Mentoring for Young Female Practitioners and Scientists in Spatial and Environmental Planning in Germany - Experiences of the joint Mentoring Program of the Academy for Spatial Research and Planning and the Association for Spatial and Environmental Research

Ulrike Weiland Institute for Geography University of Leipzig 04103 Leipzig, Germany

Andreas Klee Academy for Spatial Research and Planning (ARL) 30161 Hannover, Germany

Joerg Knieling Institute of Urban Planning and Regional Development Hafen City University 22085 Hamburg, Germany

Abstract

In order to overcome the underrepresentation of women on higher management levels in planning, the Academy for Spatial Research and Planning (ARL) and the Association for Spatial and Environmental Research (FRU) in Germany jointly have elaborated a mentoring program for young female planning practitioners and scientists. This article introduces objectives and elements of the mentoring program being considered a strategic talent development in a network of excellence. Results from a survey among the mentees and mentors of five subsequent years are presented revealing the principal verification of the program with its main elements: one-by-one mentoring for one year each, joint events, qualification classes for the mentees, projects by mentees and support with publications, and a final certificate. The survey reveals the need for several modifications, such as the introduction of target agreements at the beginning of a mentoring period, the modification of the project study as well as the extension of the mentoring period, which are discussed in detail. Finally, conclusions are drawn regarding the program efficacy and transfer.

Keywords: mentoring, promotion of young female talents, gender equality, spatial planning, environmental planning

1. Introduction

Women are still underrepresented in planning institutions and networks, especially on higher management levels. This discriminates them on the one hand. On the other hand, they could bring in their knowledge and female experiences thus extending the knowledge base and perspectives of planning institutions and networks, because many of them are well skilled in planning practice and science. This discrepancy was the reason for the Academy for Spatial Research and Planning (ARL) and the Association for Spatial and Environmental Research (FRU), to initiate a joint mentoring program in spatial and environmental planning.

The Academy for Spatial Research and Planning (ARL), Leibniz Forum for Spatial Sciences, is an autonomous and independent institution under public law. It consists of a network of 150 elected national and international experts from planning academia and practice who are voluntarily active in the academy. The ARL is a platform for inter- and transdisciplinary cooperation of science and practice in all relevant spatial issues and analyses opportunities for sustainable development mainly on the regional level. Economic, social, environmental, and cultural knowledge from science and practice are integrated in order to gain an innovative, holistic perspective on the complex societal challenges of tomorrow.

Research results serve as a basis for convincing and independent advice to political and administrative institutions and society, as well as for ambitious education and advanced training in spatial issues. As in many institutions rich in tradition women are underrepresented in the ARL, but female knowledge and experiences shall be increasingly better integrated in order to cover more facets of the complex sustainability perspective.

The Association for Spatial and Environmental Research (FRU) supports the cooperation of science and practice in this field. The association is particularly interested in supporting young talents in spatial research and planning practice. With the mentoring program the initiators aim at achieving two strategically significant management tasks simultaneously: the promotion of young talents and the support of women in planning practice and science.

In this article, based on the theoretical concept of mentoring applied in this program, the elements of the mentoring program are presented. Results of a review after five years of runtime are presented, revealing both the general verification of the program and the need for several modifications, for example target agreements between mentor and mentee, the extension of the program runtime, and the introduction of regular discussions on how to reconcile job and family. Finally conclusions are drawn regarding the transferability of the program.

2. Mentoring as Strategic Talent Development in a Network of Experts

"Mentoring" in general means an experienced person – a mentor – passing over his/her knowledge and experience to a young person at an early stage of his/her professional career - the mentee (Havenith, Martin, and Petersen 2003, p. 7). This may refer both to topically relevant expert knowledge and to non-codified knowledge, for example to "rules of the game" or ways of behavior, in order to achieve strategic aims. Thus, it serves both career and personal development (Hansen 2006, p. 33). Usually mentoring is connected to goals set for both mentors and mentees. In this way the mentees are accompanied and supported during their development as professionals or individuals, while the mentors receive new stimulations for reflecting on their previous knowledge and skills.

