The Challenge of Intercontinental Scholarly Exchange – Lessons from Dresden - Columbus Program on Sustainable Urban and Regional Development

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Abstract

The longstanding Dresden - Columbus Exchange Program on Sustainable Urban and Regional Development focused on the exchange of knowledge between schools on different continents where the framing conditions for planning as well as the planning systems differ widely. Looking at the long-term collaboration since 1998 between the Technische Universität Dresden, the Leibniz Institute of Ecological and Regional Development in Dresden, Germany, and the Ohio State University, USA, this paper describes and discusses the strengths and challenges of the program as an example for the challenges of intercontinental scholarly exchange. The Dresden – Columbus Program was awarded the 2006 Prize for Excellence in Teaching by the Association of European Schools of Planning.

International Dialogue on Planning Systems as an Educational Challenge

Planning systems vary from region to region and country to country. The philosophy of planning, framing conditions, as well as administrative systems and planning instruments differ widely. Although this is well known these differences are often ignored. Friedmann (2004) argues that urban planning is an institutionally embedded practice that makes the transfer of knowledge within and between countries extremely complicated. Even though a comparative perspective in spatial planning can seldom provide detailed prescriptions for action, it allows practical and research horizons to expand. Studies on the relationship between planning systems and their contexts are required, especially considering the need to assess the extent to which cooperation (trans-border spatial planning) and learning can contribute to convergence in planning styles in Europe (Nadin and Stead 2008; Dühr at al. 2010). This is even more certain if we look at the discussion on replicating planning systems within the framework of international development cooperation (Rakodi 2001; United Nations – Habitat 2009).

Higher education in spatial planning accordingly has to reflect these challenges. Comparative studies can give students a broader understanding of the characteristics of spatial planning, what it is about, what its limits are, and, in particular, how institutions and practice can learn from experience in other realities (Mc Carthy 2003). This comparative perspective requires permanent dialogue among researchers, scholars, practitioners and policymakers that can bridge abstract spatial theories and specific planning challenges. Efforts to encourage international exchange through planning scholarships have increased over the past decade and

were highlighted by the first World Planning Schools Congress in Shanghai in 2001 (Stiefel et al. 2007). The dialogue in higher education in the planning field needs to be organized and managed, and should start as early as possible in the careers of planners. Developing exchange programs is an effective and affordable means for improving students' educational experience as well as developing faculty relations and building institutional resources (Warner 1992).

Experience with Intercultural Higher Education Programs

At the present time higher education is part of the globalization process and it can no longer be viewed in a strictly national framework. Globalization has transformed the concepts of time and space, and universities are now operating across spatio-temporal boundaries (Chan 2004). Consequently universities have aggressively pursued the expansion of educational programs and opportunities by offering and participating in study abroad programs and international co-operations (Whitaker 2004).

The internationalization of higher education has been defined as "the process of integrating an international, intercultural, or global dimension into the purpose, functions or delivery of postsecondary education (Knight 2003, 2-3). However, within spatial planning schools the terms "intercultural education" (Stier 2002) or "transcultural studies" seem to be more appropriate. Intercultural education implies a learning situation characterised by intercultural interaction, which is used actively as an educational resource. This kind of experience may be a way to enhance professional and intercultural competencies in the labour force (Stier 2003). Nowadays, and especially in European Union member countries, many employers stress the need for professionals with competence in languages and a knowledge of diverse cultural codes. However, the rationale of international cooperation in academia seems to be grounded in a common-sense assumption that "internationalization is good per se" (Stier 2002). International cooperation undoubtedly gives students and faculty access to new knowledge and competencies; but the communication and understanding of different cultural beliefs, principles, ideas and data should also be sought. According to Liston (2002 in Abdullahi et al. 2007:2) "internationalization does not only presume the understanding of other cultures, but also the ability to see oneself and one's culture in the eyes of the other". This is particularly true in the field of spatial planning studies, where an understanding of the institutional elements embedded within the profession in each society is essential. Thus the goal of transcultural studies in planning education is to promote and understand planning cultures.

A wide range of experience can be gathered in intercultural education in the urban planning field (Afshar 2001; Kunzman 2005) mainly through such activities and institutions as study abroad, faculty exchanges, thesis-oriented field research, internships, joint research, and/ or visiting fellowships. In comparison with other fields, planning exchange programs are usually distinguished by their short duration, intense nature, and, most importantly, by their concentration on practical problem-solving (Abramson 2005). Unlike the vast majority of bilat-

eral exchange programs, the Dresden – Columbus program on Sustainable Urban and Regional Development was a long term project to foster joint practice between students from Germany and the United States, countries with distinct approaches in spatial planning (Schmidt and Buehler 2007).

