

## **NEW PERSPECTIVES IN PLANNING EDUCATION: HOW PLANNERS CAN COLLABORATE IN INTERDISCIPLINARY WORK ENVIRONMENTS**

Bahar Gedikli, Ela Babalık-Sutcliffe

<sup>1</sup>Middle East Technical University, gedikli@metu.edu.tr

<sup>2</sup>Middle East Technical University, ebaba@metu.edu.tr

Keywords: Planning education, Interdisciplinarity, Multiculturalism,

### **Abstract**

The ever-networking contemporary society has impacted on urban areas, making their physical, social, economic and organizational dimensions more complex. Consequently, sustainable spatial development has become a challenging aim, which requires planners to collaborate with professionals from other disciplinary domains. Many urban sustainability problems necessitate joint action of different practitioners/researchers (representing public and private institutions and/or non-governmental organizations). Their involvement may range from the physical/design dimension to technical/engineering, sociological, economic, environmental and organizational dimensions. These public and private actors explicate their standpoints, negotiate, and develop a common response to a specific problem.

Given the increasing need for collaboration with different professionals, planning education should be improved in such ways to prepare students for interdisciplinary work. Furthermore, today city planners increasingly work in international projects/ institutions requiring a global as well as a multicultural understanding of urban problems. Both interdisciplinary and multicultural approaches should be incorporated into planning education.

This study portrays the findings of an international interdisciplinary programme (an Erasmus Intensive Programme), where 45 master students from 9 different countries with different disciplinary backgrounds (city planning, architecture, sociology, geography, territorial sciences) came together. They worked in teams to develop sustainable spatial development projects for an urban area in Ankara. Based on questionnaires with students, the study shows students' perspectives about interdisciplinarity; what new perspectives they learned from one another, what challenges they faced. The outcomes help us understand the achievements and challenges that interdisciplinary experiences present, provide lessons in preparing similar programmes, and better prepare planning students for interdisciplinary work environments.

### **1. Introduction**

The ever-networking contemporary society has impacted on urban areas, making their physical, social, economic and organizational dimensions more complex. Consequently, sustainable spatial development has become a challenging aim, which often requires planners to collaborate with professionals from other disciplines. Many urban sustainability problems necessitate joint action of different practitioners and researchers from public and private institutions and/or non-governmental organizations. Their involvement may range from the physical/design dimension to technical/engineering, sociological, economic, environmental and organizational dimensions.

Obviously urban planning and design does have a domain of its own, it involves in the physical organization of urban space starting from the regional scale and going down to the neighbourhood

and even smaller spatial scales (Balaban et al. 2014). The increasing need for joint action with other professionals does not make planning an “interdisciplinary” area; planners collaborate with others keeping their disciplinary position and expertise like other professionals do. Having said that, given the increasing need for collaboration with different professionals, planning education should be improved to prepare students for interdisciplinary work. Furthermore, today city planners increasingly work in international projects and institutions requiring a global as well as a multicultural understanding of urban problems. There is a need to incorporate both interdisciplinary and multicultural approaches into planning education.

Today many problems do not clearly fall into the research and practice of one single discipline; they stand in a place where several disciplines could intervene. There are three different modes of collaboration of multiple disciplines so as to tackle such problems and phenomena: First is the *multidisciplinary* approach, involving researchers from two or more disciplines who work jointly on a common problem, without modifying disciplinary approaches or developing synthetic conceptual frameworks. The second is the *interdisciplinary* approach that uses an innovative conceptual framework to combine and modify two or more disciplinary approaches. The third is the *transdisciplinary* approach which involves non-academic practitioners working with academics on real-world problems (Tress et al., 2003; cited in Graybill et al., 2006).

Another set of definition is developed by Rosenfield (1992). He defines multidisciplinary projects as the ones in which researchers from different fields contribute methods and ideas of their own disciplines towards a research question. Meanwhile, interdisciplinary projects require closer collaboration of researchers from different fields who work together on a common problem. In transdisciplinary projects, researchers from different fields work closely together on a common problem for a longer period, and develop a shared conceptual model that integrates and transcends their disciplines (Rosenfield, 1992; cited in Mitrany and Stokols, 2005).

There are obviously certain differences in these sets of definitions. For some other study, it would be necessary to differentiate between the approaches and discuss them separately; however, this study aims at emphasizing the increasing “collaboration” of planners with other professionals for multi-, inter- and/or transdisciplinary purposes. Therefore, it brings these approaches together since all of them imply collaboration of professionals from different disciplines, and uses the term “interdisciplinarity” to refer to all of them.<sup>1</sup>

This study, after reviewing the literature on interdisciplinarity in planning education, elaborates the achievements of an interdisciplinary and international programme (an Erasmus Intensive Programme) in this respect. The programme was held twice in Ankara, each of which was organized with the participation of approximately 45 students with different disciplinary backgrounds from 9 different countries. They worked in teams to develop sustainable spatial development projects for an urban area in Ankara. Based on questionnaires with these students, the study shows students’ perspectives about interdisciplinarity in a work environment; what new perspectives they learned from one another, and what challenges they faced. The outcomes help us understand the achievements and challenges that interdisciplinary experiences present, provide lessons in preparing similar programmes, and better prepare planning students for interdisciplinary work environments. The study concludes with implications and recommendations for planning education.