In the joint mentoring program of the ARL and FRU under discussion, mentoring also may be interpreted "as an attempt to work against structure-related obstacles for the rise of women, by supporting them at the individual level" (Kaiser-Belz 2008, p. 62). Structural obstacles include e. g. a mostly male dominated leadership culture, the marked readiness of men for self-staging, their better networking, as well as the still insufficient familyfriendliness of working hours. If the mentoring program is being formalized and carried out by an enterprise or an organization such as the ARL and FRU (like in the case presented here) another advantage results. This may be described as a 'flanking kind of human resources strategy' and as the strategic promotion of young talents.

Over recent years the application of mentoring in businesses but also in organizations has risen strongly, and a multitude of field reports and books exist that discuss, for instance, the various types and elements of mentoring, and how to install a mentoring program (see e. g. Caplan, 2013; Clutterbuck, Pulsen, and Kochan, 2012; Klasen, and Clutterbuck, 2012; Ragins, Clutterbuck, and Matthewman, 2012; Owen 2011).

Also at universities, the promotion of young talents by means of mentoring programs has gained significance in the course of increasing competition. Many universities have established such programs, and sometimes they are even integrated into curricula. Examples include the "Mentoring in Science and Business" program of Leibniz University Hanover (Gender Equity Agency, 2014), the University of Cologne's mentoring program (Equal Opportunity commissioner, 2014), and the program "Women into Science!" of the University of Leipzig (KOWA, 2014). University-based mentoring programs pursue various goals. Some are meant to make graduate entry into professional life easier and/or provide orientation in the context of studies; others are intended to support junior scientists, and some aim at increasing the chances of women being offered Chairs.

But the strategic support of young talents is relevant also for non-university research institutions (Havenith, Martin, and Petersen, 2003; Dalhoff, 2006), particularly for institutions such as the ARL whose research and political consultation is based on excellent personal networking. The support of junior experts contributes to the systematic maintenance and renewal of networking, and thus to the topically relevant knowledge base.

At the end of 2003, on the initiative of the board, the general meeting of the FRU decided to introduce a mentoring program to complement their promotion of young talents. And in 2005, the ARL and the FRU decided to introduce a mentoring program for the promotion of young scientists in spatial and environmental research and planning practice. With the program being announced for the first time, the ARL headquarters took over the topical-organizational supervision of the program. The ARL is supported in this task by the HafenCity University of Hamburg.

The FRU board monitors the mentoring program and decides about accepting the mentees as well as about matching mentees and mentors. At regular intervals the board reports to the general meeting of the FRU on the progress of the program. After five years of the program, an interim report was compiled and published in a peer-reviewed national planning journal (Weiland, Klee, Knieling, Scholich, 2012).

In the following, the current structure and outcomes of this mentoring program will be presented. Results of its evaluation and recent ideas on the further development will be discussed. Finally, conclusions, also concerning the transferability of the program, will be derived.

3. The Mentoring Program and its Elements

The goal of the ARL's and FRU's "Mentoring in Spatial and Environmental Research and Planning" program is to support young women from planning science and practice with their professional development. The mentees are supposed to be given deeper insights into the structures, rules, and ways of behavior of planning practice and science. The intention is not only to support them personally in their careers, but also to bring them into contact with scientific and practice-oriented networks of spatial and environmental planning and science.

Because the ARL is a non-university research network, because the members of the network are not employed at ARL but earn their salary in different institutions, and because the members cooperate on a broad and changing variety of topics, the initiators of the mentoring program first had to determine which objectives and elements of business and university mentoring programs were appropriate and suitable for implementation in the mentoring program of the ARL and FRU.

Thus the intention is to support strategic competences and self-marketing as well as mentees' further career planning. The preconditions for increasing the share of women in leading functions of spatial and environmental planning and research are to be improved. Supporting junior experts and increasing the share of women among ARL members is also supposed to contribute to ensuring the long-term performance levels of the ARL.

Since October 1st, 2005, usually five positions for participants from science and practice are advertised for a period of one year each. Positions are advertised by distributing a flyer via a nationwide distributor, by e-mail, and on the ARL News. The elements of the mentoring program will be characterized in the following.

