

Organising Interactive Dialogues between SMEs and University

Agneta Hansson, Högskolan i Halmstad, Sweden

Agneta.Hansson@eok.hh.se

Mia Swärdh och Kicki Stridh, Internationell kompetens, Sweden

info@interkomp.se

Presented at HSS05 (Högskole og Samfunn i Samvirken), June 1 – 3, 2005, Tönsberg, Norway

Abstract / summary

This paper takes its departure from the ambitious KrAft¹ programme in Sweden, financed by KK-Stiftelsen (Knowledge Foundation) aiming at business development in SMEs by using university resources initiating long-term relationships between SMEs and universities. The model to achieve the aims in KrAft is to build a process leader team, a team with researchers and practitioners, who organises learning networks of SME managers. The pedagogical idea in the concept is that the business managers themselves shall identify their own special needs for strategic business development, and that the network will provide learning from a reflective dialogue between the managers, the process leader team and resource persons invited to the network.

In the paper we reflect on different aspects related to the programme and the aims of the programme. Some of these aspects are

- how gender blindness in this type of national incentives aiming at supporting business development and regional growth may exclude women from the arenas, and
- the efficiency of universities as a partner in regional business development.

We have worked in action research processes with five krAft networks for business managers in the Swedish region Halland. When we try to identify success factors and barriers in the interactive dialogue between SMEs and university we find that university, with its organisation and priorities, is a difficult dialogue partner for SMEs.

In the paper we present some models that we have practiced in our krAft projects attempted to overcome the barriers by building bridges between universities and SMEs, for example;

- narratives for building trust and identifying core issues, and
- multidisciplinary consulting teams just-in-time for the SME manager.

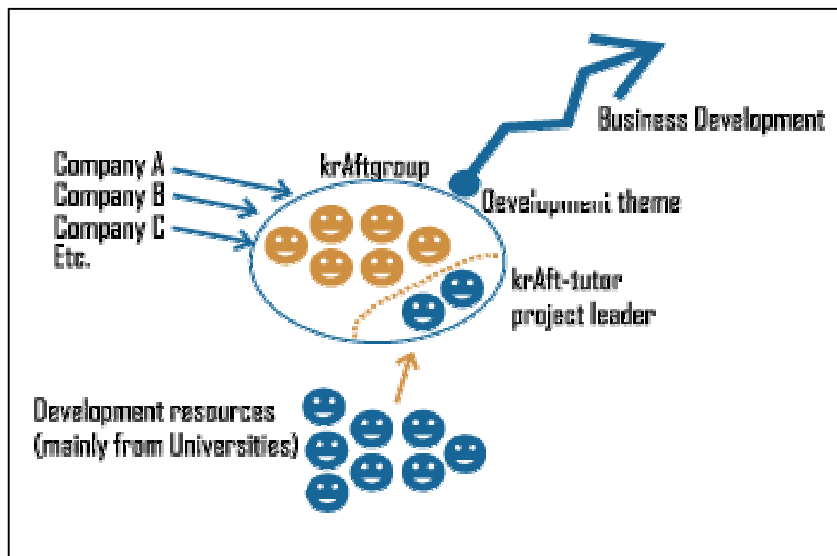
¹ The acronym krAft (which is Swedish for "power") should be decoded as "K" for Competence/Knowledge, "R" for Reflection, "Af" for Business Development and "T" for Growth. The acronym mirrors the belief that business development in SMEs is not primarily about simple knowledge transfer. (krAft website 2003)www.kraftprov.nu

Introduction

The KrAft program

The krAft program is a national programme financed by the KK-foundation, a governmental initiated foundation, which, among other tasks aims to bridge the gap between the academy and industry. A group of Swedish universities is, during a period of five years (2000-2005), engaged in organising, developing and applying the programme.

The major aim of the programme is to contribute to a continuing collaboration between SMEs and universities on the basis of networking and the core themes for the activities are Leadership, Business Intelligence and Networking. KrAft is a new approach for fostering business development initiatives in SMEs, based on the assumptions that business development is about “getting your act together” and take action to grow the business, and that knowledge is something that develops in the minds of people when they are exposed to stimuli (competence/knowledge) that make them reflect on their present situation. The aim for krAft is that all educational activities will follow a pedagogical style based on dialogue and problem-based learning. The ultimate goal is not to make participants learn a lot of theory but to encourage them to develop and grow their businesses. Leading words are flexibility and customisation (krAft website 2003).



The model to achieve the aims in KrAft is to build a process leader team, a team with researchers and practitioners, who organises learning networks of SME managers. The pedagogical idea in the concept is that the business managers themselves shall identify their own special needs for strategic business development, and that the network will provide learning from a reflective dialogue between the managers, the process leader team and resource persons invited to the network.