---

<sup>1</sup> There are also other terms in the literature such as interprofessional and cross-disciplinary collaboration. We have chosen interdisciplinarity, as it is more commonly used in Turkey.

## 2. Interdisciplinary approach in planning education

As mentioned before, complex urban problems require collaborative work of different professionals. Sustainable development, environmental degradation, and brownfield redevelopment are among this kind of problems and phenomena (Mitrany and Stokols, 2005). As Davoudi (2010, 34) argues, “*interdisciplinary perspectives provide a useful means of dealing with complex or ‘wicked problems’ which cannot be addressed satisfactorily by a single discipline*”. Stating that in the real world, interesting and complex questions are left at the interfaces between disciplines, she suggests that addressing them requires synthetic and integrative approaches and that it is this need for integration which puts spatial planning in a position of strength. While some consider the interdisciplinary basis of the planning discipline as a weakness, others see it as a key strength (Davoudi, 2010).

There are two major arguments that support the interdisciplinary approach. The first one suggests that it fills the gaps that disciplinarity leaves empty, or surpasses what disciplinarity cannot achieve. The second argument mentions that interdisciplinarity already exists within disciplines. That is, disciplinarity and interdisciplinarity have evolved in an interlacing manner, with latter growing within disciplines. The interactions that are created via boundary crossing are seen as central to the production of knowledge as boundary formation and maintenance (Chettiparamb, 2007 cited in Balaban et al., 2014).

Those who advocate interdisciplinary learning in university education justify it with the following arguments (Woods, 2007):

- Student engages in his/her own discipline critically by viewing it from another perspective,
- Contemporary working patterns increasingly call for interdisciplinary team work,
- Present global challenges require new, holistic approaches.

Essential to the interdisciplinary attempts is the *ability to understand and be understood* in a diverse group of specialists. Woods (2007) states that interdisciplinarity, by implication, is all about communication. Experience of this type of collaborative problem-solving holds potential for developing students’ abilities in effective interdisciplinary interaction after graduation.

Since the complex spatial phenomena often require an interdisciplinary analysis and problem-solving approach, planning schools have to play a major role in providing students with skills for interdisciplinary work. Here, it is important to underline that interdisciplinarity in planning education refers to many different levels and types: It may refer to developing a new interdisciplinary graduate programme in which urban planning is a significant contributor; it may refer to a specific course in the undergraduate/graduate planning curriculum which is conducted cooperatively by teachers from different disciplines; it may be a joint course of more than one department including urban planning; it may be a temporary activity/summer school/workshop where both teachers and students are from different professional backgrounds, etc. The content of interdisciplinary courses or programmes, and the extent that planning schools adopt them certainly vary from one context to the other, depending on specific needs and priorities.

Planning has a strong interdisciplinarity in its root: in addition to the knowledge of planning, knowledge of other disciplines that closely influence the built environment, the society and all socio-spatial processes are relevant to a planner, and hence addressed in most planning education curricula. However, only delivering the knowledge of other disciplines does not necessarily help an education programme to equip its students with the skills and experience of working in interdisciplinary

environments. Sandercock (1999) argues that the profession is in danger of becoming irrelevant if it does not adopt a more interdisciplinary approach to the problems of the urban habitat but that there are difficulties in adopting more interdisciplinary studies, often related to the fears of not satisfying professional requirements for accreditation. Doebele (2007) also states that true interdisciplinary efforts in universities are difficult to achieve due to the pressures of time and conflict of basic interests.

Urban planning education is composed of theoretical as well as practical courses. Planning studios are of the second type, where students exercise what they are going to do in practical life. The Planning studio models after the approach of “learning by doing” and it is the platform where theory and practice comes together, with theoretical courses feeding the studio. Studio can also be considered as an ideal platform for facilitating interdisciplinary work environments. It is common that instructors with different disciplinary backgrounds come together as the members of the studio teaching staff. This may help reflect, albeit only to a certain extent, the interdisciplinary perspectives that may be considered in handling an urban problem. This is also supported by a survey made with head of planning schools in Turkey, in which the results reported showed that studios were seen as the main arena for providing an interdisciplinary study experience for students, and that this was achieved through the participation of teachers from different disciplines or through role playing by students (Balaban et al., 2014).

