

Practical training for architecture students from an employer's point of view

Bogusław M. Podhalański

Cracow University of Technology
Kraków, Poland

ABSTRACT: In this article, the author discusses the problem of the professional training of students enrolled in architectural faculties in Poland based on the example of students from the Faculty of Architecture at Cracow University of Technology. The problem is discussed from the perspective of the University and that of an employer. The article points out both the positive and the negative sides of students engaging in internships and professional training during the course of their studies. It also illustrates the manner in which students prepare for their licensure examination, so that they can fulfil independent technical functions in the construction industry. The most common legal forms of employing students and graduates in architectural practices are indicated and discussed. In addition, the author briefly explores the role of the professional association of architects in the education of young designers. The most important elements of the system of obtaining professional qualifications are also outlined in this article.

Keywords: Professional training of architecture graduates, architect employer, internship, graduate studies, architecture

INTRODUCTION

Ensuring that architecture students obtain proper professional training is not easy, at least in a city in which the number of licensed architects registered with the Chamber of Architects of the Republic of Poland is second only to Warsaw, the capital of Poland [1]. In accordance with the current legal regulations in Poland, only licensed architects can conduct professional design internships. Persons who have been receiving professional training for the duration of at least one year under the supervision of a licensed architect (or architects) and have received a positive opinion of their professional skills, along with a listing of all the technical and construction designs that they have worked on, can be permitted to take the examination necessary to obtain a design license [2].

Legislators have determined the requirements that need to be met by a candidate wishing to obtain a license in the Ordinance of the Minister of Infrastructure Regarding Independent Technical Functions in the Construction Industry [3]. Even though the number of architects in Poland is around one-tenth of the number in Italy (13,700/147,000) [4], this does not mean that beginners have it easy. On the contrary, one can speculate that it is getting harder and harder for them. Experienced architects do not want to employ students and graduates as interns and trainees. One of the reasons for this fact is that the costs of supervising their work are too high, as the supervising architects are held responsible for the mistakes of the interns as if they were their own and insurance companies do not take matters like these under consideration. In other words, there are no insurance mechanisms that safeguard against this.

In light of the voices that are being raised in opposition to the proposal that the architectural profession should be deregulated in a similar manner to the urban designers in Poland, and the fact that the free market in terms of design is one in which the lowest price nearly always wins, the financial situation of most architects who work in Poland can be considered to be rather difficult. The free architectural market, in view of the lack of universally acknowledged price standards for design work, means that cutting any cost by individual architects and small design practices is the norm, if they want to keep getting commissions which, unfortunately, means offering the lowest price in tender procedures. This situation is another element, which makes it difficult to hire interns, as smaller design practices simply cannot absorb the additional costs of labour associated with hiring such interns.

The legally regulated minimum wage plus taxes mean that having the option of hiring an intern or a person of equal qualifications, the owner of a small business (and many architects are small business owners) would rather hire a more

experienced person than someone whose work demands constant supervision and monitoring at practically every stage of a project. Interns are hired - if they are hired at all - by those companies, which have secured commissions that allow them to have a glimmer of hope of getting fairly paid. Unfortunately, this has ceased to become something to be confident about, as not paying for design work by dishonest clients has become common. The need to pay the value added tax (VAT) in such a case is another burden that works against honest employers. Not only are they preyed upon by dishonest clients, but are also kept under pressure by taxation authorities, which demand that all taxes be paid upon invoicing, rather than receiving payment. Faced with an unjust judicial system, one cannot risk making the claim that such an environment provides an incentive for employers to expand their workforce. Nevertheless, young people need to get their experience somewhere, which is why voluntary unpaid internships are a very popular form of obtaining professional experience. The Chamber of Architects, in accordance with the regulations of the Construction Law Act and the Ordinance of the Minister of Infrastructure Regarding Professional Associations of Architects and Civil Engineers, allows students that have graduated from their third year of studies to undergo professional training, which is deemed as necessary to be able to apply for a license examination [3][5].