One-by-one Mentoring

The core of the program is the partnership between a mentee and an experienced mentor. Such a tandem is based on the mentee's topical orientation and goals being in congruence with the mentor's possibilities to offer support. Furthermore, we try to see that the mentor's and the mentee's workplaces and places of residence are not too distant from each other. The ARL headquarters establishes the contact between mentor and mentee. Throughout the whole year of mentoring, the headquarters offers help in case of questions or problems. At the beginning, mentoring and mentee achieve agreement on their expectations of their partnership and connected goals, on frequency and methods of contact as well as on the confidentiality of their conversations. With such one-by-one mentoring, we strive for individual support.

Joint Events for all Mentees and Mentors of one Year

To support personal contacts among participants and to familiarize them with the program, at the beginning an opening event is held where all aspects relevant for mentors and mentees are discussed to make sure that their cooperation in the rest of the year will be successful. At the closing event, the results of the individual projects the mentees have been working on during their mentoring year are presented.

Qualification Classes for Mentees

The ARL's program office offers a class on conflict management headed by an experienced trainer, which is compulsory for all mentees. Furthermore, at their own expense, the mentees attend at least one more qualification class. They may choose from classes in the fields of project management, self-management, time and conflict management, presentation, rhetoric, communications, and application training.

Projects by Mentees – Support with Publications

At the beginning of the mentoring program and in consultation with their mentors, the mentees choose a topic from their field of activity on which they intend to write a publication in the course of the year; this "project" will accompany the mentees throughout the whole program.

The projects should be definable and realistic for a time period of one year. The resulting publication shall be offered to a renowned scientific or practice-related journal. Publishing scientific results as well as the presenting planning practice aspects are becoming ever more important elements of the work of spatial and environmental scientists - especially those in responsible positions. However, the "art of publishing" is hardly touched upon during university studies. The mentoring program is thus supposed to provide support in this respect, allowing mentees to make use of their mentors' experiences in the field.

Final Certificate

After having successfully participated in the program, the mentee is given a final certificate. The awarding of the certificate depends on the mentee having actively contributed to the mentoring program (i.e.: attending the meetings with the respective mentors and participating in the joint events, giving evidence of having attended the qualification classes as well as having submitted a publication).

4. Survey on the Mentoring Program

After five years of program runtime, all mentees and mentors were interviewed on the mentoring program. The idea of the review was to see how far the expectations connected to the program have been met, and whether and how it could be extended. From this, insights regarding the concept and implementation of a further mentoring program have been derived.

Interview Method

Ouestions referred to satisfaction with information received at the beginning of the program, to judging the program and its elements, to the respective reasons for participation, and to the cooperation of mentee and mentor. Mentees and mentors were given questionnaires which were specifically tailored to their respective roles in the program. There were closed questions with several possible answers, and other open questions. This method of procedure was supposed to cover the whole range of experiences and expectations concerning the program. Of the 21 mentees we contacted, 16 responded (response rate of 76%), and of the 18 mentors we contacted, 9 responded (response rate of 50%). Due to the low number of cases, in the following the results are only verbally interpreted, and percentages have been rounded up or down.

Mentees of the Joint Mentoring Program

At the time of the interview, the mentees were on average 31 years old and had been working professionally or as scientists for almost five years. Most of the mentees live with their (marriage) partners, and four of them have children up to the age of 13 living in their households. Almost all mentees stated that women should be able to have their own professional careers, independently of whether they have children or not. The mentees judged themselves as being very willing and capable to perform, and all of them were motivated to reach their personal career goals even if this was connected to the expenditure of great effort. The great majority of mentees are satisfied with their previous successes and progress. After the completion of the mentoring year, the number of mentees working as fixed-contract staff members or on doctoral candidate posts had risen from five to eight, whereas the number of mentees working as permanent staff members had not changed. Nobody was still receiving a scholarship, whereas the number of those looking for a job had risen to three. None of the mentees had been given a leading position after this one year.

Mentors of the Joint Mentoring Program

The mentors are experienced female experts from the scientific or practical fields of spatial and environmental planning and most of them are ARL and/or FRU members. Over the years, university professors, scientists from universities and non-university research institutions as well as practitioners from ministries, regional planning, municipal planning, and chambers have been active as mentors. In the course of their professional careers, all of them have already reached positions requiring leadership skills and managerial experience. Their individual careers, as well as their insights and experiences in this context, form an important element of exchange during the mentoring program.