In brief the “standard” krAft programme has the following characteristics: KrAft groups containing 5-7 companies (2-3 representatives from each company) are created. Each group meets at 12 occasions during a one-year period together with a leadership team consisting of one krAft tutor, usually a consultant or some kind of business broker, and a project leader from the university.

The participants decide about the content in their krAft project and, in co-operation with the leadership team, suggest the topics for the different meetings, where university teachers and researchers are invited as lecturers or consultants. In addition to the group meetings about three days (for each participating company) are reserved for the implementation of projects emerging from the activities in the krAft group. Participation fee is about 4 000 Euros for each business organisation involved. All the additional costs, approximately 5 000 Euros per company are covered by the KK-foundation.

The krAft programme is based on an action-oriented approach. The process is characterised by mutual exchange between practitioner and researcher, and the results are supposed to lead to both theoretical and practical learning for both partners.

An action research approach

In a study on working life action research projects Hansson (2003) shows how action research have both practical and academic relevance. The projects studied contributed to practical actions in working life as well as to academic disciplines. They provided theoretical knowledge - new or further developed scientific theories, models and concepts - about communication, democracy, learning, networking, management, organisation development, and equality. The research problems had arisen from practical involvement and were the results from interactions between practitioners and researchers, having a subject-subject relation. Even though the researchers had entered the processes with theoretical assumptions or pre-understandings, the social research problems were not defined uniquely from the researchers’ perspectives but also considered those of the practitioners. Researchers and practitioners contributed to the research processes with different knowledge and experiences and they developed new understanding through interaction.

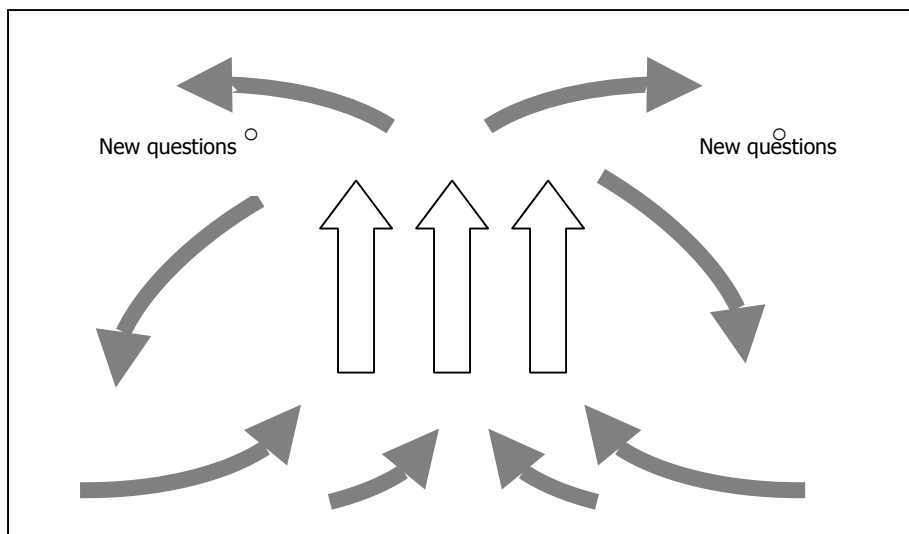
Action research treats research problems in a pragmatic way. Different methods and tools are used and tested, traditional as well as innovative, qualitative as well as quantitative. The action researcher collaborates, often for extended periods, with the practitioners in their work environment; this enhances insight in the practical problems of the working place. The action researcher may develop a deeper approach to the theoretical questions than a researcher using more traditional research models where the distance between the researcher and the researched often is larger. Interaction between researchers and practitioners in the action research process takes place in the practitioners’ reality, and involves practitioners in knowledge creation. Therefore, the results of the action research process – theoretical and practical – have direct implication on practice.

Development processes supported by researchers may lead to a number of concrete results applicable to practical life, in form of organisational, technical economical and social interventions. There is practical learning taking place and development of practical

competence as well as of theoretical knowledge about specific problems related to the organisation. When practitioners and researchers act together in dialogue-based action research processes they both, through this interaction, obtain new tools for reflection. Their theoretical and practical questions tend to merge, into a fusion that action researchers (Gustavsen 1990, Elden & Levin 1991 and others) call *local theory*, a product of mutual contribution. Practitioners, bringing in their practical experience, contribute new aspects to the theoretical research questions. Researchers, bringing in their analytical competence and proficiency with processes, contribute to the practical development, which helps the practitioners scrutinise their work from new perspectives. In the democratic dialogue, researchers encourage practitioners to express their tacit knowledge, making it explicit. This reflective undertaking fosters understanding and development of practice and theory – within both parties. The democratic dialogue is simultaneously both aim and objective, both theory and method.