Planning studio courses often comprise a field trip, and this may be another tool in creating an interdisciplinary experience as Doebele (2007) suggests. Tackling a specific field problem by a group of students from varying professions can be challenging but the results rewarding. According to Doebele, field trips can also be a means for bridging the cultural gap between different members of the class. The research below also proves that the field survey performed in the Intensive Programme was very useful for the analysis of the same problem from different disciplinary angles: students mention that they analysed the case study area with the approaches and tools of their own disciplines, but in their interdisciplinary teamwork they were amazed by the fact that the approaches of students from other disciplines were also meaningful for the very same case study area, and synthesizing the outputs of all of these perspectives enriched their team project.

The way fieldtrips are used in planning schools also point to an international experience (Peel and Frank, 2008) in addition to an interdisciplinary one. These fieldtrips provide an opportunity for students to learn about urban problems and processes in a different urban setting, but also experience different perspectives on how urban problems tackled in a given locality. The research below also supports this idea: Participants of the IP found it useful to get in contact with local culture.

Bringing together opportunities for interdisciplinary and international work-environments, the Intensive Programmes implemented through Erasmus deserve attention. Balaban et al. (2014) also mention in their research depicting the interdisciplinary study opportunities in Turkish planning schools that Intensive Programmes were highly valued by chairpersons and instructors who experienced them. Such experiences were limited in number for the case of Turkey, but they created a work environment where planning students were required to work with team members from other disciplines, often architects, in order to prepare the final product of the Intensive Programme. Building on these arguments, the current study focuses on an Intensive Programme in Ankara that brought students not only from city planning and architecture programmes, but also departments of geography, sociology, social and territorial sciences.

### **3. Evaluation of the interdisciplinary aspect of an education experience: An Intensive Programme held in Turkey**

The research below was conducted with the students who participated in the Intensive Programme held in Ankara twice. Each of them was organized with approximately 45 students from 13 different schools across Europe for a duration of 14 days. The programme focused on two case study areas in the city. It was held in the form of a short studio course, where study teams were composed with students from different disciplines and different countries. These groups worked on one of the case study areas, analysed its problems and potentials, and developed strategies and policies through a sustainable urban development perspective. Schools were from 9 different countries (Belgium, France, Netherlands, Portugal, Slovakia, Spain, Sweden, UK, and Turkey) and include fields of city and regional planning, architecture, geography, social and territorial studies, and sociology. The analysis regarding this interdisciplinary and international experience is described below.

### 3.1 Findings of the Questionnaire Survey

The questionnaire survey was responded by 35 students with an average age of 26 (11 male and 24 female). 27 of them were enrolled in a graduate programme, while 8 of them were undergraduate students when they participated the IP course. They represent 13 schools from different countries; namely 10 students from Italy, 8 from Turkey, 4 from Greece, 3 from Belgium, 3 from Netherlands, 2 from France, 2 from Portugal, 1 from Sweden, 1 from UK, and 1 from Slovakia. Their disciplinary domains are displayed in the following figure:

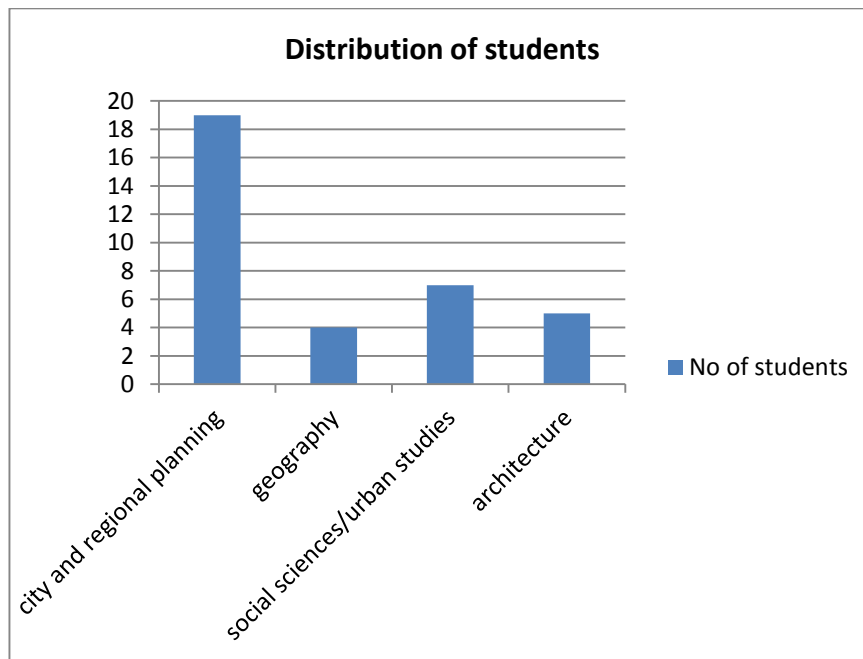


Figure 1-Disciplines of students who participated the questionnaire survey

The participants of the IP were asked a number of questions on the interdisciplinary and international nature of the programme: how they viewed the experience, what challenges they faced, and how they thought it impacted on the final product were few of such questions. Below, the replies of respondents are described under headings that correspond to each of these questions:

