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**RESEARCH PAPER**

## Creative Skill Development through Warm up Exercises in Drawing Studios of Fine Arts, Design and Architecture Disciplines at Foundation Level

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**ABSTRACT**

The research paper aims to enhance fine arts, design, and architecture education by introducing creative quick sketch exercises as an effective teaching method, fostering creativity, innovation and better instructor-student communication, specifically at the foundation year level. This approach empowers students to transform abstract ideas into tangible expressions, ultimately improving their skills and success. The research paper employs an alternative approach to teaching drawing skills, utilizing quick sketches of varying durations and types, aiming to bridge the gap between abstract ideas and tangible expression. The conclusion refers that adopting quick sketch exercises greatly benefited all students related to these fields. Ultimately, quick sketches proved to be an effective tool for beginners, providing and contributing a solid foundation in drawing learning. The research paper's originality lies in the approach to enhance creativity and skills among fine arts, design, and architecture students, thereby adding value to their long-term success in these fields.

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**KEYWORDS** Creativity, Innovation, Optimal learning, Quick Sketch, Skills

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**Introduction**

During the observation of senior class teachers, it became evident that there was a serious need to enhance creativity and drawing skills right from the foundation year level. The teachers noticed that students lacked the ability to convert designs and ideas into drawings on paper swiftly and effortlessly.

Fine artists, designers and architects hold a crucial role in the development and implementation of projects, and it is essential for graduates to possess strong analytical drawing skills, a practical approach, and the ability to create well-designed and descriptive drawings with exceptional hand-drawing abilities. The work procedure and products are shaped and guided by the drawings and sketches from Nik Ahmad Ariff, (2020). To address the weaknesses observed in students' composition, linear perspective, inspiration, illustration, and overall drawing proficiency, a curriculum initiative was introduced where students were taught methods and approaches to foster creative and critical thinking using appropriate tools. To foster a connection between diverse frameworks, values, and professional languages, certain processes and tools become essential according to Horgen (1999). The learning-teaching process followed a constructivist approach, skillfully integrating the principles of experiential learning theory and collaborative learning (Mittal, 2021).

This initiative aimed to incorporate warm-up exercise sessions to foster improvement in these areas and enable students to effectively translate their imaginations onto paper.

Drawing holds a fundamental role in the design and in creative process, as it fosters thinking abilities, precision, abstraction, and the exploration of the unexpected. It serves as a means to express conceptual imagery and stimulates visionary thinking through analogical creativity. Converting fundamental ideas into drawings fosters fruitful discussions with clients and, notably, with oneself in a contemplative studio environment. In creative fields, freehand sketching proved to be highly effective for problem identification and brainstorming purposes by Al-Kodmany (1999).

In the context of arts, design and architecture training, possessing strong drawing skills proves advantageous for various collaborative tasks throughout the entire technical development process. Essentially, drawing serves as a foundational tool for artists and designers. One's proficiency in using drawing for intellectual purposes can significantly impact the effectiveness of the design practice. Hence, it becomes imperative to prioritize and enhance sketching skills during arts training. This paper explores the creative process focused on fostering a drawing-centered and quick sketching learning culture among arts students, even those without a background in the arts (Bano et al., 2017). Over the past dozen years in architecture and design fields, there has been a development of rapid drawing approaches and complementary techniques that provide strong support in the design process. Typically, architects, artists and designers commence a design or painting task by engaging in intensive, rapid, and freehand sketching shown by Goldschmidt (1991). By emphasizing the practice of sketching, it presents an ideal package that enhances drawing abilities, introduces novel approaches, and underscores the significance of drawing for art, design, and architecture students (Richards, 2014).

In the initial stages of any design process, communication is a key. It revolves around establishing aims, concepts, visualizations, and understanding. Within the studio environment, instructors employ various methods to nurture the expressive and practical aspects of artists' thinking, enhancing their perceptive and influential abilities.

### **Literature Review**

The pedagogic strategy for a drawing studio follows the famous principle, "Tell me and I forget, teach me and I may remember, involve me and I learn" (Benjamin Franklin).