The Programme of Professional Training

Every university in Poland can shape its professional practice programmes in a manner which is compatible with its curriculum. If it is assumed that the goal of the professional training that students - who are going to become fully fledged designers one day - are to receive is to prepare them to work as independent designers, then, such training should meet the requirements that allow it to be qualified as professional training as understood by the Chamber of Architects of the Republic of Poland. This is why the Polish Chamber of Architects has been tasked with establishing a set of unified criteria that all candidates who wish to obtain an architectural design license must meet [3]. This is in accordance with the current regulations contained in the Ordinance of the Minister of Infrastructure Regarding Independent Technical Functions in the Construction Industry passed on 11 September 2014 (Session Laws of 24 of September 2014, pos. 1278). Professional training can be obtained outside of the borders of Poland. The Web site of the Polish Chamber of Architects contains the following information:

...The fact of undergoing practical professional training abroad can be certified with a document issued by the director of the practice at which the training had taken place, confirmed by a person who had supervised said training, and who is required to possess a design license which meets the conditions outlined in art. 14, p. 1 of the Act [3].

In order to find out what exactly constitutes such professional training, the training report should include:

...The name of the design task/structure being designed, along with providing its purpose, form of use, type of load-bearing structure, total floor surface area, as well as other distinct technical and functional parameters of the structure, reflecting the architectural specialisation of the design license. It should also contain the location of the site on which the project is going to be built on, the name of the property developer, as well as the name and surname of the designer/construction site manager/foreman, and the number of the construction permit...[3],

as well as the duration of training provided in weeks, in addition to the total number of weeks of training and listing the

...Form of training (for instance: full employment, part-time employment, contract of commission, work contract, other). The technical function performed during training (while designing or at a construction site) of the trainee (the character of the work being performed during training) [3].

Judging from the conversations that the author had with members of the committees that comprise the Chamber of Architects of the Republic of Poland, in their opinion, it is important for the trainee to be involved in the full cycle of the construction project in terms of its design and construction. This means that the designer or construction site manager supervising the trainees should take care that they participate in the proper activities over an appropriate period of time. This is not always possible, especially, in light of a trainee arriving at a construction site when construction work is already at an advanced stage. It is left to the discretion of the trainees whether to continue involvement in the project or to search for opportunities at a different construction site, one which is in its initial stages or that is nearing completion, with the only remaining construction work being focused on interior finishes and technical approvals. It needs to be pointed out that the regulations regarding the duration of professional training only set restrictions as to the minimum amount of time that needs to be spent on training and there is no upper limit for the training period, whether on the construction site or at a design practice. When approving the end of training, its supervisor should confirm the report by signing it and stamping it with a Chamber-approved seal with their license number, name and type of license.

Participation of the Members of the Committees of the Chamber of Architects in University Courses

The Faculty of Architecture of Cracow University of Technology (CUT), while having licensed architects who are members of the Chamber of Architects among its staff, has entered into a partnership with the Regional Chapter of the Chamber of Architects. The Faculty invites a number of architects chosen from amongst the members of the Chamber to

participate in its scientific and educational life. They are present during the defences of both Bachelor's and Master's design theses, being themselves experienced designers, performing the role of examiners. The Chairman of the Examination Committee is also invited to present the regulations regarding professional training and the proceedings associated with licensing examinations to students. Such meetings are always popular with students, who see great value in being able to ask questions directly and to obtain answers from a person with so much experience in that regard. The examination questions are prepared individually for each examination session by the Central Committee of the Chamber of Architects at the national level in a manner that makes it impossible for them to be known before the envelopes that contain them are publicly unsealed during the examination. The examination itself is composed of two parts - a written test and an oral practical test. Being admitted to take part in the second part of the examination is only possible on the condition of passing the first part. The practical part of the examination features questions regarding the solving of complex design problems in situations that demand good knowledge of the building code and require substantial design experience. Usually, around 70% of applicants pass the examination each time it is organised, with the number varying depending on the overall difficulty of a particular examination and the average level of preparedness of the examinees. There is a fee for this examination, and those who fail the examination can repeat it after six months.

The regional chapters of the Chamber of Architects usually organise courses that can be attended by persons that are preparing themselves to take part in the examination. However, the number of attendees is limited and the courses themselves need to be paid for. Nevertheless, the Web sites of each chapter usually report that the courses are sold out on the very day they are first advertised, which supports the claim that this form of education is in very high demand. Architects typically apply for the examination 3-4 years after graduating from university. However, it is theoretically possible to be eligible for it one year after graduation, provided that the candidate has been undergoing constant training after graduating from the third year of studies. This form of obtaining a professional license is usually sought by persons who, for whatever reason, wish to start their own design practice as soon as possible. Members of the Chamber of Architects are usually invited to exhibitions featuring students' designs, diploma thesis defences and to many other public events, which are held during each academic year.

