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Teaching Methodologies in Spatial Planning for Integration of International Students

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Abstract. Nowadays, the spread of international exchanges is growing among university students, across European countries. In general, during their academic degrees, the high education students are looking for international experiences abroad. This goal has its justification not only in the reason of pursuing their studies, but also in the desire of knowing another city, a different culture, a diverse way of teaching, and at the same time having the opportunity of improving their skills speaking another language. Therefore, the scholars at the high level of educational systems have to rethink their traditional approaches in terms of teaching methodologies in order to be able to integrate these students, that every academic year are coming from abroad. Portugal is not an exception on this matter, neither the scientific domain of spatial planning. Actually, during the last years, the number of foreign students choosing to study in this country is rapidly increasing. Even though some years ago, most of the international students were originated from Portuguese speaking countries, comprising its former colonies such as Brazil, Angola, Cape Verde or Mozambique, recently the number of students from other countries is increasing, including from Syria. Characterized by a mild climate, a beautiful seashore and cities packed with historical and cultural interests, this country is a very attractive destination for international students. In this sense, this study explores the beliefs about teaching methodologies that scholars in spatial planning domain can use to guide their practice within Architecture degree, in order to promote de integration of international students. These methodologies are based on the notion that effective teaching is student-centred rather than teacher-centred, in order to achieve a knowledge-centred learning environment framework in terms of spatial planning skills. Thus, this article arises out of a spatial planning unit experience in the Master Degree in Architecture (MIA) course, at the University of Beira Interior (UBI) in Portugal, to understand more about teaching methodologies, in order to promote the integration of international students. The study explores the teamwork tasks and the hetero-evaluation as new approaches in the teaching methodologies focused on the student-centred teaching. This research main conclusion is the need of promoting a shift from lecture-based and teacher-centred practices to student-centred approach.

1. Introduction

Nowadays, the Portuguese higher education system comprises a set of universities and polytechnics, both public (since 1290 when the first university was created) and private (with a boom of development in the decade of 1980) institutions. While the Universities are more focused on theory and research skills, offering academic subjects such as architecture, sciences or law, the Polytechnics are more focused on practical and vocational training, offering academic subjects such as nursing,



accountancy or teaching. However, some academic subjects are offered by both universities and polytechnics, such as engineering.

Given that the majority of the degrees are taught in Portuguese, the international students should have good language skills. In fact, until some years ago, the international students were mainly originated from Portuguese speaking countries, comprising its former colonies such as Brazil, Cape Verde, Angola or Mozambique. However, in recent years, higher education has been marked by a growth in the number of students coming from other countries, specially from Europe and Portuguese-speaking countries [1]. They are coming from the five continents, including recently from Syria.

Portugal has a mild climate, a beautiful seashore, cities packed with historical and cultural interests, and a highly developed and well respected higher education system [1], which are very attractive requirements of destination for international students. This increasing number of international students is changing the teaching context, which is a challenge for scholars, because the way they approach teaching is related to how their students approach learning [2]. Nevertheless, the academic literature that has been written in order to respond has been the awareness that this phenomenon is multi-faceted [3]. Therefore, this research aims to explore the beliefs about teaching methodologies that scholars in urban planning domain can use to guide their practice within Architecture degree, in order to promote de integration of international students. It is focused on the case of University of Beira Interior, a public institution located in the city of Covilhã.

2. Master degree in architecture at UBI

2.1. Main contents and skills

The Master Degree in Architecture at UBI, is organized according to Bologna process. It was boosted about twelve years ago, on the behalf of the Department of Civil Engineering, in order to promote a high specialized graduation in the domain of the architect's professional activity. It has 300 ECTS as a whole, during ten academic semesters along five years of graduation course. The contents of MIA comprise two main parts: a set of several Units along nine semesters, including nine Units of Project, corresponding to 86 ECTS; a master degree dissertation or project along one semester in year 5, corresponding to 30 ECTS. Architecture is the main scientific domain of the MIA corresponding to 121 ECTS. However, it contains a mix of theory and history of architecture, construction, mapping sciences, exact sciences, human sciences and spatial planning and urbanism, designed to give a solid grounding in the concepts and theories that shape architecture today. At the same time, the MIA allows the student to tailor its course of study on its own interests and to highlight the theoretical and practical aspects of architecture. This is made possible through the selection of optional units in the 1st semester of year 5, as well as through the choice of dissertation or project topic in the 2nd semester of year 5.