#### 3.1.1 Working/studying with those from other disciplines

The first question regarding interdisciplinarity was whether the participants found it important to work/study/collaborate with those from other disciplines. The results reveal that the entire participants

consider it important to collaborate with people from different disciplines. The benefits of interdisciplinary collaboration that the participants have mentioned in the survey can be categorized as follows:

• **Learning different perspectives and achieving more innovative outcomes:**

Seventeen students believe that interdisciplinary work allows learning new perspectives, new terminologies and methods. They mention that through interdisciplinary work, a given problem can be handled from different points of view which can complement one another. Four students (of the 17), together with the significance of different perspectives, also express that interdisciplinary work leads to innovative conclusions/outputs. One participant states that such work not only helps to understand other dimensions of the topics at hand, but sometimes to discover new ones. Another student explains that different points of view help understanding the given problem in a larger perspective and adds that interdisciplinary work also provides an opportunity to assess one's own understanding.

• **The subject matter, namely cities/settlements, requiring interdisciplinary collaboration:**

Eight participants emphasize that interdisciplinary analysis is useful to analyze the dynamics and characteristics of cities. The “complexity” of the object necessitates a team with different skills.

• **Improving teamwork skills:**

Six students mention that interdisciplinary educational activities improve their teamwork abilities. Three (out of 6) students say that these experiences are useful, because practical life often requires to work in teams.

• **Improving one's skills in his/her own discipline:**

Six students believe that interdisciplinary work, via sharing knowledge and experience, contributes to their own professional skills and knowledge. One student states that a too specialized knowledge might limit the horizons, and thus we must draw inspiration and contribution from others. Another one mentions that interdisciplinary work helps to develop a more interdisciplinary perspective in his own field of research.

• **Understanding and responding to multifaceted problems:**

Two students highlight that the results of interdisciplinary work are stronger in order to face the multivariable social, economic, cultural and political spheres.

Consequently, the most highlighted benefit of interdisciplinary working is learning new approaches and methodologies to understand a given problem in a larger perspective, and provide better and more innovative solutions. The figure below shows the entire benefits mentioned by the participants of the survey.