In action research three different types of results can be distinguished (Hansson 2003):

- Results that contribute to production of theories and to accumulated academic knowledge (*theoretical results*);
- Development of theoretical knowledge and practical competence related to the organisation as an effect of the dialogue-based interaction between researcher and practitioner (*practical knowledge development*);
- Concrete, practical results from the development process in form of interventions addressed to the referred organisation (*practical intervention*).



The action research process. Practical and theoretical questions from practitioners and researchers are exchanged in a dialogue (lower four arrows). The process results in theoretical and practical knowledge development as well as practical intervention (three vertical arrows). New questions are created; the process is ongoing and circular. From Hansson, 2003, p 275.

In this paper we present an action research process targeted at female managers from small and medium sized companies (SMEs) in our region. It is a competence development project financed by the KK-foundation, a state initiated foundation, which aims to bridge the gap

between academy and industry. The overall objective for the national krAft programme is to reach economical growth and to find out and test methods on how universities by close co-operation with SMEs can stimulate regional growth.

Besides promoting the process, the theoretical implication for us as researchers has been to find out why women do not, to the same extent as men, attend central national and regional programmes aimed at competence and business development. Are there conditions in these programmes that favour men and exclude women and how can these conditions then be identified? Is it possible to adjust these national financed programmes in ways that reach and attract women to the same extent as men? Can we find out and suggest concrete contributions in order to reach an economic development that is based on gender equality and from which both men and women can benefit?

A gender perspective

As well as other central programmes aimed at stimulating economic growth, the krAft programme seems mainly to attract male target groups, in this case business leaders. The key persons in the central krAft managing team are men, and the programme is designed by men. Despite that the guiding policy documents talk about gender diversity and express a formal ambition to reach companies and entrepreneurs in all sectors of economy, there is no outspoken strategy on how to involve women in the programme. On the contrary, the effect of this gender blindness is that the krAft program, as well as designed *by* men, in fact also is targeted *at* men. In the conditions regarding participation it has for example not been considered that women owned companies often are very small and face difficulties in allocating time and money for two leading managers to participate, at the same time, in competence programmes or other external activities, or that women in male dominated business fields often discover a need for networks among females only, where they can express their experiences of being women in the men's world. Neither is the recruitment process nor the marketing concepts used adapted to women's conditions and experiences.

In the light of the low representation of women and female leaders in the krAft programme our research group at Halmstad University, supported by a researcher from Lund University involved in the krAft programme, in the spring 2002 adopted the challenge to start krAft groups consisting of only female business leaders. A local krAft managing team was created: two researchers from the department of Working Life and Gender at Halmstad University (a man and a woman) and two consultants (women) from a private company. Our idea was to create a regional krAft project where we invited female managers from traditional male sectors. Our ambition was to initiate at least two krAft groups that could start their work in January 2003 and continue during the year. We felt that we were strongly supported to go ahead from the central krAft managing team. The heavy male dominance in krAft had turned out to be a bit of a problem, as it was not in agreement with the outspoken policy for the programme.

When we entered the programme, we decided to start up female networks for two main reasons. We wanted to study in what ways the programme excluded women – why didn't women enter the programme activities? How could programmes of this kind be built to be

more gender inclusive? We also wanted to see if homogenous female groups were a fruitful kind of action to involve more women managers, and to develop this model.

Development of SMEs in networks

Until today, we have run five krAft networks with women managers in Halland, our region in south western Sweden.

Setting up the first groups, we targeted at women in leading positions in their companies in male dominated branches. We had planned to start two groups, but came out with three, 27 companies including 33 participants in what we called "*KrAftverk Halland*", divided in three groups *Nord-krAft* (10), *Mitt-krAft* (12) and *Söder-krAft* (11). Two-days residential "kick-off" seminars for each group were held in November-December 2002. These groups ran during 2003.

During this time we had proposed to KK-foundation, to create krAft groups with women managers not only recruited from the private sector, but also from the public sector. Labour market in Sweden is extremely divided in male (private) and female (public), so we argued along the line that if the programme only targeted the private sector it was an inbuilt limitation for women in the programme strategy. Finally we were allowed, in a pilot action, to make a mix and to recruit managers from both the private and the public sector.