The Faculty of Architecture of the CUT is also visited by architects who work abroad, including the Royal Institute of British Architects (RIBA) Accreditation Committee, which evaluates the quality of its education. The Faculty has been accredited by the RIBA, allowing its graduates to become registered in the UK and be exempted from some of RIBA's examinations, except for the part 3 examination [6].

The Faculty also offers classes and lectures in English. Thanks to the signing of agreements and entering into partnerships with other universities, the Faculty has students from Australia, New Zealand, and various countries from Asia and the Pacific region, in addition to hosting regular exchanges with the University of Tennessee in the USA. These students usually stay in Poland for a period of between one and two semesters, which allows them to become familiar not only with the manner of education, but also with the beautiful historical monuments of Kraków and other cities of Poland. The experiences gained during design work on the other side of the globe can also be highly interesting to them, for instance, due to the different climate conditions, as well as the different legal and physical characteristics of the surroundings of the structures that they design.

Student Trainees from the Point of View of an Employer

Every architect that runs their own design practice can host professional training for students, regardless of the form of its organisation, whether it be self-employment, a limited liability company or a publicly traded corporation. This training can take on a variety of forms, ranging from voluntary work, a contract, or part-time or full time employment for an unlimited period of time. The form of professional training and the length of its duration is dependent on the needs of the employer on the one hand, as well as on the possibility of committing enough time on behalf of the student on the other. Students are often faced with the problem of managing their various activities - university classes and the time that can be devoted to design work or that can be spent at a construction site. From the formal side of things, there is a certain barrier placed by universities themselves, as their curricula do not feature a time period devoted specifically to focusing solely on professional training. Of course, there are practical courses that are required of students by the curriculum, but these are usually only two weeks long and focus on subjects, which are either a form of preparation for future classes or are hosted in the form of open air artistic courses, allowing them to develop their talent in the graphical arts.

For instance, one of these practical courses is the urban design extant state documentation preparation class, the aim of which is for a student to become acquainted with the real-world situation of a larger area and the development of the documentation of its extant state, with the area in question usually being as large as a small town or a part of a larger city. There are also practical courses in the development of the documentation of the extant state of historical monuments. Students who are committed to increasing their design or construction experience are left with the need to search for an employer who is going to be interested in hiring them in a manner which is going to allow them to continue to participate in university classes. This is not a comfortable situation for all architects, which is why those architects who agree to this form of training their future competitors are met with much gratitude from the students themselves. In most cases, these architects are persons who, in addition to being professionally active designers, are also members of the academic staff of a university.

On the other hand, the participation of students in professional training requires a certain dose of tolerance on behalf of the academic staff. Misunderstandings and minor problems for both sides sometimes occur due to this situation, but architectural universities are in a sense not only schools of engineering, but also artistic schools. That fact allows the problems that do occur to be somewhat less severe and major conflicts are usually avoided. In those cases, for which no solution to the problem can be found, one of the sides of the conflict is often forced to take action specified in the university's internal regulations. Student that have completely and intentionally abandoned attending university classes and developing design theses in favour of working at an architectural practice or at a construction site are often faced with the necessity of applying for a semester-long suspension in order to catch up on the material required by the curriculum. At times, the employer is also forced to terminate the employment of a student in the event of a lack of trust in the latter's abilities to carry out a specific task.

The core of the cooperation between both parties interested in the development of the professional education of young people is understanding the fact that by providing conditions for students to undergo professional training, an employer cannot expect better than average productivity, requiring a sort of *investment* in the training of students to be made not only in the form of time, but also in transferring the knowledge of either the employer or the supervising architect who supervises a particular design. The employer must also be prepared to accept a certain amount of financial losses. In exchange, employers can expect a certain level of enthusiasm on behalf of the trainees, as well as a fresh approach to the shaping of architectural forms. Student interns must also understand that they are being given a favour, which is tied to the conditions listed above. Positive experiences have been gained by great many apprentices of architecture who have worked and trained at the Inter Project Group (IPG) Ltd over the course of over two decades of its operation. Their observations have been very positive [7]. With the exception of a small number of persons who proved troublesome to communicate with due to peculiar character traits, the vast majority of trainees remained at the practice and cooperated with it over a period of a couple of years until reaching independence or until deciding to start their own architectural practices, successfully passing the necessary professional examinations and being given their architectural licenses.