The purpose of this paper is twofold: to present and discuss the exchange program curriculum; and to examine whether and how the joint learning experience raises awareness among young planners of socioeconomic, institutional and political differences.

The Dresden – Columbus Program: Pushing Ideas under Budget Constraints

The exchange program started in 1995 with the visit of a researcher from the Technische Universität Dresden (TUD, Dresden University of Technology) to Columbus. Building on a sister city program between the cities of Dresden, Germany and Columbus (Ohio), USA, the City of Dresden provided a small amount of money to facilitate this international scholarly exchange. Dresden and Columbus are not only sister cities: the two main universities, the TUD and The Ohio State University (OSU), are also partner universities, which gave birth to the idea of a joint program in urban-regional development. However, the results of the first visit were not encouraging. The absence of a clear funding source for the program and the priority that US scholars gave to planning issues in the US versus international exchange nearly put an end to further exchange activities. Although both sides were interested in cooperation, the prospects for collaboration were not favorable.

At the same time, the Dresden Cultural Foundation (Kulturstiftung Dresden) set up by a German bank was looking for new projects fostering the development and transformation of the post-socialist city and the international networking of its institutions. It offered to provide the TUD a fixed amount of money annually for three years starting in 1997. The money was offered for educational and research activities with Columbus on two conditions: the program should be interdisciplinary, fostering the dialogue between different university departments; and a private US institution on the US side would was to provide the same amount of money to co-finance activities on the American side. A second visit to Columbus in 1996 thus provided better prospects for German-US cooperation. However, the condition that private funds on the US side had to be provided had yet to be fulfilled. The aim of the visit was therefore to develop a proposal for attracting private sponsorship. On the other hand, neither sustainable development nor urban-regional planning issues were high on the agenda of private firms or banks in the USA, especially in a very business-driven city like Columbus. This gave rise to the idea of starting the experiment in two ways. Firstly, a joint educational and research program was developed, which was expected to actively involve the urban planning and development departments of the two cities. Secondly, modern technical communication facilities for distance learning were regarded as a cornerstone in implementing the ambitious program. After intensive discussions in Columbus and Dresden, the program received the support of the Dresden born executive director of the Columbus-based Huntington Bank.

In 1997, the program became operational with the exchange of students, combined with internships in the planning departments of the two cities and mutual visits by faculty members from Dresden and Columbus. The results of the first year were encouraging, as all parties expressed their interest in continuing with the activities and further developing the cooperation idea. In 1998, after intensive efforts to build interest among the students at the two locations, the full program could be implemented for the first time. This implementation included the exchange of planners from the two cities, as well as faculty and students. From then on, the program grew and improved steadily, receiving not only the strong support of the institutions concerned, but also became a successful co-operative undertaking between the two sister cities and partner universities.

Participating Institutions – Addressing Complexity in Spatial Planners' Tasks

From the beginning, the Dresden – Columbus Program was complex in nature and involved several institutions in both cities. It was organized by the TUD through its Chair for Spatial Development, in close collaboration with the IOER on the German side and OSU through its City and Regional Planning program on the U.S. side.

The TUD Chair of Spatial Development is engaged in a Master's Program on Spatial Development and Natural Resource Management, a graduate program which focuses on current urban and regional challenges at the interface of environmental science and spatial science. Research addresses basic issues of resilience to demographic and climate change at different spatial levels. The IOER is a research institute jointly funded by the Federal Republic of Germany and the Free State of Saxony. The institute addresses the scientific basis for the sustainable development of the urban region in the national and international context. On the U.S. side, the program is organized by faculty in the City and Regional Planning Program of the Austin E. Knowlton School of Architecture at OSU.

One of the specific features of the TUD/OSU exchange program is its close connection with the planning departments of the cities of Dresden and Columbus. The Dresden Planning Department is responsible for strategic urban planning, urban land use planning and zoning, as well as urban rehabilitation issues. The Columbus Planning Office guides and shapes growth and change in Columbus to harmonize social, aesthetic, cultural, political and economic requirements. Staff members of both departments actively participated in the exchange and offered students their practical experience, becoming personally involved in the exchange in both countries, providing internships for students.