The holders of the MIA from UBI will be responsible for harmonious integration of human activities at any territory, valuing the built heritage and the environment, and will be able to work in architecture, construction and rehabilitation companies, institutions connected with heritage, research centres and education, local authorities such as municipalities and as liberal professionals, in the following domains: building, spatial planning and urban design; studies, projects, plans and consulting activities; management works; planning, coordination and architecture Project evaluation; participation in architectural competitions; or teaching activities. In this sense, this MIA aims to promote the following achievements: a dynamic teaching / learning methodology, with research seminars and accompanying by teachers / tutors; information on techniques and innovative materials such as Information and communication technologies, and vernacular and traditional building materials; an experimental architectural practice component, from the drawings by the end of project, linking several units' contents to the project; a comprehensive training, including all scientific and technical areas which comprise the architect's work; a knowledge about the heritage and memory of each place; and an external openness, service to society and humanization of architectural interventions.

2.2. Spatial planning and urbanism knowledge in the context of architecture

The spatial planning and urbanism research field in the MIA at UBI comprises two units: urban design and urban planning. Such as in other graduation course subjects, for example in the several project units, the pedagogical contents of urban design unit are linked with other unit contents of the MIA. On the one hand, the urban design unit contents have continuity in urban planning unit contents, in the following semester at the same academic year. On the other hand, the urban design and the urban planning units are the unique subjects of the MIA which are compulsory in the spatial planning and urbanism domain. They are both in year 4 and they are sequential, urban design in the 1st semester and spatial planning in the 2nd semester. In this sense, it could be said that the urban design unit is the first part of the Spatial Planning unit which works as a second part at the scientific domain of spatial planning and urbanism. Therefore, if in the urban design unit, the main task is to understand the city morphological elements in order to project them, in the spatial planning unit the main task is to understand the urban / rural spaces in order to project them on the behalf of the spatial planning system rules (its instruments and tools, its construction and urban development permissions and restrictions). Consequently, the contents of them are linked and consecutive. This means that in the end of year 4, the students should be able to project a new or to rethink an existing territory, having a deep knowledge of their morphological elements features, and of spatial planning system rules, that these projects have to keep. Thus, this paper will focus on spatial planning unit, because this the one where every academic year there are more international students coming to.

2.3. Spatial planning unit objectives

In the MIA at UBI, the spatial planning unit examines a series of topics that lie at the policy interface between spatial planning system, construction and urbanization permissions, design of public spaces and definition of land uses, with special emphasis on the application of new ideas and theories to institutional and policy contexts from urban or rural areas, coming from national and international references. It comprises 15 theoretical hours, 15 theoretical-practical hours and 15 practical hours, corresponding to 5 ECTS and to 140 working hours for students. The lectures are exploring the main driving forces and implications of various public and private sector practices on land uses, urban developments, construction and urbanization restrictions, with regard to Portuguese cities, towns or villages whether in existing urban spaces or new urban developments.

This unit was designed to set the spatial planning foundation for architecture students due to the challenges of territories where the majority of population is living, the urban spaces. First of all, this subject aims to give to architecture students the theoretical and practical bases of spatial planning. These students, who are coming from different academic, cultural backgrounds and geographical locations, are called to debate the features, tools, techniques and proposals of spatial planning. They explore the contents of spatial planning tools and policies, their evolution, theories and different instruments of acting in the territory. Secondly, it is focused on the reasons of the spatial planning analysis and their evolutions until nowadays, engaging the students in order to rethink about future perspectives, in an open debate. Students are encouraged to compare practices and policies coming from a set of case studies at the local, regional, national or over national scales, and to bring their experiences to the discussion. Therefore, this unit aims the following purposes: to dominate the general features of spatial planning in Portugal and in other European regions; to understand the spatial planning proposals and to analyse the reasons in favour or against them; to dominate the main features of the spatial planning; to recognize the main types of construction and urbanization rules related on spatial planning permissions; to understand the techniques-tools and models of spatial planning, and to know how to apply their rules, in architecture; and to prepare the students in order to understand the spatial planning features in a wide range of subjects related with spatial analysis at the European scale.