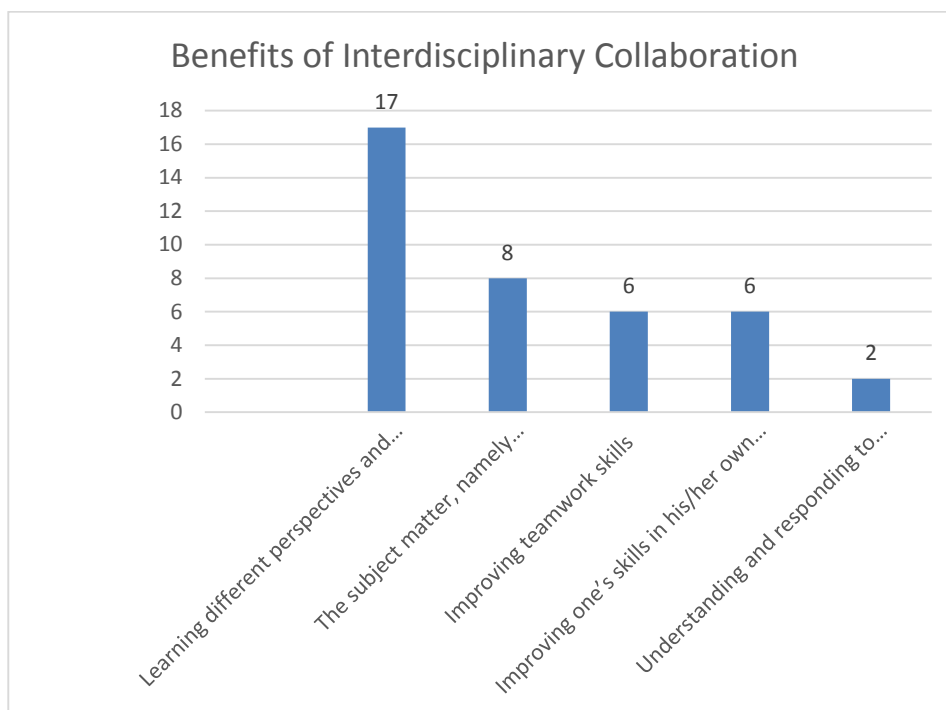


Figure 2-Benefits of interdisciplinary collaboration in students' views

### 3.1.2 Courses for interdisciplinary working/studying

Students have been asked whether there are such courses in their undergraduate/graduate programmes that provide them with the opportunity to work with people from other disciplines. Participants of the 11 schools (out of 13) answer positively to this question. The courses which provide them with interdisciplinary experience represent a very large variety that include planning theory, anthropology, economics, ecology, history, sociology, chemistry, GIS, research methods, study trip, and so on. As mentioned in Section 1, the approaches to interdisciplinarity in education can differ from one context to the other. Responses of students reflect that they have experienced interdisciplinary learning environments in different courses.

### 3.1.3 Interdisciplinary working/studying experience within the IP course

The questionnaire asked the participants whether the IP course in Ankara provided them with a useful learning experience in terms of working with people from other disciplines. All of them respond positively to this question. They have been asked to elaborate particularly what aspect(s) was/were useful in the course. Their answers are grouped as follows:

- **Learning different perspectives and approaches:**

27 participants express that it was useful to learn different perspectives, approaches and methodologies of other disciplines during the IP course. Their responses reveal that the interdisciplinary work provided them with the opportunity to deeply understand the object of the project. One student mentions that it was particularly interesting to arrive at a common point of analysis with inputs from multiple disciplines which resulted in a holistic understanding of the subject of development. Another one states that the final projects also highlighted various expertise of students from different backgrounds. Six students (of

the 27) give examples in their responses, eg. how different disciplines see problems and in what aspects they complemented one another in their teamwork during the IP.

#### • Learning teamwork, time and conflict management

Nine students emphasize the challenging aspects of the interdisciplinary teamwork and how they learned to tackle with them. Different views may arise in a teamwork and time constraints may be stressful. Their responses reveal that during the IP course they participated, they learned to communicate and collaborate in order to produce the demanded work in a short time.

#### • Learning in a multicultural work environment

The IP course provided students not only with an interdisciplinary learning experience, but also with an international work environment. Nine students point to this aspect as a useful experience. Two students also point to the importance of working in a different planning context. One of them explains that conducting questionnaires at the work field and getting in touch with local people were useful.

The benefits of interdisciplinary learning experience in the IP with respect to the responses of students are summarized in the following figure:

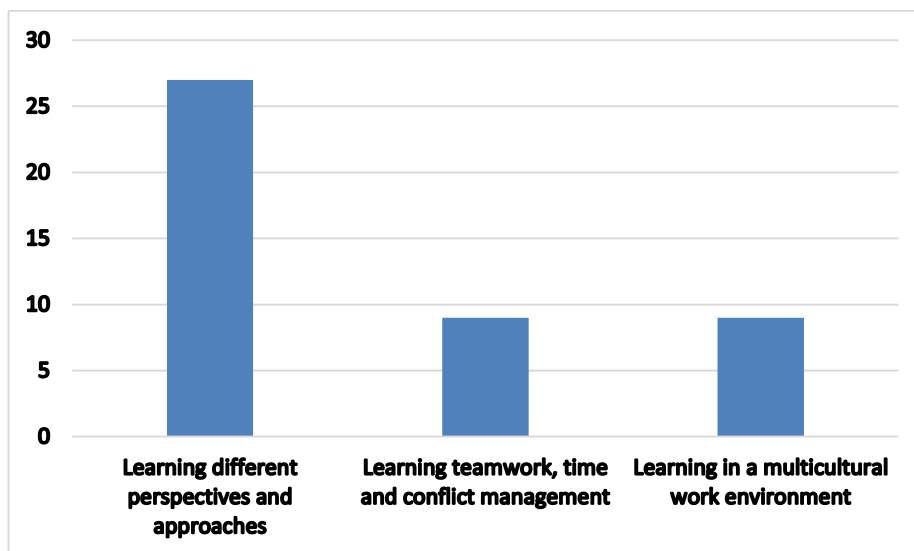


Figure 3-Benefits of interdisciplinary learning experience in the IP in students' views

#### 3.1.4 Disciplines that were productive to work with

The participants were also asked which other disciplines they found it particularly useful and productive to work with. They were free to indicate as many different disciplines as applied. The analysis of the replies shows that both city planners and sociologists are indicated by 23 of the 35 participants. Architects and Geographers are indicated by 18 participants. Five of the respondents state that all of the disciplines involved were equally productive to work with.

The answers to this question was also analysed by separately observing the replies given by city planning students and students from other departments. 18 of the students of city planning departments cite sociologists as useful and productive to work with; 14 of them indicate geographers, 13 of them architects, and 12 of them city planners. Among those who were from other departments (non-city planning departments), 10 of them indicate city planners as useful and productive to work with; 6 of



them indicate sociologists, 4 of them architects and geographers. In short, it is interesting to note that those from planning and sociology schools are considered as particularly productive to work with.