In 2004 we started two new krAft-groups, *Göta* (10) and *Svea* (10), both with five participants from private sector and five from public sector. This action involved twenty organisations and companies of high diversity, which highlighted the concept of learning from diversity. These groups started their work in January 2004 and ended a year later.

Trust and learning

By making links between universities and SMEs the KK-foundation wants, through the krAft programme, to increase the competence and the business activity in small and medium sized companies. The aim is to develop sustainable relations between the companies and the higher education and research system. It has often been difficult to build these links between small companies as the owners and managers of these companies traditionally have not been academics and thus have had no idea about how universities might contribute to their daily business life. There has been a language barrier and a distance between the business representatives and the teachers/researcher.

To overcome these two different cultures the krAft programme has introduced the tutor role as a mediator between the two systems. The krAft tutor is someone with experience from the business system and her/his role is to facilitate for the participants to understand the academics and to function as the "translator" between the academic and the business world.

In our project the tutors are also dealing with all the administration and the IT based documentation.

KrAft is designed as a programme for learning. It is not only for the participants from the companies who is taking part in this learning process, but also the researchers from the universities, the consultants that act as tutors and the “experts” that are taking part in the project in order to cover certain specialities. Researchers and practitioners enter the process with their different experiences and pre-understandings and they have different aims and expectations. In the interaction between the different actors the questions are further developed and the actors learn together and learn from each other.

The Japanese authors Nonaka and Takeuchi (1995) describe this way of learning as a transfer between different phases of *tacit* and *explicit* knowledge. In their book *The Knowledge-Creating Company* they discuss how Japanese business leaders use the tacit knowledge of their staff in order to create innovative organisations. They consider the tacit knowledge as “...the basis of organisational knowledge creation” (Nonaka & Takeuchi 1995, p. 72). The tacit knowledge is personal and contextual and thus difficult to formalise and communicate. Contrary to tacit knowledge they talk about explicit knowledge. In a model Nonaka & Takeuchi explain the cycle between tacit and explicit knowledge. The first phase in the process of knowledge creation is the *socialisation* (from tacit to tacit knowledge). In this phase the actors share their experiences and build a relation of mutual trust. Next phase they call *externalisation* (from tacit to explicit knowledge). Here is the tacit knowledge articulated into explicit concepts in the form of metaphors, models and concepts. The phase that then follows they call *combination* (from explicit to explicit knowledge). In the fourth phase *internalisation* (from explicit to tacit knowledge) the knowledge is transformed into “operational knowledge” in form of shared models of thinking or technical know-how. Provided that there are enough of time and possibilities for dialogues the knowledge creation continues in a spiral process.

Hägerfors (1994) has developed a model for, what she calls, co-learning, which both deals with learning together and how we learn to learn. This model build as well on communication and group dynamic theories as on applied practice. From her studies among systems analysers she notices that co-learning seems to be a more natural process for women than for men.

The learning process in our krAft groups has both been collective and individual. To learn in dialogue with different actors both lead to a common knowledge, relevant in the development of the project, and to specific knowledge, relevant to the actors in their different contexts and settings.

A prerequisite for the participants to share their knowledge and experiences in a way that lead to new and shared knowledge is that an effective dialogue can be organised where the participants trust each other and the process (Ljungberg van Beinum 2000). When we started our regional krAft project we choose to build the dialogue on narratives from the participants’ daily experiences. By using a method where the participants shared their

experiences in an open dialogue, we have succeeded in creating a strong group feeling. The krAft meetings are not only learning activities, they are also social events where the participants can relax and have fun.

Narratives for Building Trust and Identifying Core Issues

The krAft concept means that managers concentrate on their own business development with managers from other companies and with access to university resources. It is stressed in the krAft programme that this SME-university co-operation should take its departure from the needs of the managers themselves. They shall identify their own needs for development, and the project leader team should act as process leaders and facilitators.

A successful and sustainable learning process has to be built on trust and confidence and the conditions for maximal result are that the group members establish such a confidence in each others that they can be open as well about themselves as about the companies they represent. To build up such a trustful relationship the participants have to get to know each other as individuals as well as professionals.

In order to facilitate this introduction phase, where the participants should get to know each other and each others' companies and together should formulate the themes for their future group meetings, we decided to organise the first meeting in each group as a two days residential seminar, which we called a "kick-off" seminar. In the design of this seminar we used a narrative method, "Tell&Develop" (T&D), where the discussions and presentations of the participants were well structured. This method had been developed and tested by members of the team in a European ESF project and after that used in many different contexts for organisational internal evaluation and planning (Danilda & Stridh 1998).