5. Results of the Interviews with the Mentees

Information about the Mentoring Program

The mentees learned about the existence of the mentoring program in different ways, in about equal shares through "ARL News", through information at an ARL event, and through the flyer on the program. Some were also told about the program by former mentors or mentees, by superiors, or by colleagues.

Motivation for Participating in the Program

The most important reasons for mentees to participate in the program are the possibilities to network with other women in leading positions and to make new professional contacts (64%), individual further development (14%), topical and personal exchange (14%) and the possibilities for further training (7%, multiple responses allowed). Planning one's own future career, curiosity as well as interest in the ARL and its bodies are reasons which were given slightly more seldom.

The Mentees' Expectations towards their Mentors

The mentees see their mentors on the one hand as discussion partners for topics of professional orientation and further development, and, on the other hand, as role models and a source of critical feedback and advice in case of problems at work and in the professional environment. Almost all mentees hope to benefit from their mentors' personal, professional, and life experience. For example, the mentees expect their mentors to be able to give advice both on career planning and the compatibility of family and career, and on writing the required expert contribution. Apart from showing interest, they expect their mentors to show open-mindedness and competence, to have time for them, and to maintain confidentiality and continuity in the context of giving advice.

The Mentees' Appraisal of the Mentoring Program

Frequently, the mentees judge the program and its elements as being "very good" (42%) or "good" (40%). Almost all mentees – with two exceptions – judged positively (as "very good" or "good") the round of introduction of participants including information about career-supporting and career-obstructing aspects, the two plenary sessions of each mentoring year with the final presentation of results by the mentees, the feedback given by the mentors as well as the qualification seminar on conflict management. The great majority of mentees express interest in exchanging experiences with mentees from other mentoring years. The appraisal of support with publishing in renowned expert journals is only slightly worse (64% "very good" or "good", 27% "average"). Opinions were split only regarding networking with the "expert community" – obviously the mentees have found less access to ARL bodies than they initially expected – and regarding the certificate on having successfully participated in the mentoring program.

6. Results of the Interviews with the Mentors

Information about the Mentoring Program

Most mentors were told about the existence of the mentoring program directly by the ARL headquarters, and when asked if they were interested in participating; only exceptionally were they informed by colleagues, at an ARL event or through the "ARL News". However, the mentor's views on the available information on the program varied. The majority believe the information to be correct and sufficient, but need for further information is also expressed.

The Mentors' Motivations to Participate and their Possible Benefits

The mentors' motivations to participate are most of all altruistic; what is stated most often is the possibility to support junior scientists and practitioners. In this context, there is a desire to make the mentees aware of the challenges confronting spatial scientists in leading positions.

Furthermore, the possibility of receiving new impulses as well as curiosity about the program and work with the mentees played a significant role in the decision to contribute as a mentor. All responding mentors stated that for them, the greatest gain during their contribution had been insights into the working conditions of young female junior experts. Second, new contacts with the world of experts, most of all to other mentors and mentees, as well as generally new experiences were mentioned as a gain. From the mentors' point of view, however, the mentoring program did not serve to improve their own leadership skills, support their communications skills, or enable them to become more open towards other points of view – although this was a possible answer. More than half of the mentors judge the input-output relation as being "good" or "very good" (71%).

Cooperation of Mentee and Mentor

The majority of mentees and mentors met three to six times throughout the mentoring year. If, due to spatial distance, frequent meetings were not possible, telephone calls were made instead. Usually meetings lasted two to three hours, in one case each meeting took a complete workday. The majority of mentors considered frequency and time to have been sufficient. Five out of eight mentors stated that for them, the mentoring relationship was not over after the mentoring year, so that interaction between mentor and mentee continues via networking contacts, telephone calls and e-mails, thus maintaining some "mentoring feeling".

Concerning the relationship between mentors and mentees, there is no uniform picture. Appraisals of the relationship range from "very good" to "not so good", with the majority of answers (63%) being positive ("very good" and "good"). Concerning those questions investigating the relationship between mentor and mentee, it becomes obvious that not only topical aspects and career steps were discussed but also difficult situations within the mentees' work environments and general personal problems.

The Mentors' Appraisal of the Mentoring Program

About one half of the mentors judge the mentoring program and its elements as well as the organization and implementation of the program as "very good" (49%) or "good" (48%). The great majority of mentors are of the opinion that the ARL benefits from carrying out the mentoring program and tying young female junior experts to the academy; only in one case was the opinion expressed that only the mentees benefit. The program is said to motivate junior female experts to engage with the ARL and to improve the ARL's outward-facing image, also for evaluations.