3. Teaching methodologies for integration of international students

3.1. Pedagogical approach in spatial planning unit

The pedagogical methodology approach in spatial planning unit comprises the following four steps: 1. is based on bibliographic references analysis and case studies, in order to promote the realization of practical works in group, improving the collaboration in between students in common tasks and goals, sharing the outputs, the knowledge and several points of view regarding the topics in discussion; 2. is focused on the analysis of real case studies of urban development projects, and spatial planning instruments, at the local, regional, national and over national scales, in order to bring to the discussion different points of view from all students; 3. it comprises two practical exercises, each one of them with a presentation by the group, at the class. Each working group can choose different case studies, from all over the country or abroad; 4. the research of bibliographic references, the systematization of knowledge as output of the bibliography study and the knowledge sharing in between group members are methodologies used in these practical works. This methodology aims to be able to promote the realization of tasks related on practical exercises or working groups, focused on the integration of international students. The students are expected to read the assigned materials and to draw upon their own experiences and research particularly related to their home countries in order to contribute fully to each session. In preparing for the lectures, students should examine the following materials: the major questions raised by the literature on the subject; the answers to theses provided in the literature and from the student's experiences; the arguments and controversies related with the topic. Students are encouraged to attend to events such as seminars or workshops organized with other national or international universities and to field trips. Regarding international students, the talks and all teaching materials are provided in English or explained in the classroom in English.

3.2. Requirements for integration of international students

In Europe, considerable public funds have been invested in higher education systems in order to promote several international mobility programmes, such as ERASMUS. These programmes have aroused both political and scientific interest in whether international students' mobility [4]. Albeit a wide research about good practice teaching to integrate international students, there are still some doubts about what should be the good practice within the context of architecture in general and in the domain of spatial planning in particular. The integration of diverse groups of international students requires to scholars' new demands in the teaching process. Currently there are no doubts that students should be taught in a way that allows them to make decisions while surrounded by uncertainty [2]. The strategy is to lead teachers to adapt their teaching approaches to match with the students' background context. To achieve this goal there is the need of turn from the traditional teacher-focused approach of teaching to a student-centred approach of teaching within a knowledge-centred learning framework [2]. The scholars should be aware that students coming from all over the world have to make substantial adjustments from their home school 'culture of learning' to that of university [1]. Scholars belonging to higher education institutions have a responsibility for preparing students according to societal ethical standard and principles [5], considering their different backgrounds. The Australian universities, having students coming to this country at least since the beginning of the 20th century, from the Asia-Pacific, are good examples. Being an English-speaking country and offering a Western-style of education [6], they adapt teaching methodologies to several issues, including the following: the definition of the teaching / learning framework, regarding the international context; the training of scholars in order to work effectively in a multicultural framework [7]; and a praxis of international cooperation in research [8]. The experience at the Australian university of Victoria reveals that there are several strategies to accommodate international students, such as to emphasising important points of each subject contents, or to simplifying the written materials [9]. Consistent with the international literature, there is another study in Australia [10], which confirms the benefits of university diversity experiences on the development of students' preparation for the globalized society [11, 12]. In particular, it has examined how students' views and attitudes toward diversity and experiences contribute to their intergroup attitudes and civic engagement. In fact, Australian universities are aware of the ways in which students can use the diversity of the international population as a strength. These institutions play a pivotal role in fostering high-quality intercultural amongst their students, which,

will help to prepare them for a gradually diverse global society [10], with an increasingly human mobility. Regarding the latter aspect some authors [13] alert for an interdisciplinary approach, combining global change and fluidity of human mobility.

4. Conclusions

Higher education students are coming to international experiences in different academic cultures, bringing inevitably their home countries backgrounds, which have provided their previous university training. Therefore, scholars should be aware of these diversities of cultures, preparing appropriate contents in their academic units and subjects, in order to adapt the pedagogical methodologies to the international students. In countries, which are not English-speakers, such as in Portugal, and where the number of international students is increasingly rising, the efforts of scholars to integrate these students start with the preparation of all taught contents of the degrees' units in English. The presented case of the spatial planning unit, in the MIA at UBI is an example of this practice. Another strategy is rather than teacher-centred approach, as a traditional way of teaching, to turn to a student-centred approach, supported by a knowledge-centred learning environment. At the referred literature, Australian universities were shown as pivotal examples, with a long experience of international students, coming from culturally diverse nations, capable to move towards a more internationalized curriculum [5].

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