Betts (2011), discussed that within a conventional drawing studio setting for architecture and design, a rich visual atmosphere is created with an abundance of substantial objects and drawing materials. Having physical models and still life objects on the tables, even if they appear unrelated to current projects, serves the purpose of introducing challenges and sparking fresh inspiration. These cross-contextual reminders frequently result in innovative thinking and conceptual breakthroughs. Various material artifacts such as design sketches, observational drawings, storyboards, rhythmic drawings, and collages contribute to the creative environment.

Creativity is fostered through brainstorming sessions and quick, creative drawing exercises. These exercises aid individuals in uncovering and unleashing their distinct forms of creativity, which they can then cultivate and apply in the future. These assignments cultivate imagination and provide individuals with opportunities to explore

diverse thinking approaches, encompassing with all perspectives. Consequently, creativity enhances and refines skills, and introduces a new perspective to the learner's intellect which was inferred by Purcell and Gero (1998).

To further elaborate and enhance the creative process and drawing skills, extensive practice becomes essential. To achieve this within a limited time, a vast array of defined drawing exercises is offered, with students compiling hundreds of drawing sheets and working on fixed time intervals ranging from 2 minutes to 20 minutes consecutively. This intensive practice has made a remarkable difference in the quality of drawings.

### **The Significance of Quick Sketching**

In the realms of arts, architecture and design, quick sketching empowers students to articulate their ideas effectively, fostering both internal and external communication pathways for their designs. It validates and endorses new thoughts, providing a means to legitimize creative concepts.

Drawing holds a fundamental place within the arts curriculum and is intricately linked to nurturing creative growth. Through drawing, students engage in insightful exercises that provoke creativity and prompt innovative shifts towards new and exciting alternatives (Blaney, 2010).

### **The Character of the Quick Sketching**

Quick drawing learning serves multiple purposes in all practical based programs such as arts and design and architecture, encompassing the following:

**Ideation:** It aids in the development of design ideas, transforming them into coherent proposals.

**Communication:** Quick sketches facilitate the communication of ideas and concepts, applicable to various types of designs.

To evaluate the most effective approach for teaching manual drawing skills, our study was conducted in academic arts studios and certified design studios, involving participants from the first-year level. Drawing is an integral part of studio work, characterized by collaborative, personalized, and practical activities. Whether in expert or theoretical design studios, drawing plays a pivotal role in inputting ideas and finding inspiration (Adams, 2002).

This paper presents illustrative observations and improvements made to the conventional methods of teaching manual drawings. The study incorporates short-time strategies and adopts a longitudinal approach, utilizing quick sketches within a range of very short (2-5 minutes) to moderate (10-20 minutes) time frames. The study was conducted in the drawing studios of the Department of Architecture and Department of Art and Design at COMSATS University Islamabad, with the aim of achieving optimal results and preferred outcomes in first-year studio sessions.

During the foundation year, students coming from diverse educational backgrounds with a practice of horizontal thinking face a period of adaptation. To address this, a broader thought process is encouraged and required. Thoughtfully designed creative exercises combine foundational principles with the elements and principles of design. These combinations facilitate the transformation of visions into

comprehensive visuals, making use of top-notch drawing skills. These exercises are commonly known as warm-up exercises. The aim of this research is to assess the learning outcomes of foundation year students, particularly in regards to their drawing skills, with a specific focus on pedagogic objectives and creativity in design and architecture programs offered at our University.

**Material and Methods**

This study employs the qualitative approach that focuses on the consecutive exercises, which had the objective of instilling confidence within the studio as the primary method of creating drawings. Kelley, et al., (2017) emphasized that, warm-up exercises are employed as techniques to further enhance creative skills. In various domains, sketches are created as a means of communication with oneself or others that enhance memory and information processing by alleviating some of the cognitive load from the mind (Tversky, 2002). These drawing exercises cover various aspects of learning and contribute significantly to the students' skill development, ultimately adding a new dimension to their abilities.