### ***3.1.5. Learning experience due to the international multi-cultural nature of the IP***

As described before, the IP Course was carried out in multicultural working teams with both students and teachers from different countries. The participants were asked whether they found this particular aspect useful, i.e. whether they learnt different academic perspectives from those coming from different countries. In this question no options/answers were offered to students and they were just asked to explain their experience and thoughts on this multicultural environment. Only three participants say that multi-culturality was not something they observed and felt strongly during this programme; but remaining 32 participants gave answers and made comments about what they took from this multicultural working environment. Their answers can be grouped under two categories: those who commented on the different academic perspectives they learnt from team-members and teachers coming from different countries; and those who commented on different teaching/learning models they realised that existed in different countries.

#### **• Different perspectives due to different country/cultural backgrounds**

Twenty-one respondents stress that it was a very enriching experience to realise that same topics were treated, understood, analysed and solved in different ways by those who came from different countries, because due to their cultural, social and political context they interpreted phenomena differently. There were similarities too, and seeing both differences and similarities between those from different countries and different cultures was considered as a valuable experience. Some respondents say that even the style of working, in terms of time management, creativity, effectiveness in team work, and visualisation of ideas would differ from country to country. One participant particularly stress that to witness this multicultural environment of working and to learn different perspectives from those coming from different countries and schools were in fact the most important opportunity that the IP provided. Below are some quotes worth highlighting:

*“Naturally, the way of thinking on planning and also more general issues is different in different regions of Europe (or the world)... It was interesting to see what the hot topics are in some countries as people from these countries (sub)consciously pushed these agendas. So, in a way, one could observe “the evolution of (planning) thought” in real world practice.”*

*“Planning is vested in the culture of a country and this became apparent in the way different participants of the IP worked and also the solutions they brought forth. My own cultural background is known for its strong governmental role in urban planning, while other cultures have a different role for the government in planning. The combination of these views on planning were very interesting and made me realize not only that there are difference in perspectives on planning, but also to combine these views which can make a planning policy stronger.”*

*“It was very interesting to see that many of the students and professors shared the same concerns especially about the (real estate) “development” industry, politicians, and executive powers. It was helpful to see how different planners and architects in different parts of the world have dealt with very similar issues.”*

#### **• Different styles of teaching, learning, and student-teacher relations**

11 respondents comment not on the variety of academic perspectives but the differences they realised in the teaching and learning styles, and in student-teacher relations due to different cultural backgrounds of those from different countries. Some comment on the differences in training styles and how different learning outcomes this could result in. It is stated by one participant that “in the IP programme, one could easily understand the differences of education systems in different countries”. Two of them note that there were “different kinds of communication between teachers and students” in different countries. Most of them valued this realisation regarding the differences in teaching styles.

### 3.1.6 Challenges

Participants were asked whether they faced any challenges in working in an interdisciplinary and international environment during the IP; and if they did they were asked to choose among a number of possible answers. They were able to indicate as many challenges as applied. 9 out of 35 students state that they did not experience any challenges. The remaining indicate a number of challenges. As seen in Figure 4, the difficulty in communicating in a language that was not their native tongue, is indicated as a challenge by 10 students. This shows that rather than the interdisciplinary environment, the international context was found challenging. Following this challenge, the difficulty to reach a consensus in team work is indicated by 9 students as a problem they faced in this IP experience. This may not necessarily be related to the interdisciplinary aspect but to the students’ familiarity with teamwork although only one of them state that this was their first time in carrying out a teamwork. The difficulty in understanding the approaches and perspectives of those from different disciplines is indicated by 7 students. Similarly, the difficulty in understanding different perspectives of those coming from different countries (due to differences in local context) is indicated as a challenge by 7 students. It is seen that 6 students found it difficult to explain to others their disciplinary approach and methods.