This T&D concept is a type of dialogue conference aiming at transferring tacit knowledge into explicit knowledge. We realized that the actual needs for the company managers would be of the tacit knowledge kind and; if we should have formulated the question in a traditional way like what kind of development needs they would have, we expected to get answers like "marketing", "leadership", etc – answers related to well-known and established disciplines. If we had acted in this way our problem– both theirs and ours – would at the end have been that what we could offer would not had suited the participants' desires, being too broad formulated and perhaps not even adequate to their actual needs. By using our method, we processed the tacit knowledge, made it explicit and structured in a way that we could act upon it.

T&D has been developed from dialogues in dyads and is based on the theory of symbolic interactionism, mirroring "the other" and changing perspectives. Briefly it means that each participant write down a short key text that they tell as their "story" to the others in the group. This story is then discussed, analysed and reflected by the other participants according to their background and experiences (Stridh 2001).

All in all we have organised five “kick-off” seminars in the five groups. They were held at small conference hotels in different parts of our region. They started at lunch day one and continued until afternoon day two. 9-10 female managers attended each seminar together with 3-4 of the researchers from the krAft team. The seminars were structured in the same way, with the time balanced between discussions in groups and in plenary and also time for social meetings.

Methodology – Example 1: How to start a collective development process

Before the seminar the participants had been told to write a short story about “a meeting I remember” and bring with them to the seminar. The idea by asking the participants to write down their chosen “meeting” was to start a reflection process in the mind of the writer. The dialogues in the seminar were held both in plenary (all participants) and in tandem groups (two participants together). The four of us in the krAft team were acting as facilitators, we were leading and documenting the process. The seminars were organised according to the following agenda:

Phase 1 – plenary session

Each participant tells her story. The listeners may ask clarifying questions about the content, but not (at this stage) value the stories or give their advice or opinions.

Phase period 2 – tandem group

The participants work in tandem groups (two together). Each tandem group deals with two stories from another tandem group. The first task is to read the two stories and get deeper into them. The tandem group discuss the stories and how they have interpreted them. They try to get their shared picture of the meeting told in each of the stories, which they illustrate at a flip-chart. In their illustrations they also try to cover the feelings and relations between the different persons involved in the meeting.

Phase 3 – tandem group

The two in the tandem group compare the two stories and their interpretation of them. They illustrate their analysis and reflections.

Phase 4 – plenary session

In a plenary session the tandem groups present their discussions and by their illustrations show how they have interpreted and reflected upon the stories. The authors of the stories can make their comments, and all the participants discuss the reflections in plenary. They make a synthesis of what has been brought up in the discussion and formulate key-words referring to what they consider important to highlight.

Out from the analysis and reflections that had been brought up in the discussions the participants together could formulate the aims for the future work in their krAft group. They also formulate themes and content for the coming group meetings.

In the analysis of the stories the participants focused different themes. They recognised the situations and could often identify themselves with the author. The participants together helped each other to put words on the incidents described in the stories. In this group process the participants mirrored themselves in each other’s cases. The problems faced in the

stories were often by the participants considered to relate to the situation of being a woman manager and to the relation between men and women and male and female in working life.

Results

The themes that were identified in the five seminars were quite similar. The stories dealt with competence development, social competence, information and communication problems, to be able to argue, management and leadership, handling diversity, male contra female leadership, to dare to pose questions, to dare to take the steps forward, motivation, to show appreciation, to handle conflicts, group dynamics, to hit the “glass ceiling”, how to deal with changes, responsibility, learning and how to learn, self esteem, structure of organisation and hierarchy. From these themes we could plan proper input, according to the formulated needs of the participants in the networks.

There is a significant difference to results coming out of this dialogue process, compared to what would have been achieved if we had come from university with ready-made solutions to the needs of the participants. In the way we performed this work together the themes for the joint work were developed “from within”. What we did was to switch from a top-down agenda with the content formulated from the university disciplines and subjects to a content formulated by the company managers themselves from a bottom-up perspective.

Our kick-offs could contribute to create:

- Identification of content for the joint work, formulated from within.
- Deciding upon work forms.
- Understanding of network learning – the participants could see from start that the most important part of their learning process would be the reflective dialogue among themselves.
- Clear understanding of roles and responsibility in the group – that the participants are in a real way responsible for the content and that the project team is there to facilitate their joint reflections and to link their needs to university resources.

Multidisciplinary consulting teams just-in-time for the SME manager

The main form of work in the krAft programme design is the network, where all participants meet together to reflect and learn from each other and from people invited to the group. But there is also an individual string: each manager can use consultant days for a specific intervention in her own company. These *company oriented projects* were decided upon by each manager individually, and the issues differed from company to company; some examples: launching of a new website, analyses of logistics flow, competence development of middle managers, building a soundproof wall around a printing press and so on. There were some technical projects, but most of the projects were focussed upon some aspect of human resource development.