The following assignments were designed to enhance creativity:

**Motivational and Creative Assignments**



Figure. 1, Dotted drawing method in cubical form



Figure. 2, Quick drawing method to learn perspective

These exercises focused on incorporating different aspects of composition and perspectives to foster creativity in the students (Fig.1&2).

In these exercises, students explored the art with composition and perspective by using the dotted drawing method to create complex depictions of cubes and other various shapes. Figures 1 and 2, likely visual depictions or illustrations, offer tangible patterns of their creative study. Through the particular arrangement of dots and lines, students not only enhanced their drawing skills but also embarked on a journey of learning to focus on one thing. This exercise challenged them to reflect the interplay of light with shadow, and spatial associations, learning a deeper understanding of composition and perspective with all elements and principles of art and design, within their drawings. By learning and mastering this method, they learned to breathe into two-dimensional surfaces, infusing their artwork with depth and in all dimensions. Finally, this exercise nurtured their creative instincts, training them with the drawing tools to cater art with a fresh perspective and an enhanced ability for innovation.

**Skill Learning with all Compositional Aspects**

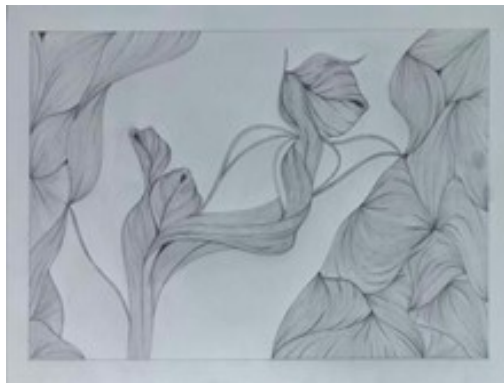


Figure. 3, continuous rhythmic lines



Figure. 4, Rhythm, harmony, and balance in design.

These assignments delved into the principles and elements of art and design, exploring how they influence the psychological aspects of creativity (Fig.3&4).

In these specific assignments, students explored the particulars of the principles and elements of art and design, with a certain focus on the fascinating realm of continuous lines, movements of characters and flows within their creations. Figures 3 and 4, are likely visual examples of these illustrations. The use of continuous lines and flowing drawing and design elements not only showcases technical expertise but also serves as an access into thoughtful psychological aspects of creativity. Through their art, students involve in a visual dialogue, managing the viewer's eye along a continual journey, evoking sentiments, and motivating the imagination. This assignment

challenges them to hold the meaning of rhythm, harmony, and balance in design, eventually revealing how these elements of design and drawing can exercise a powerful influence on the better dimensions of the creativity, adopting a deeper connection between the artist, their work with the viewer.

**Observation enhancing exercises in drawing and design**

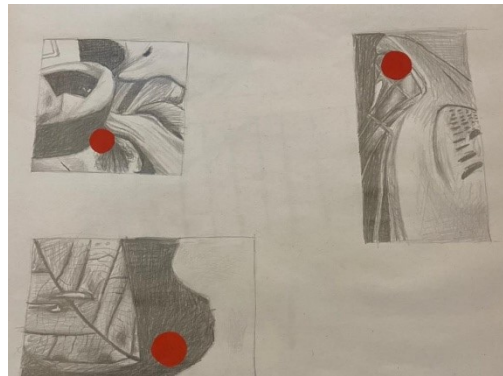


Figure. 5, Brainstorming exercise to recall memories

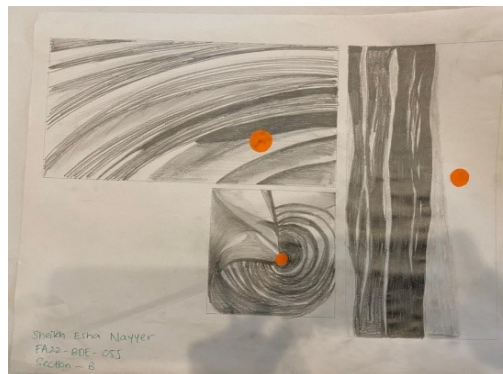


Figure. 6 Imaginary sketches inspired by the rhythms

Students engaged in creating imaginary sketches inspired by the rhythms of music, delving into the role of experiences and memories in the design process (Fig.5&6).

