Innovative Architectural Learning: A Case Study on Multidisciplinary and Experiential Teaching Methods

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Abstract: This study explores an innovative approach to architectural education, integrating multidisciplinary and experiential practices to enhance student creativity, spatial perception, and problem-solving skills. Traditional studio-based teaching methods are reimagined by incorporating diverse activities such as storytelling, sketching, filmmaking, and scenario development. These methods encourage students to develop multidimensional thinking and effectively communicate complex design ideas.

The research unfolds in two main phases: the transformation of a mundane urban space into a city attraction and the subsequent marketing of the design. Students engage in hands-on activities, including observational drawing, narrative construction, comic book creation, and short film production, fostering a deeper understanding of spatial dynamics and user engagement. Feedback sessions and peer evaluations ensure iterative learning and practical application.

A case study involving the redesign of a "boring" street demonstrates the efficacy of this methodology, revealing increased student motivation, creativity, and interdisciplinary collaboration. However, challenges such as balancing regulatory compliance with creative exploration and the limited integration of advanced digital tools like 3D modeling and virtual reality were identified. The study underscores the necessity of adapting architectural curricula to meet contemporary professional demands, emphasizing user-centered design and advanced technological integration.

This alternative pedagogical framework highlights the importance of fostering cultural exchange, peer learning, and professional preparedness. While the findings suggest a positive impact on student engagement and skill development, maintaining academic rigor within this gamified and interactive learning environment remains crucial. Ultimately, this approach not only prepares students for the complexities of modern architectural practice but also inspires innovative contributions to society.

Keywords: Architectural Education, Multidisciplinary Learning, Creative Pedagogy, Spatial Perception, Design Thinking, Experiential Learning

Introduction

In this article, we delve into the transformative potential of innovative teaching methodologies in architectural education and its creative process. By examining the interplay between teaching, research, and architecture, we aim to demonstrate how integrating diverse approaches can enrich the learning experience and better prepare students for the challenges of contemporary practice. The following sections, framed as "what's," provide foundational short definitions and insights into teaching, research methodology, and architecture, setting the stage for a deeper exploration of our proposed pedagogical strategies.

What's teaching?

Edmund Amidon (1967) [4] described teaching as "an interactive process, primarily involving classroom talk which takes place between teacher and pupil and occurs during certain definable activities".

Building upon this, scholars such as Gagné et al. (1974) [11] emphasized that teaching is inherently scientific, comprising key elements such as content, communication, and feedback. The instructional strategy significantly impacts student learning outcomes and holds the potential for continual adaptation and enhancement [18]. They have significantly contributed to defining this concept, and their views can be outlined as follows: Teaching is a systematic and scientific process, centered on core elements such as content, communication, and feedback. Effective instructional strategies play a crucial role in enhancing student learning and always offer opportunities for adaptation, improvement, and growth.

What' research and methodology?

Research, in a broad sense, refers to the pursuit of knowledge and is defined as the effective search for information on a specific topic. The High Learner's Glossary of Current English defines research as "a careful examination and inquiry aimed at discovering new details, especially in any field of knowledge." Methodology is the systematic and theoretical examination of methods that are functional for a field of study. It encompasses the hypothetical analysis of the body of methods and ethics associated with a field of knowledge. Typically, it elaborates on concepts such as examples, academic models, phases, and quantitative or qualitative techniques. Methodology aids not only in explaining the products of scientific inquiry but also in understanding the process itself. Research methodology aims to elucidate and scrutinize methods, shedding light on their limitations and resources.

What's Architecture?

Architecture is perhaps one of the few professions that creatively integrates both art and science in the process of design and construction. This area of practice – architecture – merges both functionality and aesthetics by serving both practical and artistic purposes. While it may appear that these objectives are different, they are in fact interdependent. Rather every culture has its own concept of space with relation to nature and other people, and the houses they build are a proof of their environment that encompasses the climate, the past, the customs, artistic preferences and numerous aspects of everyday life. Designing in architeure means a multifaceted activity that encompasses a wide range of skills, all of which contribute to the overall design process. These skills include critical thinking, creative ideation, problem-solving, spatial awareness, and technical proficiency. [14]

Architects, as a consequence, seek into almost any subject under the sun simply because they are artists whose work benefits mankind. An architect is trained and educated for the tasks of controlling or creating space and feelings, thus, control over perception and ideas is possible to achieve.

Architecture is a form of creative action that aims to fully shape the human environment and encompasses a wide range of practices to meet human needs, intricately intertwined with the environment and nature, while also expressing emotions and beliefs [20].

What's methodology of Architecture?

Architectural education initially began with the transfer of knowledge and experience from master to apprentice during the construction of buildings, and it has gradually evolved with the teaching of architectural design in universities. As people's aesthetic concerns have changed, interest in architectural education has increased day by day. Due to the learning and perception difficulties students encounter during architectural education, this article addresses the need to explore teaching methods in architecture and find the most suitable approach. In recent years, many studies have been conducted on teaching content and research methods. Previous studies and theses on this topic will guide our perspectives.

It can be described as a comprehensive curriculum in architecture offered by a higher education institution, culminating in the award of a Bachelor or Mastrer degree in Architecture. [3]

In architectural education, rather than focusing solely on studio-based lessons or drawings within projects, encouraging students with an interest in filmmaking, writing, or public speaking would make the learning experience more enjoyable for them and add more variety to the courses [16].

We may understand that the main tool for architects is drawing [10], which creates an existence where none previously was. Architectural illustrations have consistently served multiple functions, ranging from technical clarifications and artistic expressions to bold proposals and the exploration of creative ideas. These representations enable designers to develop, interpret, convey, and assess their design concepts at every stage of the design process. [17]

First of all, it is useful to explain to the students that architecture is everywhere, that everything is designed and that they can be inspired by everything that is designed. Since one of the methods in architectural education is to imitate until they find their own lines, which is also a form of learning, we should encourage them towards artistic activities as much as possible.

Sectors such as story writing, script writing, movie making are some of the main sectors that have been influenced by architecture. When writing a story, we need to describe the characters and the places where they live/live. When making a movie, we need to create scenes to be shot and create certain places. These places should be decorated according to the subject of the movie in order to convey some emotions to people in the best way. It may be necessary to design complex scenes and places that people can easily perceive or conceptually not easily perceive. We need architecture and an architectural point of view in order to easily change/manage the atmosphere with shadow and light plays and give the desired effect. Since architecture students are in a continuous learning process inside and outside the school, it is up to the lecturer to show them the right way to correct the wrong examples they are exposed to/see outside the school. It can be said that one of the things the lecturer should do is to intervene in wrong design decisions and bring the student closer to the right one.

When we look at architectural education from the outside, we often do not see the traces of the search for design or we see it very faintly. We can say that the main reasons for this are that students are not practicing multidimensional thinking exercises or are not guided to do so. Students who are new to this department generally have a hard time understanding what is required at first. It is futile to expect quality work from students when they do not even understand what is required of them. For this reason, students can be given writing and reading exercises to increase and stretch their thinking and comprehension capacities. In this way, they can both improve their general culture and understand what they read and hear more easily. When students begin to understand what is required of them, it will no longer be futile to expect quality work from them.

