

# The importance of co-operation between architectural school and practice in the process of design studio work

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**ABSTRACT:** In this article, the authors evaluate the benefits and shortcomings of co-operation between architectural school and practice from the point of view of individual stakeholders - students, teachers, representatives of municipalities and the public. The research is based on the evaluation of a case study of co-operation between the Faculty of Architecture and Design at Slovak University of Technology in Bratislava, Slovakia, with the district of Bratislava - Nové Mesto (Bratislava - New City) in Slovakia. Students of the 3rd and 4th year of the Bachelor's degree and selected students of the Master's degree took part in this co-operation called *New, Nové Mesto*. Representatives of the city district government participated intensively in the teaching process by taking part in the monitoring of progress, the final presentations of the urban design proposals and the final exhibition of selected proposals. The number of actively involved stakeholders provides a sufficiently broad database for the analysis of this co-operation. The findings and ideas of the research can contribute to higher motivation of the students, make the teaching process more efficient and the projects more usable for practice.

## INTRODUCTION

Co-operation between universities and practice is currently the preferred trend in education. To create realistic assignments, the Faculty of Architecture and Design at Slovak University of Technology Bratislava (FAD-STU), Slovakia, is trying to connect teaching with practice in the form of co-operation with the private sector and public institutions, including municipalities. This resulted in numerous projects at the Institute of Urban Design and Planning, which were presented to the professionals and public. Some of these collaborations successfully led to changes and amendments of the spatial plan, served as a basis for the creation of spatial planning documentation or participatory activities with the public and dialogues with investors.

Solving the real problems of cities and urban districts is an attractive challenge for future architects and urban planners. When designing a city and its parts, it is natural to involve representatives of the municipalities, experts, city residents, institutions and companies operating in the area. These are stakeholders who participate in the development and who live and work in the city. In the academic environment, the effort is to simulate this process by co-operating with practice and presenting student works to the public.

For students and teachers of the FAD-STU this co-operation with practice-based stakeholders is a valuable experience. Linking specific assignments and teaching processes requires longer preparation and co-operation with these stakeholders. Co-operation with municipalities is particularly important in the field of urban planning. As Vitková et al point out:

*The approach of public administration and its competence in territorial development management, as well as master plans and projects prepared by architects have a fundamental impact on the quality of life in the city. They decide on the accessibility of services and equipment to the population, on the routing of transport infrastructure, but also on the integration of social groups [1].*

Co-operation between municipalities and educational institutions is mutually beneficial. On the one hand, the municipality has high-quality materials and maps available for students that will meet the real needs of urban planning and social practice, while on the other hand, a certain freedom of open-minded students can bring many valuable ideas for the practice for discussion on the current issues of urban development. Diverse student solutions can serve as a basis for an urban planning competition, or directly represent an interesting alternative to it. Matusik adds that:

*Hybrid integration, which combines the theoretical plane (academic) and practical (external planning institutions) provides the broadest spectrum of knowledge in terms of training the ability to optimise design decisions [2].*

Co-operation with municipalities in the creation of assignments for architects and urban planners and the participation of their representatives in the educational process is generally perceived as an example of good practice. In addition to the mentioned practical reasons (sharing of documents, transfer of knowledge), such co-operation has also significant motivational potential. Thanks to the co-operation, the students feel that they are putting their creative abilities to practical use, improving the quality of life in communities and the built environment, which Boyer and Mitgang consider important motivational factors [3].

## RESEARCH GOALS

The main goal of the research was to evaluate the student benefits of co-operation between the school of architecture, exemplified by the FAD-STU and practice in the educational process of urban design studio. Specific emphasis was placed on the aspect of student motivation.

In a broader context, the research dealt with the evaluation of this co-operation with practice from the point of view of all stakeholders (students, teachers, representatives of practice and citizens). The aim was to verify the assumed benefits of the co-operation, to reveal its unknown weak and strong aspects, and to suggest possible improvements in the future. The basic tool for formulating research conclusions was the data from the questionnaire survey and their comparison with the authors' experiences from pedagogical practice.

## RESEARCH METHODS

For practical reasons, the evaluation of co-operation between school and practice was carried out on a selected case study. The chosen co-operation with the district of Bratislava - Nové Mesto (Bratislava - New City) represents a very current and broad co-operation with the municipality.