The fusion of music into the creative process complements a layer of emotion, mood, and freedom to their drawings and sketches. Different musical tempos, genres, and melodies can evoke varying excitements and sensations, guiding to a diverse range of artistic and creative interpretations. The rhythmic tempo of the music guides their hand with brain and influences the flow of lines, shapes, and colors on the paper with all elements included.

These sketches become more than just visual representations, they become a reflection of the individual's inner world, a fusion of their personal journey through their own life.

Figures 5 and 6, likely pictorial representations or examples of the assignments, offer a sight into the tangible results of this creative process.



### Imaginative drawing learning



Figure. 7, Illustrative drawings "Less is More".

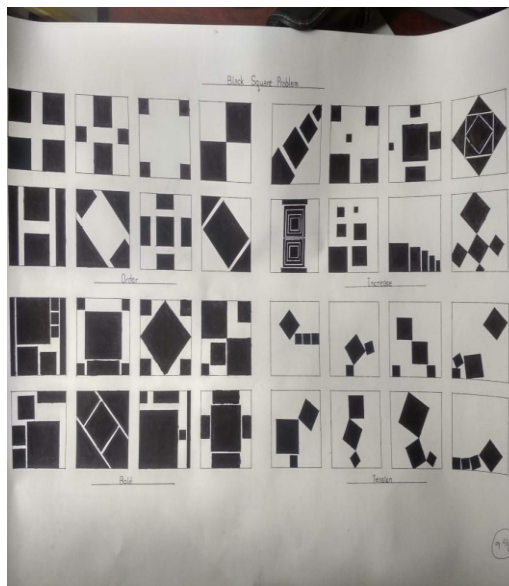


Figure. 8, Illustrative drawings "Black Square problem".

In these assignments, students implemented illustrative drawings to explore the interplay between imagination and reality within the realm of design (Fig.7&8).

With these design problem and finding solutions based assignments, students learned a creative journey by engaging in design-based creative tasks that included concepts like "less is more," the "black square problem," the "Jack and Jill problem," and "bar code designing" with all their possible solutions. Figures 7 and 8, likely visual depictions or illustrations provide tangible examples of their imaginative endeavors. Through these design tasks, students were fortified to explore the accurate balance between imagination and realism in the context of visual design, art and architecture. Concepts such as "less is more" compelled them to purify complex ideas into simple yet impactful designs (fig. 7), while the "black square problem" advised them to handle with abstract visual puzzles, pushing the margins of their creativity (fig. 8). These tasks of

visual designs further highlighted the fusion of art and design functionality, where they directed the connection of aesthetics and sensibleness. Overall, these assignments not only cultivated their design skills but also encouraged them to untangle the complex relationship between their artistic ideas and the concrete design solutions they developed.

### Brainstorming exercises

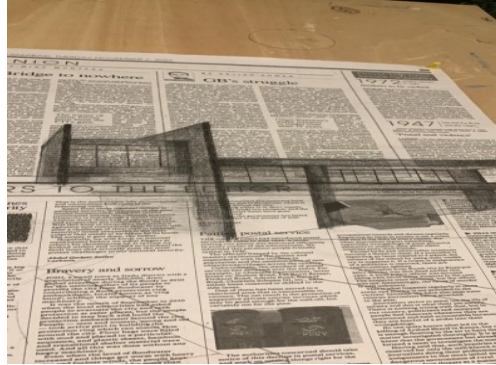


Figure. 9, Perspective learning with busy back ground



Figure. 10, Anatomy learning on rendered back ground

This exercise involved working on busy backgrounds to stimulate mental creativity and encourage brainstorming. These assignments were carefully crafted to nurture creativity and enable students to explore different aspects of design while honing their skills and artistic behaviors (Fig.9&10).