Since exercises such as reading, writing, listening and drawing will not only improve their individual abilities but also contribute to their creativity, such a teaching form will be tested and analyzed with the feedback received from the students.

As a case study for future researchers, this paper investigates the applicability of an alternative approach to architectural education.

Background Antecendents

Schools of architecture have aimed to provide students with diverse perspectives through various methods. The primary schools of thought include:

1.Beaux-Arts Schools:
Originating in France, this approach emphasizes classical architectural principles and aesthetic values. Students are taught traditional drawing and composition techniques.

2.Bauhaus Schools:
Emerging from Germany, this school aims to create functional and aesthetic designs by combining art, craft, and technology. Students are given the opportunity to conduct experimental studies on materials and construction techniques.

3. Modernist Schools:
Developed in the early 20th century, this approach adopts the principle of form following function. Students are taught minimalism and the use of new materials.

4. Sustainable Architecture Schools:

Prioritizing environmental sensitivity, this school focuses on designs that promote energy efficiency and ecological balance. Students are trained in green building design and the integration of renewable energy sources.

5. Digital Architecture Schools:

This approach is characterized by its emphasis on the use of digital tools, thereby enabling students to explore complex design concepts and create innovative architectural solutions. Unusual and innovative situations in architecture and design create niches and creative capsules within traditional architectural education, transferring the knowledge gained in the field of architecture to a new dimension through emerging technological channels or transforming it into new insights that generate fresh meanings. [7]

Some argue that these schools have become outdated and insufficient in an era of rapidly advancing technology, while others believe that contemporary architecture education has evolved into a comprehensive framework that integrates theory and practice. This framework encompasses not only classical approaches like Modernism and Postmodernism but also emphasizes environmental sustainability. In my view, while contemporary architecture education is on the verge of success, it still requires further refinement. The methodological experiment that we will discuss in this paper aims to address this need.

Architecture is inherently a multidisciplinary design process that encompasses various art forms. For architecture to reach its full potential, it must integrate with other disciplines such as painting, cinema, sculpture, theater, and music. As Julie Kim (2024) [13] emphasizes, "We define design as a creative endeavor that requires the integration of knowledge from various disciplines with a shared focus on solving a design problem."

Design studios, which constitute the core of contemporary architecture education, play a pivotal role in the curriculum. The focus in today's design studios has shifted from the end product to the design process itself. It became evident that the ways in which designs are presented significantly influence how design goals are communicated. [12]

In architectural education, as in other design fields, design studios serve as distinctive settings where students acquire architectural design skills by integrating theoretical understanding and practical experience into design expertise. [2]

These studios are increasingly recognized as environments where students acquire the specific thinking and behavioral patterns required by the architectural discipline. Beyond being mere courses, design studios have evolved into learning environments that foster both professional formation, particularly design skills, and critical thinking [5]. Characterized by an iterative process where students continually develop their projects week by week, architecture education is fundamentally based on trial and error and experiential learning [22]. As students enhance their knowledge and experience through this process, they also develop essential skills such as self-expression, interaction, critical discourse, and adaptability, primarily within the studio setting.

This underscores the significance of face-to-face education in the architectural discipline [24]. Research methodology in architecture is a systematic framework used to clearly define and analyze the research problem, guiding the creative process of inquiry in a structured and logical manner. It serves as the science of understanding and applying the principles, tools, and techniques required to conduct research in a scientific and objective way. This approach not only ensures the validity and reliability of the findings but also provides a clear roadmap for selecting appropriate methods, designing experiments, and interpreting results. By methodically explaining the research problem, research methodology establishes the foundation for producing robust and credible outcomes in any field of study. [23]

Architecture education, a dynamic and evolving process, is characterized by its studio-centric, design-focused approach, fostering a unique and creative environment enriched by various art forms. Since the 1980s, rapid technological advancements, proliferation of computer software, and the constant evolution of software systems have significantly restructured the learning environment within design studios, the backbone of architectural education. Today, many architecture schools implement blended learning in their design studios, combining the effectiveness and flexibility of computer-assisted learning with the social aspects of face-to-face interaction [1]. The architectural discipline plays a crucial role in reflecting technological changes and transformations within educational spaces. This is because meeting the needs of users is paramount in the architectural design process. As technology evolves, so too do user needs. A failure to accurately analyze these needs can diminish physical and psychosocial comfort, hinder the efficient use of designed spaces, and compromise

the quality of education delivered within them. There is a limited body of research emphasizing the need to transform architectural educational spaces in line with emerging technologies [25].

Architectural education encourages students to gain diverse perspectives by collaborating with other disciplines. This approach enables students to integrate social, cultural, and environmental factors into their design processes. Interdisciplinary projects allow students to address complex problems in a more comprehensive manner [25].

Learning through studio-based approaches is viewed as the most beneficial teaching strategy for both learners and instructors. This approach promotes active engagement from students while enabling instructors to offer personalized feedback and support. The studio setting fosters the development of creative thinking, problem-solving, and critical assessment abilities in students. Furthermore, studio-based learning equips students more effectively for their future careers. Creativity can be defined by the ability to engage with and develop expressive ideas in innovative ways, resulting in outcomes that are not only original but also practical and valuable. It involves thinking beyond conventional boundaries to produce solutions or creations that are both distinctive and meaningful. [19]

In light of existing research on architectural education, this study aims to cultivate students in a multidisciplinary game-based learning environment. By doing so, it seeks to address the shortcomings of the current education system and establish a more effective learning process.

Method

The aim of this study is for architecture students to explore and redefine a space through various artistic and analytical exercises. This methodology, which aims to develop students' creativity, perception skills and multidimensional thinking skills, consists of two main stages.

Our case study aligns with the perspective highlighted by Malec-Zięba, 2023 [15], who underscores the importance of foundational definitions in teaching and research methodologies to frame pedagogical strategies. The emphasis on linking structure, form, and design experiences provides a cohesive framework for integrating interdisciplinary methods in architectural education. By incorporating activities such as observational drawing, storytelling, and collaborative projects, our case study demonstrates how these foundational principles can be applied to real-world educational challenges.