As part of the co-operation between the district of Bratislava - Nové Mesto and the FAD-STU, students of the 3rd and 4th year of the Bachelor's degree and students of the 1st and 2nd year of the Master's degree in the academic year 2023/2024 solved possible urban scenarios for reshaping and transforming the area of brownfields in the city district (Figure 1).

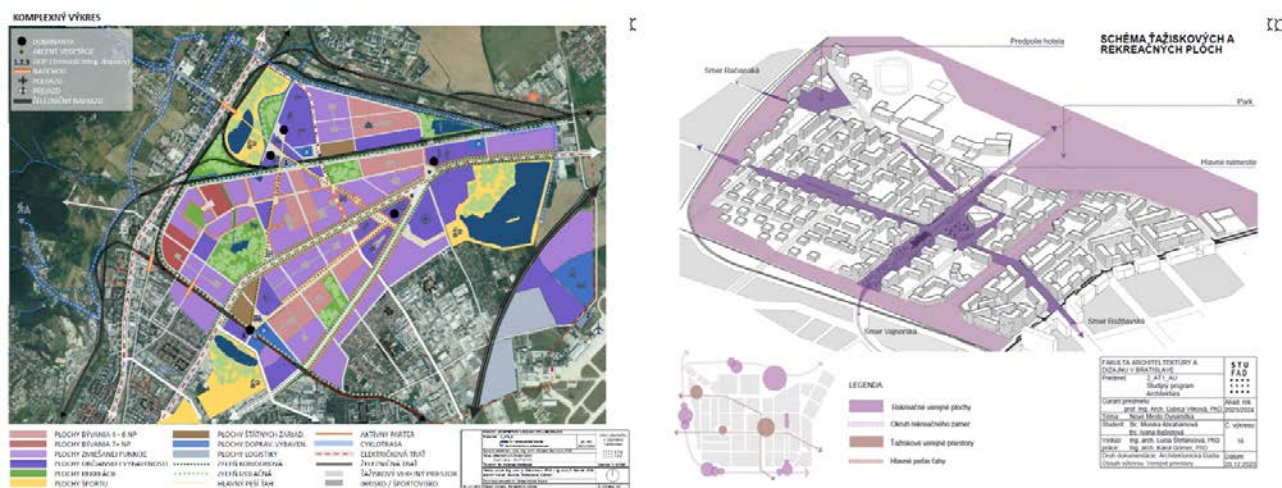


Figure 1: Urban study transformation of the brownfield area in the district of Bratislava - Nové Mesto (authors: Kristína Králiková (l); Monika Brahmová and Ivana Bašistová (r)).

The aims of the student proposals were the transformation of the environment, the hierarchisation of public spaces, the intensification of the existing structure, the connection of public spaces in the internal structure, also with the surrounding parts of the city.

The ambition of the urban design studio works was to solve the problem of new functional use of several unused, neglected and contaminated areas of former industrial areas. Student proposals pointed to possible approaches in the development and transformation of the brownfield locality. During the co-operation, representatives of the local government were actively involved in the educational process (creation of the assignment, participation in inspections and defence of studio works). At the end of the collaboration, selected works were presented at a public exhibition.

The main method of evaluation were anonymous questionnaires. The questionnaires were focused on individual groups of stakeholders:

- 1) students;
- 2) municipality representatives;
- 3) teachers;
- 4) the public, who attended the final presentation exhibition.

Since not all the stakeholders participated in all activities, the individual questions were modified depending on the addressed group of respondents. The questionnaire created in the Google Docs application was distributed to all members of the co-operation via e-mails. The questionnaire was aimed at the motivation and awareness of co-operation of students, their teachers and municipality representatives.

The questions in the questionnaires were formulated in the form of a degree of agreement with the statement of the question on a scale from: 1 - *completely agree*; 2 - *rather agree*; 3 - *rather disagree*; 4 - *do not agree at all*; and 5 - *cannot express myself*. In addition, the respondents had the opportunity to add their additional observations in the form of short comments in the last question.

The main set of questions was aimed at students, teachers and representatives of municipality. The questions in the questionnaire for the public representatives were halved and focused on the general opinion about co-operation in the public sector and the final presentation of students' works on the exhibition.