Program Components and Structure

The major goal of the program was to familiarize students with the spatial planning framework in both the US and Germany, with special reference to the urban regions of Columbus and Dresden. The program consisted of three elements: a seminar, study tours, and poster projects:

The seminar was the main element of the program and focused on a specific issue every year relevant to urban-regional development in Dresden and Columbus (Table1). Both academic teams narrowed down the main topic, establishing associated research questions to be answered by a mixed German – US group. The exchange involved students from the U.S. and Germany either specializing or having an educational background (bachelor) in different fields, e.g. city and regional planning, geography, transportation and landscape planning, architecture, sociology, international politics or engineering. During the spring term, the two classes worked on background reading, becoming familiar with the topic both in their home country and in the partner country and held video conferences to discuss different issues. Fundamental institutional and structural differences were discussed with spatial trends and patterns. Furthermore, students developed team-working, notably cross-cultural skills, making use of the technical possibilities of distance communication. One of the key features of the exchange was that the students were assigned to different work groups from the beginning of the program and used e-mail and video conferencing for regular communication. Familiarizing students with the application of modern information and communication technologies was a great help in achieving all learning objectives. The program was organized to ensure that distance learning methods and video conferencing could be intensively used.

The study tours were the second important element of the program. They built on the assumption that, although video conferencing may facilitate successful collaborative student work even over great distances, personal experience and exposure to a different planning environment is required in order to understand the situation in the other country and to familiarize oneself with the functioning of urban-regional planning within a specific context. Excursions consisted of two parts: One part took place in Germany. The US students together with their supervisors usually stayed in Dresden for a two weeks period in the month of June, immediately at the end of the spring quarter in the U.S. while the summer semester in Germany was still running. The second part of the excursion took place in the U.S. during a two week period in August, when the American students were in their summer term of classes and the German students had their summer break. During the excursions the two classes worked together in Dresden, Columbus and nearby cities (Berlin, Leipzig, Goerlitz, Chemnitz or Weimar in Germany, and Cleveland, Pittsburgh, Detroit, Indianapolis or Cincinnati in the U.S) in order to obtain a broader view on the specifics of the issue being investigated. While individual presentations on background papers were conducted during the Dresden excursion, joint group results were presented in Columbus. Excursions were always strongly supported by the respective city planning departments. Team representatives usually participated in travel, as well as in the local excursion. Practitioners participated directly in the course, giving lectures, organizing site visits and other elements of the excursions and providing internships for students. This contributed to students' understanding of different planning systems and their structural backgrounds.

The third element were poster projects carried out by the same groups working on the seminar papers during both excursions. The aim of the projects was to foster students' direct exposure to a concrete planning-development issue and strengthen their capacity to cope with "real" problems. Usually, a project comprised background research, data collection, meetings with local experts and actors, and site visits. Students presented their results in a public forum including local planners and interested private development bodies, NGOs, donors etc.

Table 1 Dresden-Columbus Program – List of Exchange topics 1998 - 2011

Year	Topic
2011	Adapting to climate change – strategies to increase urban – regional resilience.
2010	Sustainable urban development – open spaces large and small and their relationship to urban regional resilience.
2009	Adaptation to change – aging as a challenge to urban and regional development.
2008	Urban resilience - how do cities react to change?
2007	Back to the city? – reurbanization in the European and US-American context.
2006	Looking inward – culture and tourism-led urban regeneration.
2005	Living life on the edge – consequences for the urban-rural fringe.
2004	Major crises and hidden challenges – how urban regions react to problems.
2003	Sustainable development in the urban region – a focus on revitalization.
2002	Improving the livable environment in the urban region.
2001	Community redevelopment in a regional context – problems and solutions.
2000	Transformation at the urban edge – urbanization of exurbia.
1999	Regional growth and regional governance – the development of urban regions in the US and in Germany.
1998	The Americanization of East German cities as a problem for Germany and a mirror for the United States".

The Program as an Academic Innovation

The exchange on sustainable urban and regional development between Germany and the U.S. described above was academically innovative in a number of ways.

 The program fostered an international perspective on planning, and strongly involved planning practice from two continents with fundamental institutional and structural differences. It fostered joint working experience between students from Germany and the U.S. Excursions involved even more practitioners than the seminars, since students met and worked with local, regional and state officials as well as with NGOs on both sides during their work.