In individual cases there is also the expectation that a greater inclusion of women in spatial and environmental research will lead to new impulses for questions of spatial science. The mentors believe mentoring to be a suitable tool for human resources development. Due to its combination of topical and personal advice or support by female mentors, it is said to be particularly suitable for the support of women. Particularly important from the point of view of the mentors is the inclusion of young women in professional networks and support with career planning, conflict management training, and joint conversations. Here the mentors serve as role models. Due to the concrete, personal and individual nature of mentoring and the absence of any dependency (in contrast to relations with a superior), support can be very individual.

7. Outcomes of the Mentoring Program

Beyond this appraisal by the participants of the mentoring program, outcomes of the program can be presented. The following analysis includes results from 2005 to 2014 and exceeds the survey carried out in 2009. In the meanwhile, out of the stock of project works by mentees, a number of contributions have been published. Most of these contributions are sole-authored pieces; some were written by several authors in the context of working groups. The contributions deal with a variety of current topics, such as – to mention a few - the need for single-family houses in a situation of demographic change (Fina, Planinsek, and Zakrzewski, p. 2009), formal and informal procedures for the planning and building of large infrastructure projects (Külzer 2009), spatial density as a planning entity in the context of urban redevelopment (Westphal 2009), environmental matters in the context of public participation in planning (Regener 2010), public-private partnerships as a means of funding urban regeneration (Reuter 2008), and the suitability of Corine geodata and surface statistics for the analysis of the development of settlements and circulation areas in Germany (Einig, Jonas, and Zaspel, 2009). More essays (e. g. Herlitzius, Linke, Lüsse, and Palomba, 2009; Schlotmann, 2012; Ehrlich, 2012; Steinmüller, 2013; Schell 2014) have been published in the further course of the program.

Several mentees have found access to ARL bodies and are now regular contributors. During the entire running time of the program, six mentees have become members of federal state working groups, and four have participated as guests. One mentee contributed as a guest to the "Real Estate Economy and Spatial Development" working group, one mentee is now the manager of the "Spatial Policy and Planning for the Energy Turnaround" working group, one mentee contributed to preparation of a congress of the ARL's "Young Professional Forum" in 2011, one mentee hosted a workshop in the context of the ARL Congress in Bremen in 2011, and two mentees gave lectures on "Between Places and Flows – The Regionalization of Knowledge-Intensive Services in Urban Regions in Germany" and "Urban Landscapes as Stages of Planning – Spatial-Scientific Observations" at the ARL Congress in Hamburg in 2013.

One mentee joined the working group "Mobility" within the federal state working group of Bavaria; another mentee joined the working group "Retail Development" within the federal state working group of North Rhine-Westphalia. Two mentees applied for a ARL working group – as part of the "Call for Membership" – and became members in the working group "Mind the Gap – Perspectives on Spatial Planning" and "Spatial Planning and Policy for the German Energy Transition".

Thus, the goals of supporting of female young talents formulated for the mentoring program have indeed been achieved by the current program concept. The mentees are supported with their topical and personal development, as can be seen, for instance, in the documented publications written in the context of the mentoring program. It has also been possible to win over qualified young talents for ARL bodies.

8. Further Development of the Program and its Implementation

In and based on the survey, ideas on the further development and extension of the mentoring program were discussed. In the following, the presentation of these ideas will be structured in six topical groups, and light will be shed on their possible implementation. Ideas by mentors or mentees will be dealt with as one, as there are only marginal differences.

Target Agreements

Mentor and mentee agree upon target agreements at the beginning of the mentoring relationship, ideally already at the opening meeting, thus fixing the cornerstones of their cooperation. These target agreements are also supposed to improve understanding of mutual expectations. Therefore, a model text has been developed which is oriented upon the mentoring program's strategic goals. This model is now made available for the tandems at the beginning of each mentoring year. The tandems decide about the confidentiality of the target agreements and whether they may be passed over to the other participants in the mentoring program and/or the headquarters.