In our case study, we kick off the creative process with some basic exercises in drawing and sketching. Our goal is to help students create faster, more effective sketches that convey ideas clearly, without getting bogged down in unnecessary details. Before this exercise, students often treated sketches like fully detailed drawings—spending too much time and energy on minor elements, which ended up making their work harder to understand. With this new approach, we're encouraging them to focus on making quick, clear sketches that communicate the essentials, a skill that will be crucial in their careers as architects. We're also organizing students into multidisciplinary groups, where they'll take on different roles like sketching, developing scenarios, creating comic books, and even filmmaking. This setup exposes them to a variety of skills and tools, from learning new techniques and software applications to figuring out how to effectively present their work. We know this can be challenging, as they're picking up a lot of new skills at once—learning to use digital tools, experimenting with different media, and collaborating with others. By pushing them to work across these different areas, we want to help them develop the ability to think in multiple dimensions and to see their projects from different perspectives. This experience doesn't just teach practical skills; it encourages a way of thinking that's flexible and adaptable, which will be invaluable in the complex, collaborative world of architecture. This pedagogical framework echoes Malec-Zięba's[15] assertion of creating a structured yet adaptive learning experience, paving the way for innovative approaches in architecture education. Creating assignments that integrate diverse, and occasionally conflicting, approaches from various disciplines enables us to re-evaluate and redefine both the pedagogical objectives and methods of operation. [9]

Prior to implementing an interdisciplinary study, a comprehensive investigation was conducted to assess the feasibility of undergraduate students undertaking such complex work. The research considered studies aligned with the proposed project's mindset, such as Julie Kim's assertion that " I have been asked why include undergraduates at all? Undergraduate students are arguably only just beginning to shape their leadership

skills. Is an inexperienced, beginning student ready to engage in interdisciplinary exercises when they are only just learning their own discipline? Perhaps not. But these students are also ready to challenge boundaries and constraints. For undergraduate students especially, we can entertain broad definitions of design inquiry and experiences precisely because we are not constrained nor limited by accreditation requirements overlaid on professional degree programs. Free of such constraints, undergraduate programs can enjoy greater flexibility in design-focused curricula to leverage the critical creative thinking of our students.''

Phase 1: Transforming a Space into a City Attraction Point

In the first stage, students were asked to visit a street that was 'boring' and lacked vibrancy. It was aimed to transform this area, which our study and the local people also considered 'boring', into an attractive spot for the city. Students were enabled to observe this process and re-evaluate it from a creative point of view. We are in a moment where we all learn again how to live and enjoy the city[21], thtas why this case study, its important to revel a startegy to teach and to create new and more creative projects of architecture.

1. Developing Spatial Perception through Observation and Drawing
In architectural education, observation and drawing studies are very important to increase students' spatial awareness. Such applications offer students the opportunity to examine the details more closely and to evaluate the space from different perspectives. Students gain the ability to develop original design solutions by better understanding the characteristics of the space through drawing. This process of observation and drawing develops students' ability to perceive and analyse the visual elements of architectural space.

2. Design Idea Development through Scenario Development
In the scenario development phase, students were asked to construct a story around the street. ''Storytelling allows architecture students to place their designs in an emotional and narrative context and helps them develop original ideas about space'' [6]. This allows students to think not only about spatial arrangements, but also about the experiences that these arrangements will create in users.

3. Developing Visual and Critical Thinking with Comics
Translating the script into a comic book is a technique that we think will help students develop their visual thinking skills. The comic book format helps students to concretise their abstract thoughts and create a narrative structure. At this stage, it allows students to improve their drawing skills and builds a bridge between storytelling and design.

4. Developing Creative Thinking with Short Film Shooting
Making a short film based on comics allows students to develop the script and interact with different disciplines, such as acting, directing and cinematography. This comprehensive method enhances their visual abilities and supports them to have different perspectives. Film making allows students to consider the storytelling and visual aesthetics of the design process.

Filmic environments may offer fresh inspiration for architectural representation, serving as an innovative method for identifying design challenges. Elements from film, including filming techniques, editing, and stage composition, can be utilized as design strategies to express aesthetics and style. [8]

All tasks undertaken at this stage are designed to provide a well-rounded learning experience that brings together a variety of disciplines such as drawing, storytelling and technical skills. This process aims to develop not only students' drawing and design skills, but also their imagination, their ability to see things from different perspectives, and their ability to present complex concepts visually and narratively.

Phase 2: Marketing and Persuasion

In the second part of the project, students presented their projects to each other and evaluated the work of other groups. The idea was simple: each group had to try to 'sell' their project to their peers. The evaluation was based on how convincing they were, which made the whole process pretty competitive.

This part of the project wasn't just about presenting ideas; it was about learning how to give and take feedback, improve communication skills, and really understand the strengths and weaknesses of their designs. We wanted students to get better at selling their ideas because being persuasive is such an important skill to have before starting their professional careers. The intellectual and technological advancements of humanity, along with the intricate system of languages developed to meet communication needs, highlight a tendency to prioritise visual information. The human sensory system strives to interpret and become aware of its surroundings, storing visual stimuli in memory. Every drawing conveys a message, but if the message is poorly positioned or unclear, it fails to be understood, resulting in a lack of effective communication.

In this phase, students worked in groups of six to create another film. Each group had two people representing city hall, two representing the client, and two representing the architect. We listened in on their discussions, and everything had to be recorded because we needed to see how well they could argue their points and how persuasive they could be. The final film had to show not just the end product but also the arguments they used, and these recordings were key for grading.

Students also took classes from other professors about city hall regulations, so we could see if they applied what they learned and if they respected the boundaries set by these rules. This exercise was more than just a creative task—it was about getting students ready for their professional lives, making sure they had practical, real-world skills. It's not just about creativity; it's about being effective and efficient in their future careers.
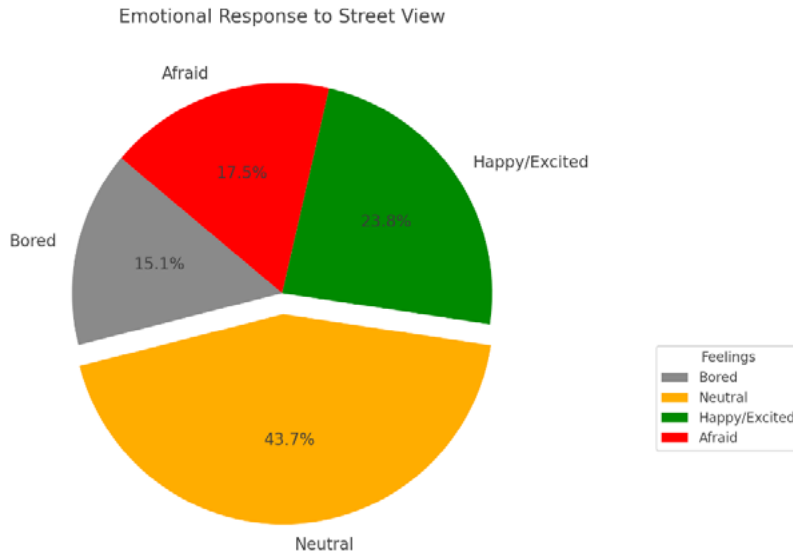
Survey

Before commencing this study, we requested that students administer an online survey, which we had prepared, to passersby in the street. The results of this survey, completed by 126 individuals, informed our approach to the study, the focus area, and our subsequent steps.

1 – How old are you?