As the issues themselves were of many kinds, the project team had to find individually designed solutions for how to link the needs from the companies to the resources of

university. These needs put the finger on the rigid organisation of university. We often had great difficulties in finding the right “specialist(s)” to meet the company for a study, a dialogue conference, a construction project or whatever. Mainly, we tried to assign students writing thesis on C- and D-levels, related to the needs of the companies, especially for tasks that involved some kind of deeper analyses.

In the network sessions we invited researchers/teachers to the dialogue but, even if they wanted to participate, the main problem was that they did not have the time to do it. Tutoring assignment always had to be the first priority. Another problem we faced, when we entered our co-operation with some university teachers was that we had to coach them not to “lecture”, but to take part in a dialogue.

In the company oriented projects we could rarely link researchers/teachers: time was too limited to make any meaningful research, and the need of the company seldom corresponded to what the university wanted to offer. Another cultural contrast between university and industry is the time aspect. You could say that companies are quicker, their needs are now, and not next year, when a course could be arranged and a student project could be formed.

It was sometimes difficult for the network participant to formulate a relevant problem for the company oriented project. Then the project team solved the situation by doing some coaching at the company. For example did two of us from the project team visit the actual company and there met key-persons in their own environment to discuss specific situations, conditions or issues. This often led to a clear formulated project that could be handled by a student project or a researcher or, if we didn't find them, an external consultant.

In the second part of our project we invented a new form, which took its departure from our analysis of the conditions that university staff work under. How could we work with people that were short of time and whose time-schedule was not aligned to company needs? How could we support SMEs with university resources just-in-time?

Methodology– Example 2: How university can support SMEs in their actual needs

It started with a task from the big real-estate company in Halmstad, HFAB (Halmstads Fastighets AB). Their quality manager was one of the participants in our network, and she was planning a quality course for the sub-contractors to her company.

She explained the situation: Due to outsourcing of services around the apartments, there are many independent companies working around the tenants of HFAB. Special firms do care-taking, cleaning, gardening, carpentry, plumbing etc. The employees from these sub-contractors meet the customer face to face, and represent HFAB to the customer. Our quality manager wanted to develop and run a course for all employees in the sub-contracting organisations; to establish the values and policies of HFAB and to make sure that the sub-contracting organisations know how to handle customer contacts in ways that correspond to

the policy of the landlord HFAB. She wanted to link this activity to the mainstream quality work of the company and was looking for advice from the university on how to construct and run this course.

From the project team we came up with the idea that she could meet a group of university teachers/researchers representing different disciplines with relevance to her task. We analysed the situation and the university resources and found that her problem could be treated by research staff representing marketing, quality processes and pedagogy. Our idea was to bring these researchers/teachers together to a counsel. Out from the question of the quality manager we identified three researchers from different departments of the university. The quality manager from HFAB met this question-based specialist team in two sessions that were facilitated and documented by one of our krAft project leaders.

- The quality manager from HFAB wrote down a description of the situation and the task, which we distributed to the researchers.
- We met in the first counselling session; quality manager HFAB, three researchers, krAft facilitator.
- Documentation was sent out by email.
- The quality manager updated the material, this update was distributed.
- New counselling session.

By organising the contact in this way we found a way for the researchers to take part and offer meaningful support, which was appropriate and just-in-time for the company and well suited for the researchers: short time, no preparations necessary (just reading through the PM from HFAB), opportunity to establish good contact with a company (for student jobs further on) and an opportunity to meet colleagues from other disciplines who they don't usually meet.

Results

The outcome of these sessions was a plan for the quality manager, who had got opportunities to discuss her plan with the counselling team. With their help she could make better training courses. She was very satisfied, and reported back when she had started her courses that they were successful, well attended and appreciated.

But there were also other results:

- A model to offer support from university to SMEs just-in-time.
- Contact between the researchers, representing different disciplines, was fruitful and resulted in plans for further cross-disciplinary activities.

Discussion

From the governmental level as well as from industry and the public sector there is, in Sweden as well as in other western societies, a growing demand on universities to work closer with actors in their surroundings. Initiatives are taken to promote a so called "Triple Helix" perspective - interaction between political decisions, the requirements of industry and society as a whole, together with commitment from universities and research institutions (Etzkowitz & Leydesdorf 2000). The krAft programme is an example of a national programme aimed to fulfil this policy.