In the context of the target agreements, at first the relevant contact data are exchanged. Moreover, information about the mentee's goals, intended project work as well as topical and personal expectations are discussed and fixed in writing. Agreements on the cooperation of mentor and mentee are supposed to help with structuring the work process right from the beginning. Furthermore, the mentee may formulate further goals she would like to achieve in the course of the mentoring year. There may also be an agreement on the joint use of resources (e. g. literature or databases). The early clarification of mutual expectations contributes to increasing the efficiency of mentoring. In this way it is possible to explicitly articulate the twofold expectation towards the mentor – both topical and in respect to her personality and social skills – right at the beginning.

Cooperation of Mentor and Mentee

Concerning the cooperation of the tandem, most of all the mentees are provided with ideas. There is the suggestion that mentees should be given the possibility to take part in the mentor's everyday work as well as to agree on a certain number of meetings of mentee and mentor. For this purpose, more spatial and topical closeness between the tandem parties is said to be useful. Indeed this has been strived for by the headquarters right from the beginning. However, particularly spatial closeness cannot always be perfectly realized. Of course, the way in which the cooperation will be organized is left to the respective tandem.

Project Study by the Mentees

The project studies or publications worked on by the mentees shall be more emphasized right from the beginning. Also in this respect, it shall be clarified at the beginning of the mentoring in which way the cooperation of mentor and mentees shall be organized particularly regarding a publication, for various kinds of cooperation may be imagined, ranging from tutoring in the form of critical reading to co-authorship. This task shall be made easier by an exchange on literature databases and possible reviews in journals.

However, in the further course of the mentoring program it became also obvious that although publication activity is relevant for all (junior) scientists, practitioners see its significance differently. Therefore in the future it will rather be left to the tandems to decide about the way in which a mentee actually contributes. As an alternative, a practitioner's project work might be organizing and managing a team, carrying out public participation or contributing to a congress as well as writing a report or reflection on their activities.

Contribution to the ARL Network

In order to facilitate the access of the mentees to ARL bodies, they are invited as guests, and more information about possibilities to contribute to the ARL network after the mentoring year is given right from the beginning. In view of the mentees' desire to stay in contact with the ARL even after the end of their mentoring years, an interactive platform has been established on the ARL website to which members of all mentoring years do have access. Also the establishment of an alumni network with yearly follow-up meetings was suggested, and such a meeting was indeed held in the context of the ARL Congress in Leipzig in 2012. Furthermore, all interested persons including the mentees are invited to subscribe - cost-free - to the ARL Newsletter and to order the "ARL News" at the ARL headquarters. Attending or - even better - contributing to events organized by the "Young Professional Forum" is further opportunities to meet expert colleagues and learn about relevant topics.

Furthermore, a (former) mentee might be invited to a federal state body if the ARL headquarters is told about somebody being interested in contributing as a guest. The "Call for Membership" of the ARL's working groups is a significant innovation in the Academy's work, providing the possibility to engage with an ARL working group and is also relevant for members of the mentoring program. The same holds for the "Call for Papers" for ARL events.

Duration of the Formal Mentoring Partnerships

From 2014 on, the formal mentoring partnerships (and the compensation for their travel expenses) have been extended from one to two years. The mentees will thus have more time, especially for the specialist publication that they prepare with the support of their individual mentor. Owing to capacity constraints the mentoring program will start a new round from now on only every second year. Beyond these two years, mentors and mentee are free to continue their partnership, may be in a less regular way. Continuing the mentoring relationship beyond the formal mentoring phase was one of the desires of the mentees in the midterm-evaluation.

Perspectives

The Executive Committee of the ARL has furthermore decided to initiate another two-year mentoring program, starting in 2015. This program will have a stronger specialist focus. The FRU Board has resolved to participate in this mentoring program.

On Reconciling Family and Career

As some of the mentees already have children or intend to combine professional careers and being mothers they are facing the common challenges of young women within a working environment which is little family-friendly. That is why some mentees explicitly wish to discuss the problem of reconciling family and job with their mentors and with other mentees. Meanwhile this has been taken into consideration for the course of the program e. g. by way of experience reports especially by mentors. Here the mentors explain, for instance, which preconditions exist or should be created to make sure that mentees will have both a professional career and a satisfying family life.