Age Distribution of Participants
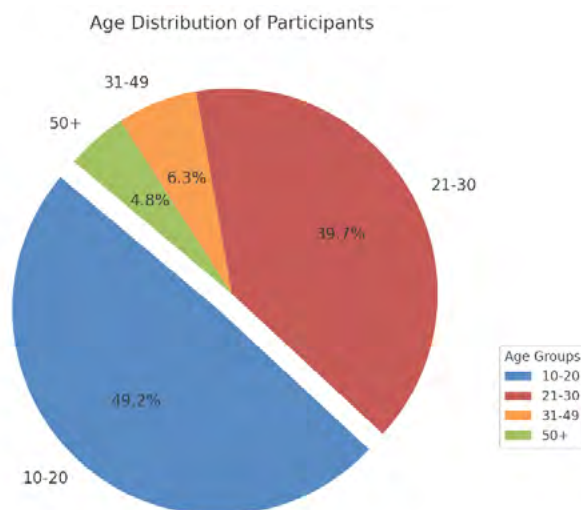
The survey data reveals that 10-20 year-olds constitute 49.2% of the street's users. Given this significant proportion, it is recommended that future design proposals be tailored to appeal to the preferences and behaviors of this age group.

2 – What do you feel when you see this street?

Emotional Response to Street View

The survey results revealed that 43.7% of individuals found the street to be unremarkable and 15.1% reported feelings of boredom. The project aims to address these perceptions by reimagining the street as a dynamic and engaging public space. This exercise is intended to underscore to architecture students the importance of adaptive reuse and the role of architects in enhancing existing urban environments.

3 – Which colors suits this street in your opinion?

Preferred Colors for Street View
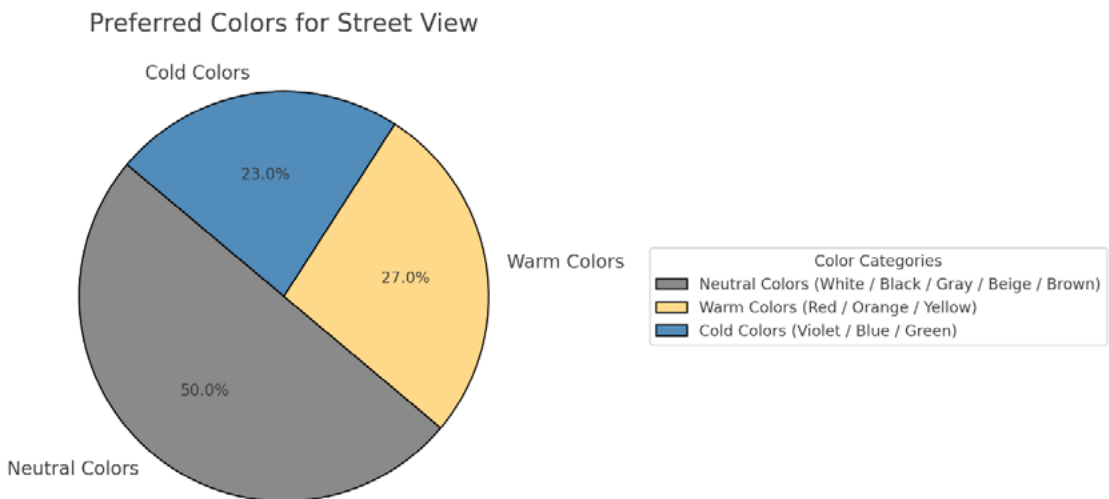
The survey data reveals a preference for neutral colors among respondents. To stimulate a stronger emotional response and encourage prolonged engagement, it is suggested that the design incorporate non-neutral and visually striking color palettes. By avoiding color mimicry and embracing a more divergent color scheme, the design can enhance its visual appeal and attract greater attention.

4 – If a building were to be built on this street, what material would you prefer it to be made of?

Preferred Building Materials for Street Construction
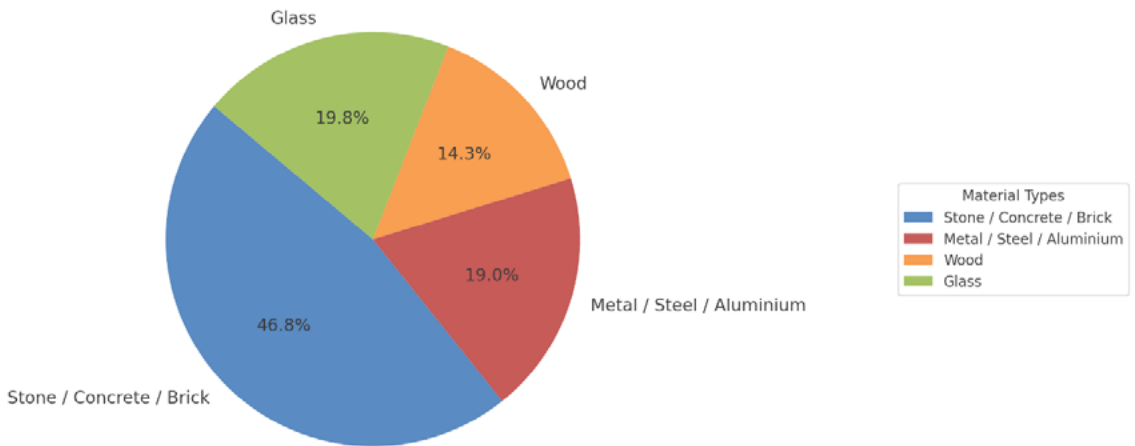
The survey results indicate a strong preference for the material palette of the existing stone-built structures in the street. To create a more visually striking design, it is proposed that this preference be challenged by incorporating contrasting materials. For instance, the introduction of wooden elements or the use of differently colored stones within the context of predominantly stone buildings could provide a visually stimulating contrast.

5 – Would you like to transform this street as a hotspot of the city?
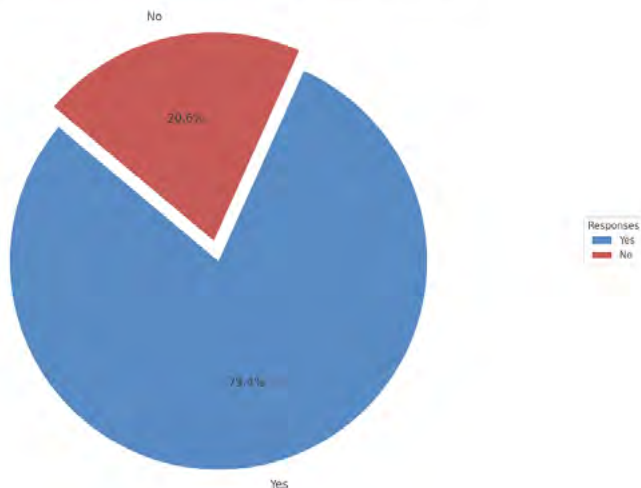
The survey results reveal a strong desire among respondents for the street to be revitalized as a vibrant hub. Given its current underutilized state and its potential to appeal to young people, the project seeks to create an Instagram-worthy environment that can attract tourists and enhance the city's reputation. By doing so, it is anticipated that local businesses will also benefit from increased foot traffic.

The students' survey played a critical role in bridging the gap between academic exploration and real-world application. By engaging with passersby on the street and collecting their perspectives, students were able to ground their creative and design efforts in the actual needs, preferences, and experiences of the community.

This process of gathering and analyzing data not only enriched the students' understanding of the space they were working to transform but also emphasized the importance of user-centered design in architecture.