CONCLUSIONS

The quality of the education of architects is not solely in the hands of the architectural schools of which they are graduates. It also depends on making it possible for them to take part in professional training in established design practices. It also demands university cooperation with the professional association of architects and a coordinated sharing of responsibility by professionally active designers who supervise the trainees. At the same time, the level of professionalism displayed by future independent architects must be ensured. The level of the skills acquired by graduates needs to be the fruit of their own hard work over the course of their education, as well as during their professional training, which is to come immediately afterwards and is to last until they are ready to become independent. Students need to take into account that they will often be forced to educate themselves. Otherwise, they will remain un-educated. It is much better to train one's competitors to be good, rather than bad.

REFERENCES

1. Izba Architektów Rzeczypospolitej Polskiej (Chamber of Architects of the Republic of Poland) (2016), 17 August 2016, <http://www.izbaarchitektow.pl/pokaz.php?id=582>
2. Zestaw Przykładowych Pytań Egzaminu Pisemnego na Uprawnienia Budowlane w Roku 2007 (2007), 17 August 2016, http://www.izbaarchitektow.pl/pliki/164pytania_do_egzaminu_na_uprawnienia_budowlane.pdf (in Polish).
3. Republic of Poland. The Ordinance of the Minister of Infrastructure and Development Regarding Independent Technical Functions in the Construction Industry of 11 September 2014 (Session Laws 2016, pos. 290) (in Polish).
4. Architekci PL. Liczba Architektów w Europie (2014), 17 August 2016, <http://www.architekci.pl/pl/aktualnosci/liczba-architektow-w-europie> (in Polish).
5. Republic of Poland. Construction Law Act of the 7 of July 1994 (Session Laws 2016, pos. 290) (in Polish).
6. The Royal Institute of British Architects. Becoming and Architect (2016), 17 August 2016, <https://www.architecture.com/RIBA/Becomeanarchitect/Route%20to%20becoming%20an%20architect/Routetoqualificationasanarchitect.aspx>
7. The Inter Project Group (IPG) Ltd (2016), 17 August 2016, <http://www.ipg.pl/english/index1.htm>

BIOGRAPHY



Bogusław Podhalański began his education at Tadeusz Kościuszko Cracow University of Technology in 1972. In 1977, prior to his graduation, he joined the academic staff of the Kraków branch of the Institute of the Environmental Development at its Department of Spatial and Architectural Design Methodology. He was gained the award of MSc in Architecture in 1978. In 1980, he started working in the Faculty of Architecture of Cracow University of Technology, becoming an employee of the Institute of Urban Design and Spatial Planning. In 1981, he graduated from the postgraduate spatial planning studies, while in 1986, he graduated from the postgraduate historical monuments conservation and urban planning studies. He received his PhD in 1993 on the basis of his defence of a doctoral thesis entitled: *Methods of the Evaluation of City Centres on the Example of the City Centre*

of Kraków. In 2014, he was awarded the title of DSc in Engineering Architecture. Bogusław Podhalański, has developed his professional interest in the field of spatial planning, as well as other related fields. He is the author or co-author of many collaborative studies of local spatial development plans, the studies of the conditions and directions of spatial planning and forecasts of the financial implications of local spatial development plans. His scientific achievements consist of scientific papers and studies on the subject of metropolises, the mechanisms of the formation of metropolitan areas and their development, as well as the planning of, and the methods used in, the restoration and conservation of urban composition. He carries out this activity as a part of the Institute of City and Regional Design of the CUT. He is a partner at the Inter Project Group (IPG) (sp. z o.o.), architectural practice. He is a member of the Chamber of Architects of the Republic of Poland (Izba Architektów Rzeczypospolitej Polskiej) and of the Chamber of Civil Engineers (Polska Izba Inżynierów Budownictwa). He is also a member of the Society of Polish Architects (Stowarzyszenie Architektów Polskich - SARP) and of the Society of Polish Urban Designers (Towarzystwo Urbanistów Polskich - TUP).