9. Conclusions

On the whole, the mentoring program was considered a gain. But beyond the further development of the mentoring program discussed above, there is more fundamental criticism referring to the low number of only five mentees who are supported every year. This number is not sufficient for substantially increasing the share of female experts in leading positions in planning – at best this might happen in the very long run. And furthermore, due to their age, many of the mentees are at the beginning of their careers while at the same time founding families, at least currently only a certain proportion are able to contribute actively to ARL bodies, although many express the wish to do so. In this context, it is on the one hand suggested that both the ARL and FRU maintain contact with former mentees - as explained above - with a view to possibly winning over these women for a contribution at a later time. On the other hand, it is recommended that the number of mentees accepted for the program each year be increased. In this way it would be possible to support the ARL's equality goals more effectively.

The evaluation of the mentoring program indicates that making such offers also in non-university research institutions or institutionalized networks of scientists might be an important contribution to the support of junior experts and a flanking strategy of staff development. It may also support young women on their way to leading positions.

However, the scope of mentoring programs should not be overestimated. As shown by the many structural obstacles hindering the access of women to leading positions, they can be but one element of a more comprehensive strategy of support and equality.

Concerning the transferability of the results of the evaluation of the mentoring program to other programs, certain simple generalizations are possible, but the specific structures of each institution must be taken into consideration. Nevertheless, the results of the evaluation of the mentoring program point to a number of important requirements and experiences of both mentees and mentors, which might be helpful when planning comparable programs.

Acknowledgements

We would like to express our deepest thanks to all mentors for their contributions to and cooperation in the mentoring program. Furthermore, we express our thanks to all mentors and mentees for their participation in this survey, without which the evaluation of the mentoring programmes would have been impossible.

References

- Caplan, J. (2013). Strategic talent development. Develop and Engage All Your Young People for Business Success. London: Cogan Page Limited.
- Clutterbuck, D., Pulsen K.M., & Kochan, F. (2012). Developing Successful Diversity Mentoring Programs An international casebook. Maidenhead: McGraw-Hill Education, Open University Press.
- Dalhoff, J. (2006). Peer Mentoring in außerhochschulischen Forschungseinrichtungen Konzepte, Erfahrungen, Empfehlungen [Peer mentoring in non university research institutions – concepts, experiences]. In Center of Excellence Women and Science CEWS (Ed.). Peer Mentoring in außerhochschulischen Forschungseinrichtungen (pp. 8 – 14). Bonn = cews.publik, No. 8.
- Ehrlich, K. (2012). Conflicting Visions of Urban Regeneration in a new Political and Economic Order: The Example of the Former Bicycle Factory ROG in Ljubljana, Slovenia. Anthropological Journal of European Cultures 21, 2, 68-88.
- Einig, K., Jonas, A., & Zaspel, B. (2009). Eignung von CORINE-Geodaten und Daten der Flächenerhebung zur Analyse der Siedlungs- und Verkehrsflächenentwicklung in Deutschland [suitability of CORINE-geodata and land-use data for the analysis of housing and transport development in Germany]. Wirtschaft und Statistik 4, 355-364.
- Egual Opportunity commissioner [Gleichstellungsbeauftragte der Universität zu Köln] (2014). Cornelia Harte Mentoring (CHM).

http://www.gb.uni-koeln.de/gleichstellungsprojekte/projekte/mentoring_program/index_ger.html.

- Fina, S., Planinsek, S., & Zakrzewski, P. (2009). Suburban Crisis? Demand for Single Family Homes in the Face of Demographic Change. Europa Regional 17, 1, 2-14.
- Gender Equity Agency [Gleichstellungsbüro der Universität Hannover] (2014). Mentoring program of the federal state and the federal lands for female professors [Professorinnenprogramm des Bundes und der Länder]. http://www.gleichstellungsbuero.uni-hannover.de/461.html?&L=1.
- Hansen, K. (2006). Mentoring-Program nachhaltig erfolgreich implementieren [Implementing mentoring programs successfully]. Franzke, A. & Gotzmann, H. (Eds.). Mentoring als Wettbewerbsfaktor für Hochschulen Strukturelle Ansätze der Implementierung (31-49) = Focus Gender, Band 7. Hamburg.
- Havenith, E., Martin, I., & Petersen, U. (2003). Mentoring-Programme erfolgreich implementieren. Ein Handbuch für die außeruniversitäre Forschung [Implementing mentoring programs successfully]. A textbook for non-university research. Bonn. = cews.publik, No. 4.
- Herlitzius, L., Linke, H.J., Lüsse, S., & Palomba, L. (2009). Development of Cultural Landscape in Germany Topical Aspects of the Region of Starkenburg in South Hessen. Hernik, J. (Ed.). Cultural Landscape. Across Disciplines (173-206). Bydgoszcz.
- Kaiser-Belz, M. (2008). Mentoring im Spannungsfeld von Personalentwicklung und Frauenförderung. Eine gleichstellungspolitische Maßnahme im Kontext beruflicher Felder [Mentoring in the area of controversy between human resources development and the advancement of women. Gender equality policy in the context of occupational areas]. Wiesbaden: VS Research.
- Klasen, N., & Clutterbuck, D. (2012). Implementing Mentoring Schemes. Hoboken: Taylor & Francis.