We have taken part in this programme through involvement in five krAft projects. The way we handle this threefold objective is through action research. We find it as a great challenge to integrate practical development efforts towards a "better" society and working life, in this case economic growth and business development, with theoretical development based on as well gender theories as theories on learning, entrepreneurship and innovation systems.

A co-operation between university and SMEs is recommended as the solution for sustainable development and economic growth. Barriers to reach this co-operation are often ascribed to the small companies who are said to be short-sighted and not interested in long-term development, who are "afraid" of the academic world and cannot communicate with academics etc. From the KK-foundation and other national and European foundations there are huge amounts of money located for activities to overcome these barriers and to support regional innovation systems, industrial clusters etc. where academics are involved with practitioners from SMEs in R&D processes to stimulate economic growth.

What we have found out from our three years' experience from the krAft processes, is that there are also lots of hindrances from within the academic environment that prevent teachers and researchers to take part in projects and development processes based on the conditions formulated by the SME's.

We have also found that these types of national incentives to support economic growths are constructed in a way that to a great extent prevent women to participate, even though the equal opportunity perspective it is often explicitly formulated in the policy documents.

In the introduction of this paper we presented how three different forms of result can emerge from action research. Results from which both researchers and academy, as well as practitioners and their organisations, create new knowledge and learn. (Hansson 2003). These results were defined as:

- * Results that contribute to production of theories and to accumulated academic knowledge (*theoretical results*);
- * Development of theoretical knowledge and practical competence related to the organisation as an effect of the dialogue-based interaction between researcher and practitioner (*practical knowledge development*);

* Concrete, practical results from the development process in form of interventions addressed to the referred organisation (*practical intervention*).

According to this definition of knowledge creation we make an attempt below to organise the results from the five krAft processes we have been involved in.

Theoretical results

We have noticed that the krAft program, in spite of its interactive design and its clear focus on process oriented learning, is very male dominated. As well the central krAft managing team as most of the participants from small and medium sized companies are men. This program, as any other national programme aimed at support business and regional development, has no gender perspective. In the design of the programme women's and men's different conditions has not been considered, e.g: that women mostly have families and the main responsibility for children and homework, at the same time as they are responsible for their companies; that women (because of this?) are less prepared to take economic risks; but that they also - when they are prepared to take risks - have difficulties in finding risk capital. By including a gender perspective and by linking to theories from feministic research we think that both the methods used in order to support the SMEs and the result of the work will be another and more complex, than if SMEs are looked upon as the men's world (Holmquist 2002).

By adding gender theories on the krAft programme we have located a need among female managers to participate in competence development activities targeted at women only. The female participants in our regional krAft project are principally working in traditional male sectors and most of their work-mates are men. In our krAft project these women have created their "own room", where they can change experiences with other women in the same situation and improve their personal development. Together with the participating women in our regional krAft-project we have discussed and reflected on theories related to gender and power. We have discussed why women managers seem to be invisible in official registers and statistics. We have focussed on how women's and men's language differ, how women look upon development of their companies and on their personal development, how women combine their family life with their professional life, etc. These theories we are further developing in another KK-foundation financed research project on the conditions for women managers (Barth & Hansson 2003).

We have also reflected on theories of learning and the role of the universities as knowledge creating and learning institutions. Since the beginning of this decennium it is written in the Swedish national university law that universities should collaborate with the surrounding society. But there are different interpretations on the meaning of this. The traditional role of the universities has been what Gibbons (1994) call *Mode 1* which refers to "a form of knowledge production – a complex of ideas, methods, values, norms – that has grown up to control the diffusion of the Newtonian model to more and more fields of enquiry and ensure its compliance with what is considered sound scientific practice" (Gibbons 1994 sid 2). Opposite to this expert and discipline oriented way of looking at knowledge production he

defines *Mode 2* as a model where knowledge production is problem oriented and user contextualised and where different actors and different disciplines are involved.

When we, as heavy supporters of *Mode 2*, have tried to realize this view of knowledge within our own university context we have found how the *Mode 1* tradition is deeply rooted also in our regional and relatively young university. We have encountered difficulties in finding researchers prepared to actively listen to the practitioners when they define their problems and to start an effective dialogue with people from the companies. Even though our participants were experienced women managers they were by many of the university teachers treated as “pupils”.

Besides these cultural obstacles we have found that the way our university system is financed and organised in fact doesn't allow this openness towards collaboration with society. Teachers and researchers are working under hard stress, and even though collaboration is manifested in the law, there are no regularly funding allocated for preparing this type of co-operation e.g. building arenas for dialogue, changing ideas and reflecting together with practitioner in order to start collaborative R&D processes. The teachers/researchers are stressed by prioritizing between teaching and research, between students and finding their time for reflection. We find that university teachers and researchers encounter an epistemological paradox. They work in a *Mode 1* culture accompanied with a *Mode 2* rhetoric (see Ehn & Löfgren 2004).