- The program's interdisciplinary nature provided perspectives on a wide range of fields. Students from different disciplines had access to the course. This was based on the assumption that they would be required to work together in their later professional life, e.g. planners, transportation engineers, environmental experts, and urban sociologists. The course therefore provided "future professionals" at an early stage in their education with the unique opportunity to learn how to work together with others from different study backgrounds.
- The course adopted a communicative approach and combined different teaching elements such as seminars, study trips and planning projects, in the form of studios.
 Teaching was combined with intensive discussions and project work. This facilitated theoretical debates as well as practical considerations to be applied in "real life" cases.
- The exchange strongly encouraged working with communication technologies: Students from Germany and the U.S. worked together in teams from the beginning. This required intensive use of ICT (e.g. individual video conferences, e-mail etc.). Group video conferences were also organized to facilitate joint lectures and group discussions. Therefore, group sessions were synchronized in Germany and the U.S.
- The course was highly participatory in nature. Students were encouraged to bring in their own ideas and take responsibility in carrying out their own projects, including collaboration with decision makers and planning practitioners. To ensure their success in this highly participative environment, students were given constant feedback, monitoring and encouragement.

The Challenges: Specific Features of the Program

Fifteen years' experience with the program shows how difficult it is to develop and sustain distance learning and intercontinental exchange programs. Achieving effective critical analysis of planning practices in students' country in the light of practices in a completely different setting is also a major challenge. There are three paramount factors for the success of such a program: the appropriateness of the program's concept, the effectiveness and efficiency of implementation, and the qualifications and preparedness of the students.

As far as the appropriateness of the concept is concerned, a co-operation program of this kind is an ongoing learning process. Over the past fifteen years the general concept of the program proved to be innovative and attractive. However, both major and minor features were constantly modified. For example, it did not prove feasible to distinguish between paper groups (collaborating in writing the seminar paper) and poster groups as in the initial years of the program. In recent years, students from one group jointly worked on the seminar paper and the posters on the same topic in the U.S. and in Germany. Another change in

concept was very closely linked to technical improvements: It proved worthwhile to place more emphasis on video conferencing presentations for the whole group and to schedule video conferences more often than in the past. During a ten to twelve week term, it seemed necessary to schedule a minimum of 3 video conferences, the first perhaps providing a general introduction and a brief students' presentation on the background paper and the other two focusing on specific basic issues which could be helpful to both the American and German groups in better understanding the planning philosophies and approaches in the two countries and the state of the art of the specific topic (Table 1). This is even more important if participants in one country do not have the same planning education or come from different fields. Learning processes require monitoring and evaluation. Within the framework of the program, constant feed-back played an important role. The progress of work was constantly monitored. The seminar was evaluated at the end of the term/semester. Students were constantly encouraged to propose improvements to teaching methods.

With regard to the second factor, the effectiveness and efficiency of the implementation of the program, financial aspects, administrative support needs, and technical requirements play a role. The program was costly and would not have been possible without external financial support. The quality of the program depended greatly on adequate funding. Additional financial support is needed if students are to continue working on their topics beyond the program. In several cases, students wrote their master's or doctoral thesis on program-related topics, requiring them to carry out on-site case studies some time after the program had ended.

Administrative support was as important for the success of the program as adequate funding. Given the complexity of structures, the cooperation of a number of institutions was required. First of all, cooperativeness on the part of the respective city planning authorities played a crucial part in such a practice-oriented educational program. Their involvement was important because it provided constant case-related input. Moreover, an exchange of experience between the planning offices can further enhance such a program. This was the case in the program under discussion, and it has contributed to specific improvements in urban planning in both cities, e.g. collaboration with different actor groups in Dresden or awareness of possible open space uses for flood plains in Columbus. The direct links with research projects and institutes also contribute to the effectiveness and efficiency of the program.

Moreover, organization and logistics make high demands on the institutions responsible. The organization of the group and personal video conferences requires technical expertise. In this regard, the computer centers of the universities and their contribution to the program were extremely important. Furthermore, the organization of student travel, the planning of the seminar and the excursion, the conduct of public workshops or presentations, as well as the preparation of poster projects are difficult and time consuming. It has proved very useful to involve the participating students right from the beginning of the process. Their motiva-

tion improves if they can contribute to shaping the program. This also gives them an ongoing sense of connectedness to the program and its development.