## RESULTS

The total number of respondents in the questionnaire amounted to 40 students (37% of the students working on the topic), seven representatives of the municipality (28% of the representatives who were involved in the co-operation); eight teachers (57% of the teachers working on the topic); and five representatives of the public (50% of the representatives who visited the final exhibition). All completed questionnaires were considered in the research analysis.

Table 1: Results from the questionnaire.

Question:	The content and scope of the assignment of the studio work was not negatively affected by the co-operation of the Faculty and the municipality.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	62.5%	75%	42.9%	x
Rather agree	22.5%	25%	14.3%	x
Rather disagree	10 %	-	-	x
Do not agree at all	-	-	-	x
Cannot express myself	5%	-	42.9%	x
Question:	The topic of the assignment created in the co-operation between the Faculty and the municipality meets both the educational and practice requirements.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	45%	75%	42.9%	x
Rather agree	50%	12.5%	42.9%	x
Rather disagree	-	12,5 %	-	x
Do not agree at all	-	-	-	x
Cannot express myself	5%	-	14.3%	x
Question:	From the beginning, students knew that the assignment was created in the co-operation with the municipality with a potential transfer to practice.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	67.5%	x	x	x
Rather agree	22.5%	x	x	x
Rather disagree	10%	x	x	x
Do not agree at all	-	x	x	x
Cannot express myself	-	x	x	x
Question:	The knowledge about the co-operation with the municipality had a very motivating effect on students (compared to a standard assignment).			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	32.5%	37.5%	28.6%	x
Rather agree	42.5%	62.5%	57.1%	x
Rather disagree	15%	-	-	x
Do not agree at all	2.5%	-	-	x
Cannot express myself	7.5%	-	14.3%	x
Question:	Students received faster and better guidance and information about the addressed area, thanks to the co-operation with the municipality.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	22.5%	50%	14.3%	x
Rather agree	40%	50%	71.4%	x
Rather disagree	27.5%	-	-	x
Do not agree at all	2.5%	-	-	x
Cannot express myself	7.5%	-	14.3%	x

Question:	Participation of the municipality representatives at the final presentation and at the monitoring of progress was an important motivational factor.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	32.5%	37.5%	14.3%	x
Rather agree	42.5%	50%	71.4%	x
Rather disagree	20%	12.5%	-	x
Do not agree at all	-	-	-	x
Cannot express myself	5%	-	14.3%	x
Question:	Participation of the municipality representatives at the final presentation and at the monitoring of progress was an important educational factor.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	32.5%	37.5%	14.3%	x
Rather agree	37.5%	62.5%	57.1%	x
Rather disagree	25%	-	14.3%	x
Do not agree at all	-	-	-	x
Cannot express myself	5%	-	14.3%	x
Question:	The municipality representatives should have a <i>stronger word</i> in the final evaluation of the students' studios.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	10%	-	14.3%	x
Rather agree	20%	37.5 %	14.3%	x
Rather disagree	42.5%	25%	42.9%	x
Do not agree at all	20%	37.5%	14.3%	x
Cannot express myself	7.5%	-	14.3%	x
Question:	The final public presentation of students' works was a successful finish of the co-operation.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	42.5%	50%	85.7%	40%
Rather agree	45%	37.5%	-	60%
Rather disagree	10%	12.5%	14.3%	-
Do not agree at all	-	-	-	-
Cannot express myself	2.5%	-	-	-
Question:	Students' works will have a significant impact on the creation of the urban design of the area in practice.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	27.5%	-	42.9%	50%
Rather agree	17.5%	37.5%	28.6%	50%
Rather disagree	27.5%	37.5%	14.3%	-
Do not agree at all	12.5%	12.5%	-	-
Cannot express myself	15%	12.5%	14.3%	-
Question:	The co-operation between the school and the municipality was successful.			
Respondents:	Students	Teachers	Municipality	Public
Completely agree	x	75%	42.9%	80%
Rather agree	x	25%	57.1%	20%
Rather disagree	x	-	-	-
Do not agree at all	x	-	-	-
Cannot express myself	x	-	-	-
	Generally positive answer			
	Generally negative answer			
	Not clear result			

## DISCUSSION

Based on the research results, several conclusions can be drawn. First of all, there are positive conclusions that support future school co-operation with practice-based stakeholders. In the case study, three-quarters of the students all teachers and most representatives of the municipality agreed that the co-operation had a positive motivational effect on students. Both students and teachers appreciated the participation of representatives of the municipality in the teaching process.