One of the key insights derived from the survey was the identification of the demographic most frequently using the street and their emotional responses to the space. This demographic information provided students with a focused target audience for their designs, ensuring that the proposed solutions resonated with the primary users of the area. For instance, the discovery that nearly 50% of respondents viewed the street as unremarkable or boring directly informed the students' approach to reimagining the space as a vibrant and engaging urban environment.

Additionally, the survey's findings on color preferences, material choices, and the desire to make the street a city hotspot offered valuable context for the design process. For example, the preference for neutral tones coupled with a recommendation for more striking, unconventional palettes encouraged students to experiment with visual contrasts that could attract attention and enhance the street's appeal. Similarly, feedback on materials challenged students to balance tradition with innovation, integrating contrasting textures like wood or alternative stone patterns to invigorate the existing architectural character.

The survey also introduced students to the iterative and responsive nature of design. By working with tangible feedback from the public, they learned to adapt their concepts to better meet user expectations while maintaining their creative vision. This practice of incorporating stakeholder input is a vital skill in architectural practice, where collaboration with clients, communities, and governing bodies is often necessary.

Ultimately, the survey highlighted the importance of understanding human interaction with spaces. It reinforced the idea that architecture is not solely about aesthetics or technical prowess but also about enhancing the human experience. By incorporating these insights, students were able to create designs that were not only visually compelling but also socially and culturally relevant, preparing them for future challenges in their professional careers.

Creative Process

Creative Process and Feedbacks

In this study, the creative process commences when students embark on a field trip and continues until the project is submitted. Students begin collecting data about the area by creating sketches from angles that pique their interest. The primary objective of these sketches is to perceive, understand, and feel the street, and to express the emotions the street evokes in them through drawing, based on their own perceptions.

During the initial phase of the study, while students are creating these sketches, professors evaluate the students' drawing techniques, their ability to express the street, and their presentation methods. As observed in the studies, each student possesses a unique drawing technique. In order to develop these unique techniques and contribute to their professional development, students have been guided on how to draw more quickly and effectively. Throughout this process, students are supported in developing their own technical skills, contributing to their acquisition of qualified drawing abilities that can be used in the professional field.
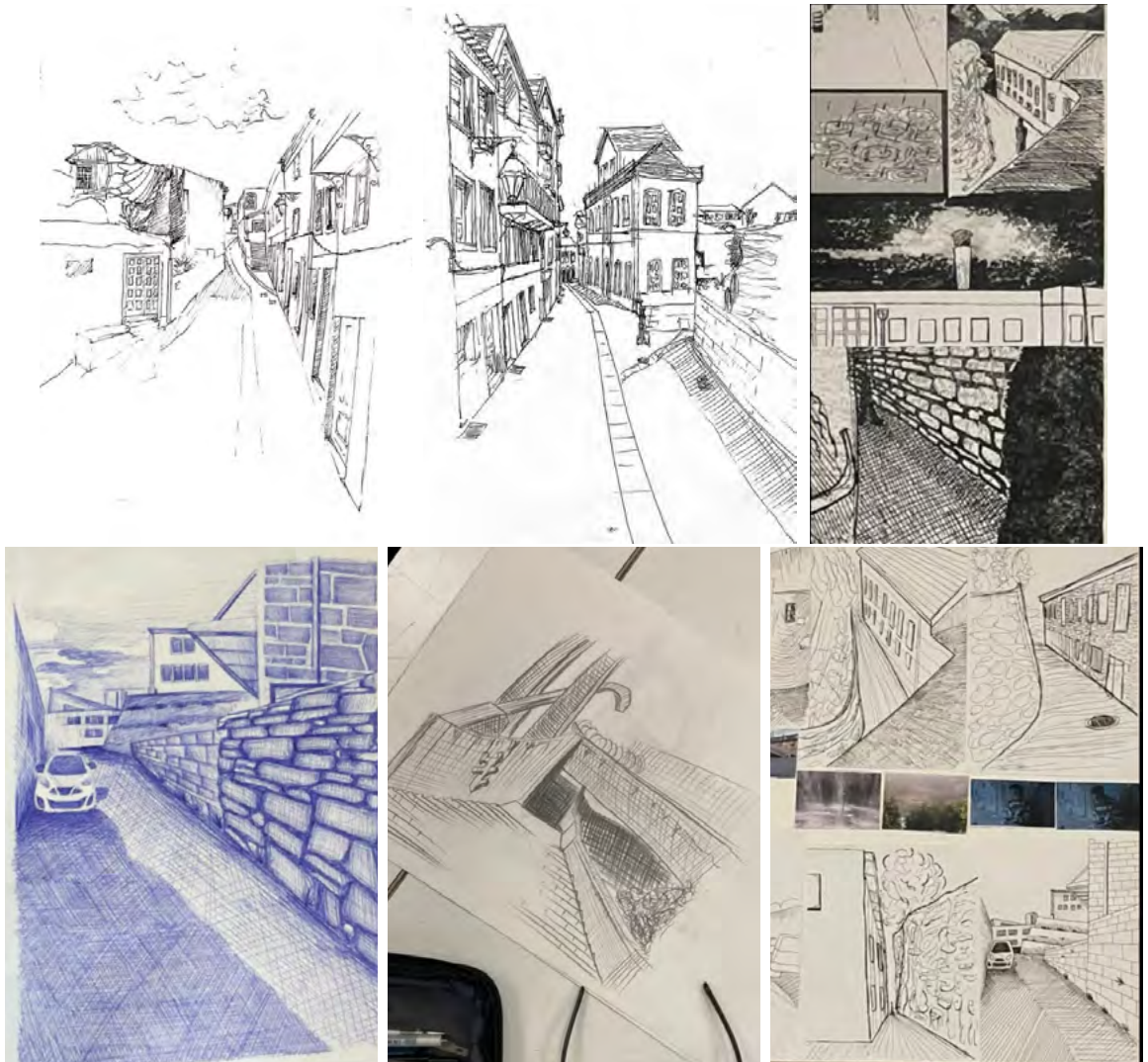
Fig. 1. Students sketches, from drawing lectures, second year 2024, Architecture, UBI

Having completed or continued their street sketches, students have embarked on creating comic book designs based on the stories they have written about the street. The primary goal of this study is to enable students to comprehend space, contribute to the development of their creative writing skills by creating a scenario specific to the space, and engage them in artistic activities that encourage three-dimensional thinking. At this stage of the study, evaluations are conducted considering how students perceive the space, how they describe it, and the originality of their stories about the street, as well as their presentation techniques.