A third important factor for the success of a program such as this is student preparedness and the experience. Practice shows that only very active and knowledgeable students participated. Especially on the German side, this is easily explained by the fact that participation in the program is not an easy task. Most discussion, even among Germans during seminars, was in English and the amount of time to be spent on program activities was comparatively high. For both nationalities, students had to be open to interdisciplinary work and were required to co-operate with foreign students whom they initially did not know and on whom they depended heavily for the outcome of their work. On the other hand they were given a oncein-a-lifetime opportunity to experience problem solving across language and cultural barriers. The preparation and presentation of findings in a public forum was also good professional training and the fact that this took place in a foreign language was an additional benefit for the German students. In general, programs of this kind may become a powerful tool for increasing students' ability to critically analyze planning issues, organize joint research, solve problems and generally "think outside the box" of their own experience.

Reflection: Lessons for the Potential Application at other Institutions

The course and its elements can be reproduced at other institutions. The course combines standard elements such as seminars, study tours, and poster projects and requires only a relatively small core group of committed faculty staff to be set up on both sides. Given an interested faculty, any two departments in different countries could develop such a course following our model. The fact that the students are not required to register for classes at the other university makes it much easier to deal with than many other exchanges. However, there are also certain factors that may help in developing such a course:

- There should be strong commitment by the faculty of the institutions on both sides. Well-established and close working relations are also an advantage. A constant exchange of ideas among the instructors on both sides should take place. The course requires a great deal of preparation and interest among core organizers for an international comparison of planning systems. This includes intensive mutual coordination in all phases of the program. It also needs the strong involvement of practitioners, who have to be motivated for both international cooperation and for an exchange with academia. The support of local planning organizations is essential for the success of a program like this.
- Students must be advanced enough to fully understand their own (planning and land management) system, the drivers of urban development and basic concepts such as sustainable development, climate adaptation or brown fields. Furthermore, students must be willing to organize elements of the program themselves (e. g. interviews and site visits, contributing to cultural experience beyond the "official" program).

- The course should be well prepared. This applies to the specific topic to be taken up, which must be current, relevant and attractive to both sides, as well as to the elaboration of detailed teaching concepts and the organization of individual elements in the different settings. The concept should be developed stepwise. Although the general concept may initially prove highly successful, there is no guarantee of permanent success. Constant monitoring and evaluation of the program and its limitations are therefore required to move forward with the course and exploit its potential to the full.
- To make the exchange an attractive experience for students, successful participation in the course and fulfillment of its requirements should be comparably recognized by both partner universities within their own curricula. Equal student participation and responsibilities in the program is important for student commitment. University offices whose job it is to encourage international cooperation can also be helpful for the exchange.
- The exchange requires adequate technological facilities, such as fast connections for acceptable videoconferencing quality. The technological centers (e.g. multi media centers) of universities should therefore be involved at an early stage in planning the program. However, a single video conference can be easily and relatively inexpensively staged by just about anyone with a computer.
- There should be only one working language. In many cases English may be the best choice, although in other contexts other languages may prove more appropriate. This will depend on the individual setting of the course and the partners involved. Instructors should be aware of potential language barriers or cultural misunderstandings in planning terminology even if all students posses excellent knowledge of the working language.
- Funding is crucial in making the course a financially viable option and experience for students. Working in sister-city organizations to find local private sponsors can be a useful way to raise funds. Sharing the results of the program can help build longstanding partnerships.
- The exchange can bear fruit beyond the confines of the student exchange experience. It facilitates collaborative research projects among faculty and expands the resources available to other departments, administrators and scholars within the supporting universities and institutions. For example, studies on the suburbanization of households in the two countries (using surveys of recent movers), research on transportation differences, and work on international communication and educational issues. Thus the projects provide vast potential for involving junior faculty and advanced students.

• Finally, with regard to institutional co-operation, the program may be regarded as an open network. In Columbus the civil engineering, sociology, geography, architecture, landscape architecture and city planning fields have already participated in the program. In Dresden, aside from the spatial development and geography chairs, the education, transportation, architecture, and computer (GIS) fields have been actively involved in program activities. The network is open to interdisciplinary education and research in the field of urban-regional development. More importantly, however, the program is generally open to new partners who could in some years link up to provide a trans-continental research and training facility, entering a new dimension of distance learning and intercontinental scholarly exchange programs for students, faculty and institutions.

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