The speed and quality of the materials provided by the municipality were especially appreciated by teachers, who mostly provide materials for students, so they particularly welcomed the help from the municipality.

A significant positive result of the co-operation was the balance of the assignment from the point of view of students, teachers and representatives of the municipality. On the one hand, it was possible to maintain the scope and content of the assignment in terms of the teaching syllabi, on the other hand, to meet the content and scope expectations of the municipality.

Despite the prevailing positive image of the co-operation, the questionnaire also revealed some shortcomings with the potential for correction.

Students, teachers and the public were especially sceptical about the unclear overlap of student proposals in city planning. In this area, it would be appropriate to improve the feedback from the municipality about how they use the students' ideas. However, improvement is also necessary on the part of the school. The representatives of the municipality would appreciate, if more space was devoted to spatial regulations. Accepting this requirement would contribute to increasing the applicability of student works in practice.

The students and teachers were also slightly critical about the form of the final presentation of the works. In their specific answers, they mentioned the inappropriate place and form of the exhibition as problematic (Figure 2). In this context, it seems appropriate to combine the exhibition with the competition in order to increase the attractiveness for all stakeholders. As Ilkovičová and Ilkovič recognise: *...competition presents a natural aspect of the education process, especially in the creative fields* [4].



Figure 2: The final exhibitions of the students' design studios (photographs by Mária Vencelová).

In their article, Smatanová at all pointed out that the increased motivation is one of the most significant contributions of student competitions [5]. Białkiewicz also highlighted that:

*The teachers of design courses opined that students who took part in competitions, and especially those who achieved significant success, were later more active in classes and made better projects. It was also reflected in the grades they received for their course projects. This proves that student competitions significantly support the didactic process, and thus serve their purpose* [6].

Students would also welcome more consultations with representatives of the municipality (especially experts) in the early stages of the studio work. The reason is mainly that later comments from representatives of the municipality are difficult to incorporate into the already developed concept. It seems particularly important to invite representatives of the municipality to the first progress review.

In the case of the question of expanding the competencies of practice representatives in the final evaluation of the students' proposals, the respondents were more in favour of maintaining the current status. The reasons slightly differ depending on the party. Students are probably afraid of the critical evaluation of practice representatives, and they do not want to be confronted with unexpected questions. Teachers try to retain their competence and *guard* the pedagogical process from the beginning to end. Practice representatives are afraid to take on the burden of evaluation. Greater involvement of practice representatives in the evaluation could be offered by the already mentioned student competition.

## CONCLUSIONS

Co-operation in the educational process between schools of architecture and practice is seen as an example of good practice beneficial to all parties. A specific form of connection with practice is co-operation with municipalities. Municipalities represent a natural partner, especially for assignments in the field of urban design and planning. The goal of the research was to evaluate the benefits and shortcomings of this form of co-operation and its motivational impact on students. Based on the analysis of the answers to the questionnaire survey, the strongest aspects of the co-operation turned out to be:

- strong motivational influence on students;
- quality and speed of obtaining background information;
- acquiring extra knowledge;
- fulfilment of educational goals while taking into account the requirements of practice;
- positive impression of stakeholders from co-operation.

The questionnaires also showed that increasing the involvement of practice representatives in the final assessment of students, which was considered, could be a step in the wrong direction.

The research also revealed certain aspects in which co-operation can be further improved, and the need is to:

- intensify contact between representatives of the local government and students in the initial stages of design;
- make the actual public presentation more attractive, e.g. in the form of a student design competition;
- increase awareness of the application of student proposals in practice;
- reflect the requirements of practice more comprehensively in assignments.

The mentioned negatives represent a challenge that teachers, representatives of practice (municipality), as well as students themselves must overcome in the future. If they manage to use the potential aligned with the identified needs, while preserving the current advantages of co-operation, there is a high probability that the motivation of students and the quality of their outputs will increase even more.

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