Fig. 2. Students work process, from drawing lectures, second year 2024, Architecture, UBI

Additionally, students are expected to create a short film, no longer than two minutes, reflecting the feelings the street evokes in them. This short film project aims to engage students in cinematography and encourage them to pursue their designs from a multidisciplinary perspective. This multidisciplinary process aims to equip students with the ability to look at things from different perspectives and to develop their creative and critical thinking skills. Thus, students have the opportunity to enrich both their visual and spatial expression abilities by utilizing various disciplines in their artistic production processes.
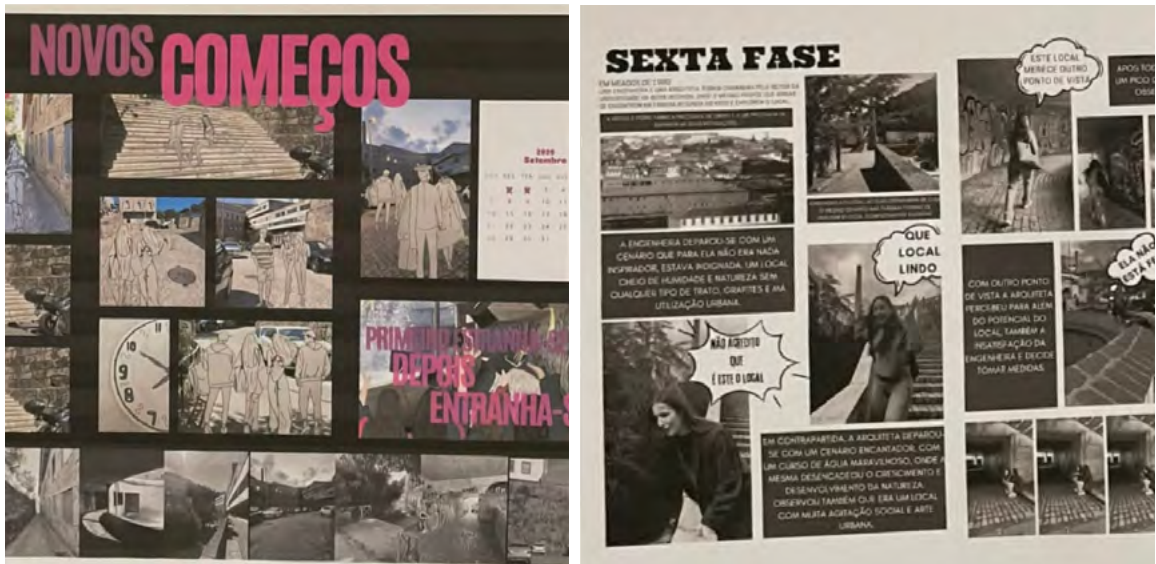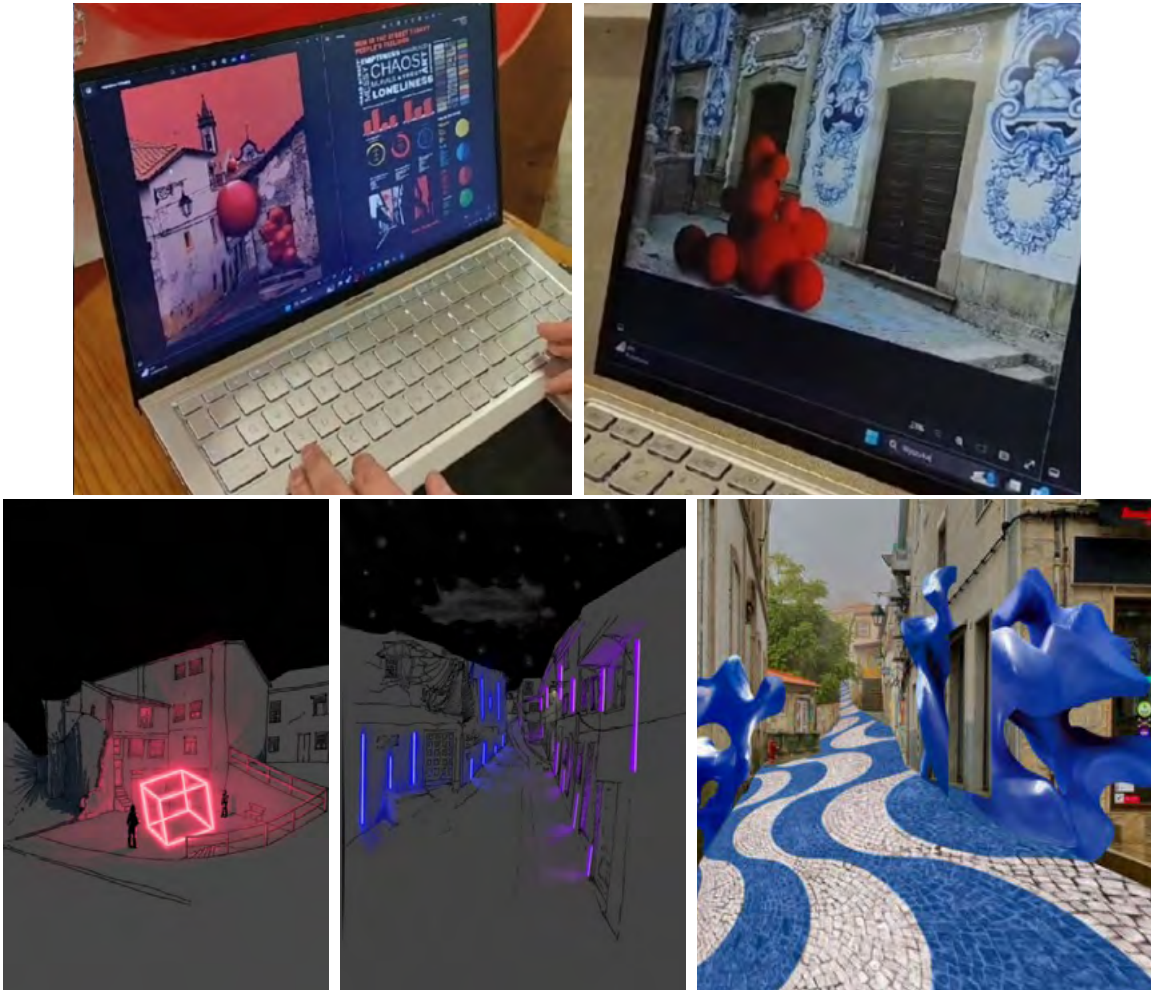

Fig. 3. Students work process presentations, from drawing lectures, second year 2024, Architecture, UBI

The ultimate goal for students in this study is to transform an ordinary street into a noteworthy, attractive space, in other words, to create a point of interest or an 'Instagrammable' location. With this aim, students are tasked with designing the area to be aesthetically pleasing and appealing to visitors. As a final product, students must learn the municipality's regulations regarding construction in historical areas and develop a design within these regulations. This process ensures that students adopt the principle of compliance with legal regulations in the design process and teaches them how to work with urban constraints while maintaining

creativity. Thus, students gain experience in creating sustainable spaces in real-world conditions by producing practical and feasible solutions.


