

## TEACHING URBANISM WITH SUDOKU

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The urban knowledge is mandatory in the career of Architecture. However, the subjects to understand the evolution of cities, their planning, design and governance, have greater complexity, especially the ones regarding technical issues, linked with the Sustainable Development Goals, as mobility, energy, economy and climate change. To solve this gap, different authors explained that a ludic approach can be useful for university lessons and even to improve the professional practices. In the last chapter of his First Lesson, Bernardo Secchi presented an interesting analogy of Urbanism with games. In fact, the city should not be seen as a puzzle, when the cover gives you a perfect photography of how it looks – our goal is to get those pieces together. On other hand, his planning and governance can reflect the checkers game disposal, the same number (program or typology) following each other. More examples of this relation are the Mikado, moving pieces, but without touching the others and achieve good external results, as the strategies of Urban Acupuncture. Or the Monopoly game, directly connected to the real estate and his exclusive financial perspective for the cities. In recent years, the practice of the Sudoku game is other interesting vision to understand the “so called” city of 15 minutes walking, with the mix-uses nearby housing and employment. In the experience of teaching Urbanism in the education of future Architects, we present these analogies at the beginning of the course, trying to introduce this complex subject in a more flexible and ludic way, opening the students attention. This paper discuss the results of an academic urban development simulation based on the soduku, with the students of architecture at the Universidade Portucalense, in Porto. These perhaps more creative tools do not prevent the use of the traditional methodologies, but can be especially relevant for the next generations, in a context of digital university training..

Keywords: urbanism; architecture; teaching methodologies; games; sudoku.