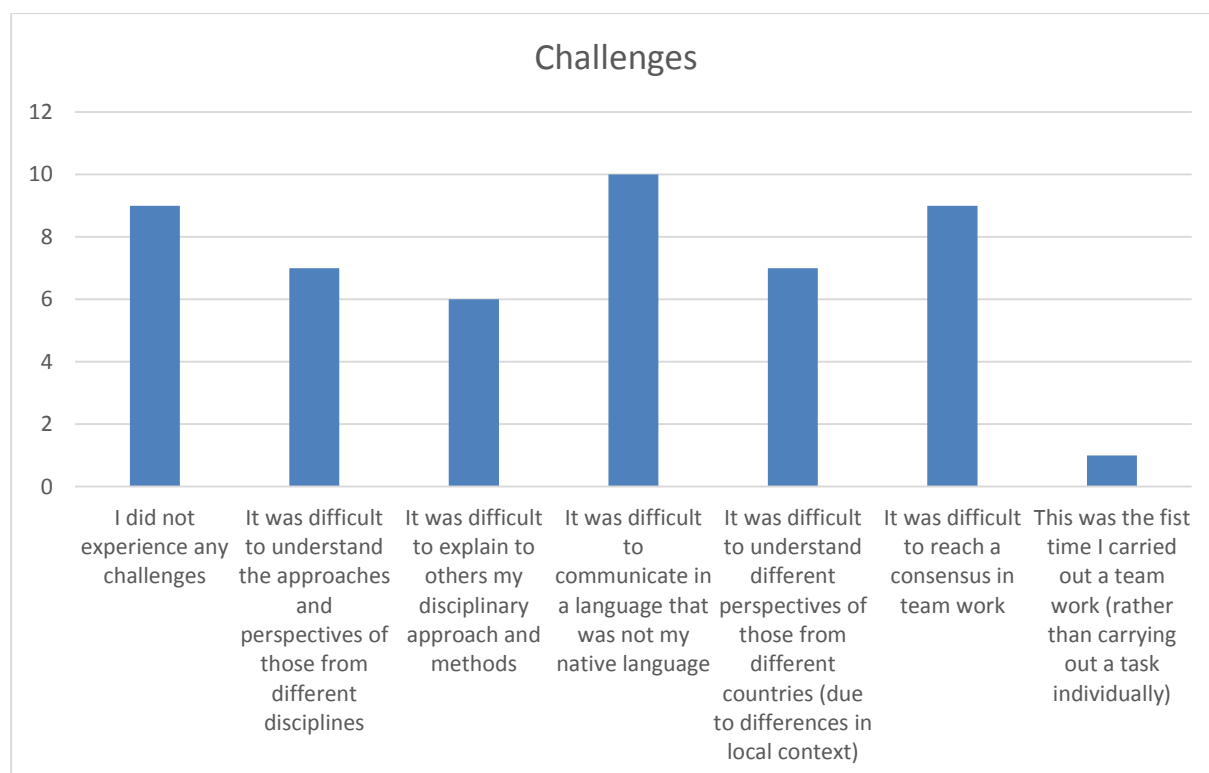


Figure 4-The challenges that students experienced in the IP

In spite of these challenges faced, all of the city planning students state in the next question that there should be similar programmes and courses in the city planning education curriculum to prepare students for interdisciplinary work. Similarly, all other students (those in schools other than city/urban/spatial planning) state that they found it useful to be involved in a city planning project and that the lectures and student projects in planning contributed to their own disciplinary perspective.

### *3.1.7 The final product*

Finally, the respondents were asked whether they thought that working with people from other disciplines and other countries/contexts contributed to the quality and richness of the final product, i.e. the plans and projects that they prepared. Apart from only one respondent, who did not have an opinion on the matter, all participants said that they thought this interdisciplinary international environment contributed to the quality of the final product.

While about half of the respondents focus on the content and quality of the output in terms of richness, a variety of issues covered, in-depth solutions on certain aspects, such as architecture and real estate development, it is interesting to note that about one-third of the respondents comment on the way that the final product was easier to describe, and more realistic to implement. Those who made comments in this latter category stress that having addressed concerns of people from different disciplinary and cultural backgrounds, the final product was comprehensive and would be acceptable to a majority, and hence more easily implementable. Some of these respondents also state that because they had to explain why they made certain choices throughout the process to each other and to the rest of the IP, they learnt explaining things in simpler words so that both those from different disciplinary backgrounds and those with limited language skills would understand their argument. They state that this was a valuable contribution as explaining the proposed solutions in the simplest and most clear way possible was a challenge but once done it ensured a mutual understanding.

## **4. Main Findings and Conclusion**

The questionnaire results show that the participants to the Intensive Programme held in Ankara valued their experience due to both the interdisciplinary and multicultural working environment. While a variety of the findings has already been described in the previous section, some of them deserve attention as they underline the potential contribution of such experiences in the academic and professional development of those who participate them.

According to the questionnaire results, the interdisciplinarity aspect in an education programme, such as the IP, enable the participants to better handle complex and multifaceted problems. The different perspectives in approaching a given problem result in different views and solutions that either require negotiating and consensus building or result in a richness of opinions that complement one another. The latter may sound more preferable although the former is also a positive experience since the questionnaire results show that this experience improves the participants' skills in team-working and conflict management. It is clear that reaching a consensus is amongst the major challenges of this interdisciplinary experience, but facing and dealing with this challenge is a learning outcome in itself as it contributes to a major skill and competence that planners need to be equipped with.