Fig. 4. Students work process, digital presentation, from drawing lectures, second year 2024, Architecture, UBI

Feedback from Students

In order to gather feedback from the students, interviews were conducted and the results were visualized in digital graphics. These results have shown us the students' level of satisfaction

**1-What was the emotion you felt the most while working on this task?**
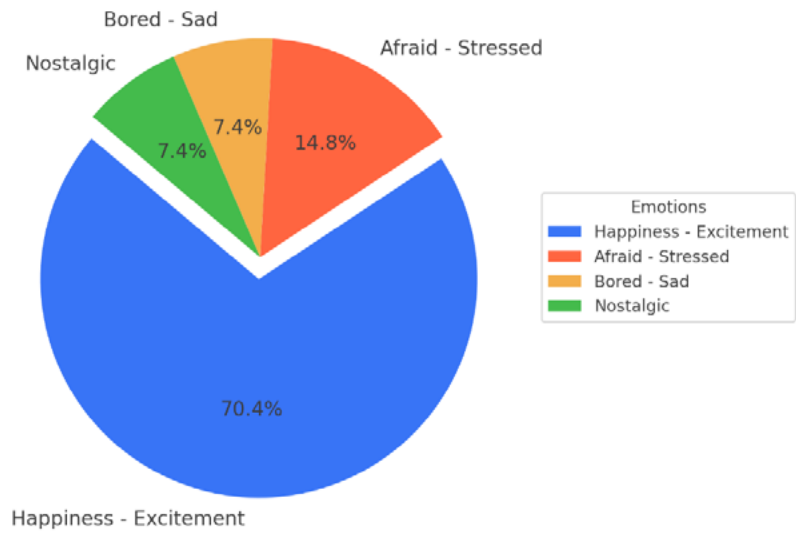
According to the graphical data, a significant majority of students reported feelings of happiness and excitement while working on this project. This finding suggests that the study had a positive impact on students, and that they embraced this approach more than traditional teaching methods. The data indicates that students enjoyed the process and their interest in the study increased. This suggests that the study positively influenced students' motivation and learning experiences.

**2-What did you struggle with the most while working on this task?**
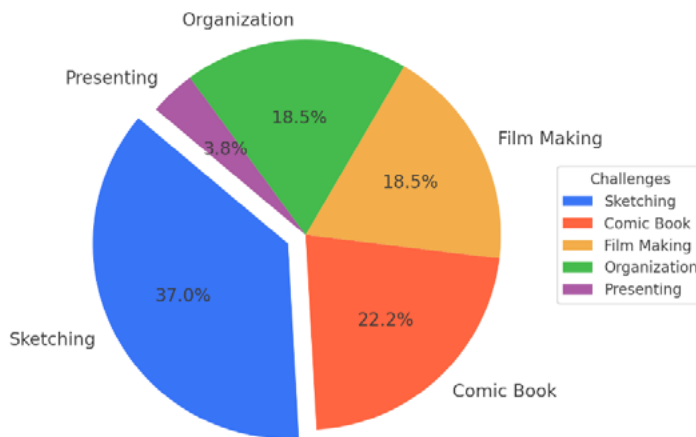
The graphical data revealed that a significant proportion of students experienced difficulties during the initial sketching phase of the project. As the project progressed, it was observed that students encountered fewer challenges and found the process to be more manageable. An analysis of the survey data indicated that students became more comfortable as they gained experience and advanced in their skills. These findings suggest that students developed their abilities throughout the project and became more adept at overcoming obstacles.

3-When did you enjoy the most during this task?
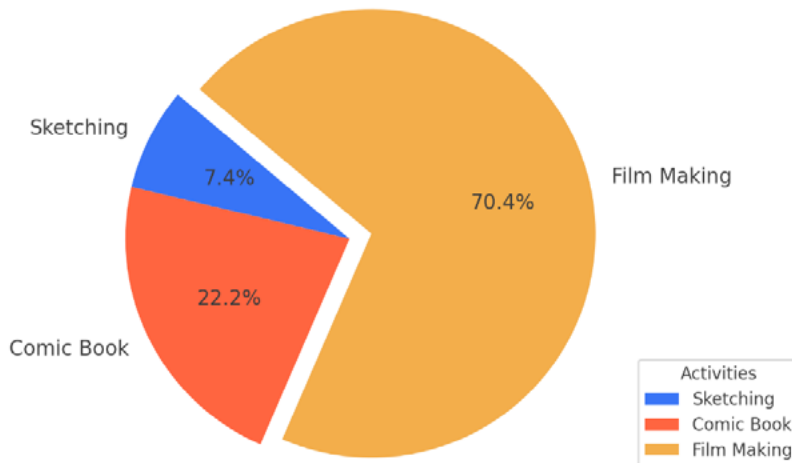
The graphical data indicates that a significant majority of students enjoyed the filmmaking process. This finding suggests that students have a keen interest in cinematography and are satisfied with the work produced in this field. Based on these results, it is recommended that elective courses related to cinematography be added to the curriculum. Such an addition would contribute to the development of students' creative expression skills and support their visual communication abilities. The inclusion of these courses in the curriculum would allow students to delve deeper into their areas of interest and make positive contributions to the educational process.

4-Do you think this task has contributed to you ? If so , What's the contribution ?
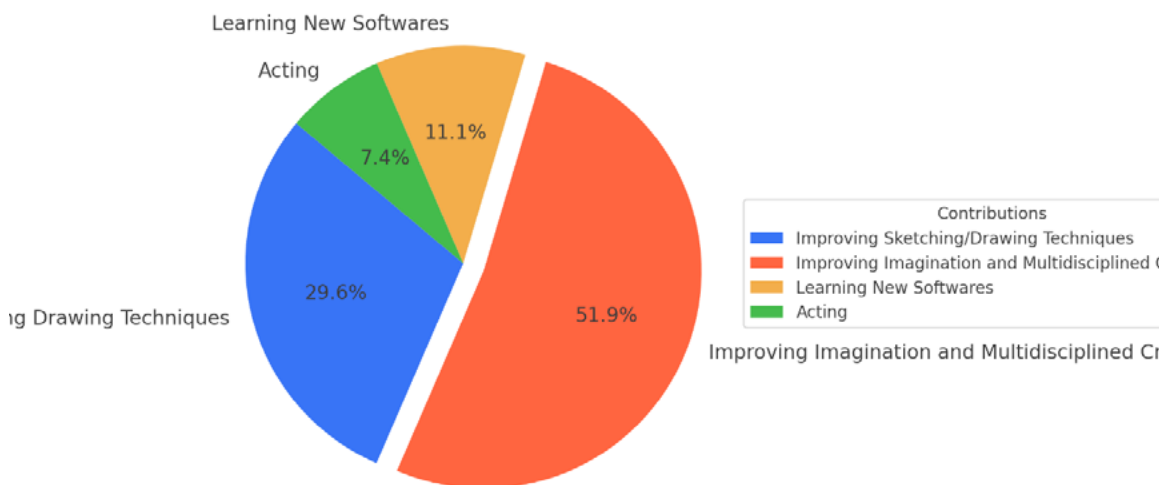
According to the graphical data, all students reported that the study had benefited them. This finding indicates that the study has achieved its objectives. Since no negative responses were received during the interviews, this option was not included in the graph. The unanimous positive feedback from students suggests that the study has had the intended impact on students and has been successful from an educational standpoint.