- KOWA (Kooperationsstelle Wissenschaft und Arbeitswelt) (2014). Projekt "Frauen in die Wissenschaft" [Project "Women into science"). http://kowa-leipzig.de/frauen-in-die-wissenschaft.
- Külzer, S. (2009). Formelle und informelle Instrumente: Inwieweit können sie sich sinnvoll ergänzen? Dargestellt am Beispiel Planfeststellungsverfahren und "Regionales Dialogforum Ausbau Flughafen Frankfurt Main" [Formal and informal instruments: how far can they complement each other in a meaningful way? Presented on the example of the plan-approval procedure and the 'Regional Dialogue Forum Development of Frankfurt Main Airport']. Raumforschung und Raumordnung 67, 4, 318-329.
- Owen, H. (2011). The Complete Guide to Mentoring: How to Design, Implement and Evaluate Effective Mentoring Programs. London: Kogan Page.
- Ragins, B.R., Clutterbuck, D., & Matthewman, L. (2012). Mentoring and Diversity. Hoboken: Taylor & Francis.
- Regener, M. (2010). Umweltbelange in der Öffentlichkeitsbeteiligung eine Bestandsaufnahme. Erkenntnisse einer Untersuchung der Umweltprüfung von Bebauungsplänen [Environmental issues in public participation - an inventory. Findings of an environmental assessment of land-use plans]. Standort -Zeitschrift für Angewandte Geographie 34, 3, 97-102.
- Reuter, R. (2008). Öffentlich-Private Partnerschaften: Eine alternative Finanzierung für die Stadterneuerung? [Public-Private Partnerships: an alternative funding for urban renewal?] Standort – Zeitschrift für Angewandte Geographie 32, 4, 132-140.
- Schell, J. (2014). Zum Zusammenhang zwischen der rechtlichen Steuerungskompetenz sowie der Steuerungswirksamkeit von Regionalplänen und dem Erreichen der Ziele der Strategischen Umweltprüfung [The Relation between the Competencies and Effectiveness of Regional Plans and the Objectives of Strategic Environmental Assessment]. UVP-report 27, 4+5, 240 – 244.
- Schlotmann, C. (2012). Die Wasserversorgungswirtschaft in New York Eine "Stadt-Land-Symbiose" für Millionen [The water supply sector in New York - An "urban-environs-symbiosis" for millions of people]. gwf - Wasser Abwasser 6, 696-705.
- Steinmüller, L.M. (2013). Die Regiopole. Eine Alternative zur Mitarbeit in einer Metropolregion? [Regiopolis. An alternative to cooperating in a metropolitan region?]. Raumplanung 168, 44-48.
- Weiland, U., Klee, A., Knieling, J., & Scholich, D. (2012). Mentoring in der Raum- und Umweltplanung eine Zwischenbilanz des Mentoring-Programms von ARL und FRU [Mentoring in spatial and environmental planning - an interim review of the mentoring-program of ARL and FRU]. Raumforschung und Raumordnung 70, 1, 65-72.
- Westphal, C. (2009). Dichte als Planungsgröße im Stadtumbau? Angemessene Dichten zur Gewährleistung der stadttechnischen Daseinsvorsorge in schrumpfenden Städten. [Density as planning dimension in urban restructuring?]. Raumforschung und Raumordnung 67, 1, 7-20.