# Student's perception regarding competence development as for the implementation of a multisensorial methodology in Architecture.

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**Abstract.** The study aimed to analyze Architecture students' perceptions regarding their territorial recognition competence through the experience of the multisensorial methodology. This investigation, is of a qualitative nature, phenomenological design, with non-probabilistic sampling, for convenience and purpose, collects information from 3 group interviews and documentary analysis of portfolios. The content analysis criteria proposed by the grounded theory are followed in the open and axial coding phases for data analysis. The students' perception records that the use of the multisensorial methodology allows them to have a major domain of the territorial components as of the role the diverse senses play; they reveal the importance of the conceptual use in the definition of territory and the consideration over time as well as the cultural and social aspects; they perceive lack of time to exchange ideas with other peers highlighting collaborative work in the development of competences. From the results, it is concluded that although there are diverse abilities that are required to develop the recognition of territorial competence, the multisensorial methodology makes an important contribution to achieve it.

**Keywords:** Perception, Students, Teaching methodology, Architecture.

## 1 Introduction

To achieve recognition and an effective approach to the territory, it is essential to take into account its many factors, detect patterns, give a significance to the rhythm and from that, enrich the different stages of design of the Architecture workshop. In this manner, it will be possible to raise projects with a more defined territorial character.

Given that there is a limited knowledge regarding the students perception of Architecture on the implementation of a multisensorial methodology for the recognition and study of the territory on their formative process, it is relevant inquire on it, and how it leads them to the declared graduation profile. Being that, as Pallasmaa (2018) proposes,

the landscape is usually studied solely from a visual perspective, which limits the environment comprehension. Nevertheless, architecture and places are experienced through multiple senses and the sensorial register expands the pedagogical experience (Di Lorenzo, 2019).

## 2 Theoretical framework

The landscape presents itself as an opportunity in teaching architecture, in the study of the territory, is fundamental for project art. (López et al., 2020). In the teaching of architecture, the study of territory corresponds to the first step of each workshop and it is part of the compromised competences in the declared graduation profile, whereby, it is needed to inquire about teaching processes and strengthen the role that landscape plays on them, so that is does not become an accessory element of project practice (Vélez et al., 2019).

Teaching from creativity requires the training of flexible versatile professionals, who are capable of taking imaginative decisions (Dorado et al., 2019) where it is important to incorporate more senses into the territorial catchment for a significate recognition (López et al., 2020). The multisensorial methodology, expresses that who studied the territory, is a multisensorial observer (Guerrero et al., 2019), and the approach is not only focused on the visual, but in all elements that compose it, which puts the observer and their senses as protagonists (Zumthor, 2019), constituting a methodological proposal which allows the enlargement of the territorial competence.

# 3 Methods

The investigation is addressed from an interpretive paradigm (Ricoy, 2006), with a qualitative methodological approach (Creswell, 2014) and a phenomenological design (Martin et al., 2021). The sample is for convenience and intentional (Hernández et al, 2010) and it is made by 13 students who had a minimum participation of 70% in the subject where the methodology was implemented. The semi-structured group interview is used as a data collection technique (Sampieri et al., 2014) and the documentary analysis of portfolios.

An inductive thematic content analysis of the material produced is carried out.

This process consist on identify, code and categorize, using a constant comparison strategy, with the objective of achieve theoretical saturation of the conceptual categories generated through analysis. (Creswell, 2014).

#### 4 Results

The results derived from the analysis process recognize three thematic axes: the multisensorial apprenticeship for territorial studies and creative development, the abilities and relevance on the development of territorial competence, and the requirements and difficulties for the achievement of competences.

First, students perceive that the implementation of the multisensorial methodology enables greater mastery of territory components, given that several senses take place and importance, not only sight; registering the contribution of this experience to the development and growth of their creativity and their competence in territorial recognition.

Students recognize the relevance of being able to delimit and define the territory through concepts, which they do not always dominate, considering the language development as a fundamental aspect. Additionally, they perceive the necessity of becoming acquainted and comprehend time passing by, as well as the relevance of the project intervention, considering the cultural and social aspect.

Students identify factors which affect the development of competences, such as the lack of autonomous time, the remoteness of their place of study and social circumstances, were they can exchange ideas with their peers. Students consider the promotion of team work very significant, increasing the interaction among peers enriches the development of competences.

# 5 Discussion

The importance of multisensorial experiences is highlighted, as pointed out by Morgado (2019) y Pallasmaa (2012), to strengthen apprenticeship and comprehension of space and territory, as well as inquire upon teaching processes which are more decisive (Vélez et al., 2019) and where the teaching architect is able to identify more methodological possibilities, not only replicating as they were traditionally formed (Morales, 2020).

Territorial recognition is key to critically read cities and their surroundings, in order to safeguard the identity and preserve the significant aspects of the localities. (Zapata y Cardona, 2020).

# 6 Conclusions

Students value the importance and magnitude of employing their sense in order to develop a better comprehension of the territory, as well as the social and local history. They also identify the remoteness of their place of study, the academic load and the

lack of collaborative work as obstacles in the development of the territorial recognition. Nevertheless, they perceive that multisensorial methodology aids them, burgeoning abilities and tools which encourages them to tackle challenges, what consequently allows them to apply their insight to practice in architecture by way of being more conscious and creative. Compared with previous workshops without MP, students perceive a higher development of abilities and tools to reach and achieve the territorial competence. It is concluded then, the contribution of this methodology to the development of the competence.

## 7 Limitations and Future Research

A limitation tackled in this study, is associated to the results, where they are linked to the experience of just one workshop and semester, where this specific methodology was enforced. Therefore, previous workshops and later ones are not considered. Consequently, for future research, it is recommended to contrast the perception of students, who attend different workshops with this methodology, with the aim of expanding the conclusions of this study and to get to know how their perceptions about the development of competence have evolved in their training process.

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