Practical knowledge development

Even though we have found the design of the *krAft* concept very effective we have tested and improved it both regarding the recruitment process and the process management. We have together with the participants developed methods and models for learning, how to learn together collectively and individually. We have during the process spent a lot of time on how to use dialogue based methods and developed different learning situations which we have evaluated along the process. Two examples are described in the paper, the “Kick-off” method (example 1) and the “just-in-time consultancy” (example 2). We have also focused on the balance between the dialogue based process and the practical intervention.

Practical intervention

The most obvious results in form of practical intervention were the outcomes of the individual *company oriented projects*. Examples of these interventions were new websites, new marketing plans, competence development of middle managers, improvement of logistics flow, a soundproof wall around a printing press. These results were very obvious and concrete and something that was visible in the company to more people than the manager who had participated in the *krAft* process.

To summarize we have found the *krAft* concept very effective and suitable for building new and sustainable relations between universities and private companies/public organisations. The idea by having external consultants as brokers between the companies and university has in our case functioned excellent and through this construction we have been able to avoid some of the university bureaucracy. In the strong relationship that was built up in the

five groups, among the participants and between the researchers and the participants, we had a close interrelation between questions and answers, between theory and practice that made the process both learning and very exciting.

References

- Barth, H & Hansson, A (2003).** *Ledarskap och Tillväxt i Småföretag - Kvinnors ledarskap.* Bilaga till ansökan till KK-Stiftelsen.
- Danilda, I & Stridh (1998).** "A Story of Improvement. Methods and Tools for Qualitative Evaluation of European Projects". CAU-rapport 1998:1. Högskolan i Halmstad.
- Ehn, B & Löfgren, O (2004).** *Hur blir man klok på universitet?.* Studentlitteratur. Lund.
- Etzkowitz, H & Leydesdorf, L (2000).** "The dynamic of innovation: from National systems and 'Mode 2' to a Triple Helix of university-industry-government relations". In Research Polity.
- Gibbons, M. (1994).** "The new production of knowledge. The dynamics of science and research in contemporary societies." London: SAGE Publ.
- Gustavsen, B. (1990).** *Vägen till bättre arbetsliv.* Stockholm: Arbetslivscentrum.
- Hansson, A, Barth, H, Stridh, K, Swärdh, M. (2003).** "Kvinnors berättelser om ledarskap. Företagsutveckling genom narrativer." Paper published in the proceedings of HSS03 research conference, Blekinge Tekniska Högskola, Sweden
- Hansson, A. (2003).** *Praktiskt taget. Aktionsforskning som teori och praktik – i spåren efter LOM.* Göteborg Studies in Sociology No. 14. Diss.
- Hirdman, Y. (1990).** "Genussystemet". I Demokrati och makt i Sverige. Maktutredningens huvudrapport. SOU nr 44.
- Holmquist, C.** "Integration mellan genus- och entreprenörskapsteori – Är det möjligt och/eller önskvärt?" I Holmquist, C & Sundin, E (red) (2002). "Företagerskan. Om kvinnor och entreprenörskap." Stockholm: SNS förlag.
- Hägerfors, A. (1994).** "Co-learning in participative systems design." Diss., Samhällsvetenskapliga fakulteten, Lunds Universitet
- Ljungberg van Beinum, I. (2000).** *Using the Lamp instead of looking into the Mirror. Women and men in discussion about the relationship between men and women in the workplace.* Diss., Universitetet Leiden. Amsterdam/Philadelphia: John Benjamins Publishing Company.
- KrAft**-programmets website, www.kraftprov.nu
- Kraftverk Halland**, website www.kraftverkhalland.net .
- Nonaka, I. & Takeuchi, H. (1995).** *The Knowledge-Creating Company. How Japanese Companies Create the Dynamics of Innovation.* Oxford University Press.
- Stridh, K, Swärdh, M, Barth, H & Hansson, A. (2003).** *Kraftnätverk för strategisk affärsutveckling. Kvinnliga ledare i mansdominerade branscher formar själva sin utbildning.* Paper published in the proceedings of HSS03 research conference, Blekinge Tekniska Högskola, Sweden.
- Stridh, K (2001).** "Tyst kunskap i EUprojekt – utvärdering och utveckling." In Eriksson, K (ed). Forskningsamverkan och nya former av kunskapsbildning. Proceedings from the 2nd HSS Research Conference. Halmstad 2001.