Bergslagen and its corporate system as economically weak, conservative and generally speaking rather uninteresting. The public discussion about regional policy had been framed as a zero-sum game, where different regions made claims for relocation of a defined set of jobs or public economic resources. Participation in extended cross-boundary networks would have to rely on more constructive plans, i.e. for value-added collaboration. In trying to establish new virtual networks value-added partnerships was our main parameter.

The centres (CENIT, APeL, the Design Centre, and more recently also Alfred Nobel's estate) were based on coordination of existing local skills and capabilities, technical resources, etc., and trying to make them more visible on a national scale. In theoretical terms we spoke of reducing transaction costs for prospective partners in search of new network linkages. Assembling strengths in this way made it easier to act both on regional and national levels. An extended virtual rather than geographic network was easier to establish and more qualified in terms of its membership; especially compared to establishing a local network or trying to build an agglomeration of resources by relocating firms and institutions on a permanent basis to Bergslagen from (say) Stockholm. There is no general shortage of R&D resources, or educational and business opportunities, if the connection can be established across some distance. Thus, building a virtual network in a transaction cost-efficient way is one significant option for peripheral regions (Etzkowitz and Leydesdorff, 1998). A policy to build extensions from the periphery in Bergslagen to the centre (wherever that is) is more cost-effective than trying to establish a local, more or less self-sustained agglomeration of business resources.

In a network with its heterogeneous mix of members, it was also easy for us to be active partners and thus join practice and theory, hand in hand within the development process. This also made long-term learning based on the shared generation of knowledge a daily experience.

The programme worked actively to promote value-added partnerships both as *horizontal* collaboration between business councillors in the different municipalities, between entrepreneurs in specific projects, e.g. participation in trade fairs, educational institutions across municipal boundaries, and *vertical* collaboration between agents at different levels, from local to national, or between firms, authorities and local universities. Our activities with respect to vertical integration included 'vertical' work groups, seminars, two high-level national conferences, and petition meetings with national ministries, etc.

The programme was not built according to a model planning strategy for project management. In practice we continually redirected the course of things and made ad hoc changes and re-appraisals. However, it is important that there was a major objective firmly established that provided a direction for minor adjustments in the course of events during the programme period.

A large developmental programme like this one – with a total of some 50 individual projects and based on flexible and contextual management – presupposes a planning instrument as a catalyst of communication. Probably our counterparts would have found it easier to understand the process and targets had we been able to articulate the plan more distinctly. Above all, accountability must not be lost due to a too flexible planning system.

It was important at the operational level that the economic accounts be connected to a transparent and simple report card, showing how operations related to a time schedule, goals and targets and the economic outcome. This required continual and detailed follow-ups, which were useful to focus the process and provide learning. The follow-up report, which exposed problems or intentional deviations, functioned as an aid in laying forth the important issues. Flexible planning should not mean that anything goes, but that matters can be reviewed for the better argument.

The object of the planning schedule was to initiate a dialogue which led to reflection and learning, individually and collectively, not to control how individual project developers use their time. The systematic report card was introduced only after some time, when it became clear that some projects were rotating in their own sheltered space, instead of progressing towards the harsher world of commercial competition, or other funding.

Conclusion

In summary, the programme was highly eclectic with respect to choice of project strategy. All three strategies contained useful elements, however not as a systematic structure for implementation, or as a fixed project technology. Each was conducive in its own way to a *learning process*, where experience and theoretically inspired reflections systematically evaluated progress and redressed problems. Our theories and knowledge about different developmental strategies have been a great help, but above all it was the planning efforts and the recurrent evaluation of practical experience, and finding the appropriate tools for that, which led the way. Shared generation of knowledge and dialogue with all the team members, project developers, doctoral students, politicians and business people was the key process and the source of energy. A municipal director credited us for achievements of this sort:

For several years we have tried to get the municipalities in northern Örebro county to work together. We have dwelt on everyday issues. But what we have not focused on, and this is the most important thing of all, is collaboration within the framework of a long-term strategic developmental effort. This is where you at the research station play a central role. You are the ones who have caused us to begin to work in this manner. You are the only ones in the whole region who do that.

Well, we enjoyed doing it and we are glad if it helped Bergslagen find its own way in the postindustrial economy.

References

- Andersson, E., K. Grude and T. Haug (1994) *Målinriktad projektstyrning*. Lund: Studentlitteratur.
- Angelöw, B. (1990) *Det goda förändringsarbetet*. Lund: Studentlitteratur.
- Argyris, C. and D. Schön (1978) *Organizational Learning*. Reading, MA: Addison-Wesley.
- Argyris, C. and D. Schön (1996) *Organizational Learning II: Theory, Method, and Practice*. Reading, MA: Addison-Wesley.
- Berggren, C. and L. Lindkvist, eds (2001) *Projektorganisation för målorientering och lärande*. Lund: Studentlitteratur.
- Brulin, G. (1998) *Den tredje uppgiften*, Högskola och omgivning i samverkan. Stockholm: SNS Förlag.
- Chisholm, R. (1998) *Learning from Practice and Theory*. Reading, MA: Addison-Wesley.

- Engwall, M. (1998) *Jakten på det effektiva projektet*. Stockholm: Nerenius and Santérus Förlag.
- Etzkowitz, H. and L. Leydesdorff, eds (1998) *Universities and the Global Knowledge Economy: A Triple Helix of University–Industry–Government Relations*. London: Wellington House.
- Gibbons, M., C. Limoges, H. Nowotny, S. Schwatzman, P. Scott and M. Trow (1994) *The New Production of Knowledge*. London: Sage.
- Gustavsen, B., H. Finne and B. Oscarsson (2001) *Creating Connectedness. The Role of Social Research in Innovation Policy*. Amsterdam: John Benjamins.
- Nowotny, H., P. Scott and M. Gibbons (2001) *Re-Thinking Science. Knowledge and the Public in an Age of Uncertainty*. Oxford: Blackwell.
- von Otter, C. and L. Svensson (1998) *Den enes bröd är den andres bröd*. Stockholm: Arbetslivsinstitutet.
- Philips, Å. and E. Gustavsson (1994) *Nätverk för ökad förändringskompetens – en metodhandbok för förnyelsenätverk*. Stockholm: Statens förnyelsefond.
- Schön, D. (1983) *The Reflective Practitioner: How Professionals Think in Action*. London: Temple Smith.
- Senge, P. and O. Scharmer (2001) 'Community Action Research: Learning as a Community of Practitioners, Consultants and Researchers', pp. 238–49 in P. Reason and H. Bradbury (eds) *Handbook of Action Research: Participative Inquiry and Practice*. London: Sage.
- Svensson, L. (2001) 'Att utvecklas och lära tillsammans. Om gemensam kunskapsbildning mellan forskare och praktiker', pp. 241–70 in T. Backlund and H. Hansson (eds) *Lärdilemman i arbetslivet*. Lund: Studentlitteratur.
- Svensson, L. and C. von Otter (2000) *Projektarbete – praktik med teori* [Project Work – Practice with Theory]. Stockholm: Santérus förlag.
- Svensson, L., E. Jakobsson and C. Åberg (2001) *Utvecklingskraften i nätverk*. Stockholm: Santérus förlag.
- Toulmin, S. and B. Gustavsen (1996) *Beyond Theory: Changing Organization through Participation*. Amsterdam: John Benjamins.
- Wilson, D.C. (1992) *A Strategy of Change: Concepts and Controversies in the Management of Change*. London: Routledge.

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