With regards to multiculturality, this aspect helps develop a better understanding of both differences and similarities between those from different countries and cultural backgrounds in approaching a given problem. Seeing different approaches is likely to enrich options when handling a problem, while witnessing similarities underlines the common problems that are faced by cities and planners throughout the world; and the realisation that planners try to solve these problems with similar understandings and

approaches can help reinforce the commitment of young planners to such approaches and solutions that they are being taught about. In terms of multicultural work experience, it should also be noted that language can be a clear barrier and a challenge. However, it can ultimately help the outcome of the project work too: the need to describe viewpoints in the most straightforward and clear way is not only a valuable skill to learn, but also a helpful contribution to the quality of the final product in terms of its clarity and presentation.

The final product in such working/studying environments is positively influenced by both the multiculturalism and the interdisciplinarity. Both aspects seem to have an impact on the final outcome by making it richer, more creative and innovative. In addition, the interdisciplinary aspect is likely to force team members to address different viewpoints through the process of consensus building and hence the final product is more likely to be acceptable by the community. This is a finding stressed by many participants: they felt their final project was more realistic and implementable due to the interdisciplinary preparation process, highlighting a valuable learning outcome in such education programmes that bring together participants with different disciplinary backgrounds.

Based on the findings of this study, it is clear that incorporating such courses and programmes that provide interdisciplinary study settings into the planning curricula would significantly help prepare students for interdisciplinary work environments that they will inevitably work in. However, making such courses as integral parts of the curricula is not an easy task precisely because of its interdisciplinary nature: it would require different departments, such as city and regional planning, architecture, sociology, economy, political sciences, etc., to formulate a common course in which students from these different departments come together to tackle issues in an interdisciplinary study environment. Such cooperation between departments is not impossible, and has many examples in the shape of graduate interdisciplinary programmes. However, without attending a full graduate programme too, planners and those from other disciplines could come together for a specific programme or course, and ways and methods to enable this should be sought for.

There is no single method of creating such programmes and incorporating them into the curricula. The case described in this study is an example of only one possible format. The way in which such interdisciplinary courses are formulated and the degree to which they will be made integral to planning education would inevitably vary from country to country and from school to school. The local context is important both in formulating possible course/programme formats in a given curriculum, and in identifying which disciplines to create a cooperation with. Therefore, a global recipe is not being sought for and each school can explore possibilities for creating interdisciplinary learning environments within their own education programme. Having said that, some practices are global and may be formulated with a view to capture such interdisciplinarity. For example, there are many experiences with summer schools in planning departments, and they are also valuable in their international character, which can help equip participants with learning outcomes that were mentioned above in relation to multiculturalism. Ensuring and encouraging the participation of those from different disciplines to such summer schools would help provide the learning outcomes regarding interdisciplinarity too. In addition, projects in the format of the programmes that were previously named Intensive Programmes and now currently referred to as Strategic Partnerships under Erasmus+ should clearly be encouraged and supported in planning education in view of the findings of this study since they can bring together both the interdisciplinarity and multiculturalism experiences, which were shown to be valuable contributions for the academic and professional development of participants.

## 5. References

- Balaban, O., Babalik-Sutcliffe, E., and Gedikli, B., 2014. Understanding the effectiveness of recent attempts in Turkish planning schools in promoting interdisciplinarity. Paper presented at the 28th AESOP Congress held in Utrecht, July.
- Chettiparamb, A., 2007. Interdisciplinarity: a literature review. Published by: The Interdisciplinary Teaching and Learning Group, Subject Centre for Languages, Linguistics and Area Studies, School of Humanities, University of Southampton.
- Doebele, W.A., 2007. Making Planning Education Relevant: A Proposal. *Journal of the American Institute of Planners*, 36:4, pp. 269-278.
- Graybill, J. K., Dooling, S., Shandas, V., Withey, J., Greve, A.I. and Simon, G.L., 2006. A rough guide to interdisciplinarity: graduate student perspectives. *BioScience*, 56(9), pp.757-763.
- Mitrany, M. and Stokols, D., 2005. Gauging the transdisciplinary qualities and outcomes of doctoral training programs. *Journal of Planning Education and Research*, 24, pp. 437-449.
- Peel, D. And Frank, A., 2008. The internationalisation of planning education: issues, perceptions and priorities for action. *Town Planning Review*, 79: 87-123.
- Sandercock, L. (1999) Expanding the 'Language' of Planning: A Meditation on Planning Education for the Twenty-First Century, *European Planning Studies*, 7: 533-544.
- Woods, C. 2007. "Researching and developing interdisciplinary teaching: towards a conceptual framework for classroom communication". *Higher Education*. Volume 54, Issue 6, pp 853-866.