SWOT Analysis

SWOT	Analysis
Strengths	**- Fun and engaging structure:** Improves the classroom atmosphere. **- Professor-student interaction:** Constant communication builds a strong connection. **- Encourages creativity:** Enables students to develop original ideas. **- Interdisciplinary approach:** Provides multifaceted skill development. **- Provides professional experience:** Prepares students for the professional world. **- Class participation:** Increased student participation and time spent in the classroom.
Weaknesses	**- Need for constant communication with the professor:** Difficulty in working independently. **- Long working hours:** Requires additional work, leading to intense study hours. **- Limited creativity:** Lack of communication between groups. **- 3D Modeling :** Students didn't work 3D modeling or virtual reality.
Opportunities	**- Cultural and experiential diversity:** Allows students to share each other's experiences. **- Preparation for professional life:** Provides insights into the business world. **- Peer learning:** Gaining creative and professional knowledge through different perspectives.
Threats	**- Lack of seriousness in understanding the work:** Gamification may lead to insufficient attention. **- Group fragmentation:** Effective work may become challenging with lack of communication. **- Imbalance between seriousness and fun:** Risk of underestimating the importance of the course.

This methodology, drawing on feedback from both students and faculty, has positively impacted the classroom atmosphere and boosted participation rates by actively engaging learners and instructors. By offering an alternative to traditional teaching methods, this approach has made the classroom more enjoyable and stimulating, eliminating the monotony of lectures. Fostering continuous interaction between professors and students, this methodology ensures a more interactive and effective learning experience. Students, in constant communication with their professors, receive superior guidance and can reinforce their learning through immediate feedback. This interdisciplinary approach, which exposes students to diverse knowledge, empowers them to develop their own creative ideas rather than merely replicating their professors' thoughts. Moreover, students enjoy this process and actively participate in classes, enhancing motivation and overall course effectiveness. This methodology equips students with the foresight and preparation for future professional scenarios, enabling them to learn how to interact with stakeholders such as clients, municipalities, or employers. One major drawback of this methodology is that students may struggle with independent work. Additionally, students may need to dedicate time beyond regular class hours, making the course demanding in terms of workload. The need for home study can also pose challenges in time management for students. If students isolate themselves from other groups and work solely within their own, their creativity may be constrained to a narrow scope.

The presence of students who have traveled and interacted with different cultures within groups can benefit other group members by broadening their perspectives and enhancing their creativity. This enables students to view situations from diverse perspectives and contribute to the development of creative ideas. The opportunity for peer-to-peer learning is also a significant advantage of this study. Diverse cultural backgrounds and experiences contribute to students' creativity and professional knowledge. Through this methodology, students gain firsthand experience in effectively communicating with various stakeholders in future work environments and meeting their expectations. Moreover, this study provides students with a creative space within the design

process, enabling them to present their own ideas independently of professorial guidance, thus fostering their creativity and innovative approaches.

In contemporary architectural practice, the role of three-dimensional (3D) modeling and virtual reality technologies is becoming increasingly significant. Architects strive to present their designs to clients or stakeholders in a way that most closely resembles reality, enabling them to communicate their design concepts and ideas more effectively and accurately. However, in some architecture education programs, students are not required to engage in 3D modeling. This lack of requirement may limit students' interest in and proficiency with 3D modeling skills.

Consequently, the absence of 3D modeling experience can create disadvantages for students during presentation phases. Their inability to visually express ideas and concretize abstract concepts can make it difficult to convey the strengths of their projects to viewers (such as employers or jury members). In contemporary architectural practice, clients increasingly expect to see designs not only in two-dimensional drawings but also as realistic 3D renderings or virtual reality simulations. Failing to meet this expectation may hinder students' transition into professional life and represents a significant gap in architectural education. This situation underscores the need for architectural education to incorporate more robust training in 3D modeling and virtual reality applications. Encouraging students to develop these skills would enable them to present their ideas more effectively and professionally. By integrating such visual representation tools throughout each stage of the design process, students would be better equipped to present compelling visual narratives that can enhance the likelihood of their ideas being accepted. Thus, integrating 3D modeling and virtual reality applications into the architectural curriculum represents a critical advancement in aligning architectural education with the demands of contemporary practice.

While the gaming methodology contributes to the development of students' creativity and modern thinking skills, it may also lead to the study being perceived as mere play, causing students to become less serious. This situation carries the risk of the study failing to achieve its objectives. Although creating a fun learning environment during the course boosts student motivation, it can also hinder their recognition of the work's seriousness. Striking a balance between fun and focus is a critical aspect of this methodology. Furthermore, insufficient communication between students and professors may lead to group disintegration and ineffective work. Students' enjoyment of the class may cause them to underestimate its seriousness and importance. Therefore, it is crucial to ensure that students both enjoy the fun environment and comprehend the seriousness of the course. Students may perceive this methodology as a mere classroom pastime and may not prioritize the study's outputs, thus emphasizing the importance of providing detailed information to students at the outset of the process.

Conclusion

This article emphasizes the transformative potential of innovative methodologies in architectural education. By moving beyond traditional studio-based approaches and integrating interdisciplinary, experiential, and creative practices, it proposes a comprehensive framework for fostering holistic development among students. The study underscores the necessity of embracing diverse influences such as storytelling, filmmaking, and public engagement to cultivate multidimensional thinking and problem-solving skills.

The methodological framework outlined in the study reflects a shift from mere replication of architectural principles to encouraging originality and critical thinking. By involving students in multidisciplinary activities—such as creating sketches, developing scenarios, designing comics, and producing short films—it fosters a broader understanding of design as a dynamic and integrative process. These activities not only enhance students' technical skills but also nurture creativity, spatial perception, and the ability to communicate complex ideas visually and narratively.

A notable strength of this approach is its emphasis on active student participation and feedback. The integration of surveys, peer evaluations, and professor-student interactions ensures that students are deeply engaged in their learning processes. Furthermore, the inclusion of gamified elements and real-world challenges prepares students for professional scenarios while maintaining a fun and motivational atmosphere.

However, the study also highlights certain challenges. For instance, students often face difficulties in balancing creative exploration with adherence to regulatory frameworks. Additionally, the absence of adequate exposure to 3D modeling and virtual reality—crucial tools in contemporary architecture—represents a gap that needs to be addressed. The study suggests incorporating such technologies to align educational practices with industry demands, ensuring that students are equipped to meet the expectations of clients and stakeholders effectively.

The findings from student feedback and SWOT analysis reveal a positive reception to the alternative methods, indicating their potential to redefine architectural pedagogy. By fostering cultural exchange and peer learning, these methods enhance students' creativity and broaden their perspectives. Nevertheless, it is crucial to maintain a balance between fostering enjoyment and ensuring academic rigor to prevent trivialization of the learning experience.

In conclusion, this article provides a robust case for rethinking architectural education. By integrating innovative methodologies, it prepares students for the complex, interdisciplinary nature of modern architectural practice. Addressing the identified gaps, such as integrating advanced technological tools, can further refine this model. Ultimately, this approach not only cultivates proficient architects but also inspires them to contribute meaningfully to society through their designs.

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