In these inspiring exercises, students involved themselves in a new dimension of learning drawing with busy backgrounds, connecting the power of visual impression to learn for their mental creativity and brainstorming methods. The assignments provided a thoughtful platform for cultivating creativity, allowing students to explore more aspects of design, all while refining their creative skills and artistic awareness. By working with framework of busy backgrounds, students were dared to find coherence among visual chaos, adopting innovative thinking. These assignments fortified them to experiment with an opulent tapestry of design elements, principles textures, perspectives and compositions, finally allowing them to develop a best approach to creativity, a skill precious in the ever-changing world of art, design and architecture.

### The initial Attempts

The initial warm-up exercise sessions were specifically designed for students who had limited experience in manual drawing and felt restricted by their drawing skills.



Sketching is a creative process that necessitates coordination between the mind, eye, and hand. These sessions aimed to quickly develop their drawing abilities within a 3-hour to 6-hour workshop, providing focused ideation opportunities (Fig. 1&2). The intention was to familiarize students with industry pressures and time constraints, incorporating them into their design and drawing processes right from the foundation year.

In facing the demands of their work, they depend more on the improvisation skills acquired through practical experience rather than the formulas learned (Schon, 1983).

Despite the short timeframe, significant value was expected from the specific drawing approaches used. The main objectives were to boost drawing confidence, enhance aptitude, and foster creativity through more strategic implementation.

Each week, a different drawing task was presented to the students, followed by evaluations, discussions, and consideration sessions with the teachers. These tasks and challenges were accompanied by concise concepts to guide students towards achieving the desired drawing outcomes (Fig. 3&4). The initial drawing sessions commenced with exercises focused on line quality and progressed to include abstract lines, emphasizing valued lines, observational drawings, values, colors, shapes and forms (Fig. 5&6).

### **Rigorous Experiments n Drawing Learning**

Advancing from the introductory drawing phase to a comprehensive three-week teaching method, each semester offers a varied curriculum that prevents redundancy and progressively enhances sketching abilities throughout at least in foundation level. Normally, drawing sessions are scheduled for one to two hours as part of a three to six-hour class. However, due to the dedication to foster a thriving drawing culture, additional time has been provided for students to review and enhance their drawings. This emphasis on technique has strengthened students' dedication to drawing activities, resulting in increased confidence and a greater desire to excel in sketching expertise (Fig. 9&10).

The intensive drawing sessions encompass quick anatomy sketches, imaginative drawings, storyboarding, illustrations, designs, drawings based on rhythm, and observational drawings focused on light and shadows. These sessions leverage the way our brains process information, absorbing words and transforming them into mental images that guide our drawing process. We combine these mental illusions into lines, shapes, values and perspective (Fig. 7&8). To achieve this goal, we hold the belief that learners require tools, techniques, knowledge, awareness, and skills that facilitate their exploration of expressive and dynamic behavior (Hummels et al., 2007). When we successfully shape things as our vision perceives them and as our brains convert them into a form, we achieve a quick learning process that leads to success in drawing.

### **Results and Discussions**

The initial warm-up sketches elicited hesitation and uncertainty from the students. Most of them were not accustomed to drawing previously, and their drawing output had not been evaluated extensively before. Consequently, less proficient sketchers discovered that they were no longer hindered by their limited sketching experience, which was precisely the skill that this new learning approach sought to improve.

The demand to create drawings within tight timeframes pushed students beyond their comfort zones and revealed their skill deficiencies. While some students struggled to generate quality ideation, those who were already proficient sketchers demonstrated well-thought-out product ideation. This observation aligns with the findings of Fish and Scrivener (1990), Verstijnen and Hennessey (1998) and Fallman (2007). The students who possessed greater skill in sketching had the luxury of time and proficiency to rework and enhance their projects. As a result, they were able to explore a broader spectrum of design features, unlike their peers who faced difficulties in effectively conveying their thoughts. Evaluation is categorized into two primary groups: one focused on skill learning and the other on visualizing mastery. Drawings are assessed based on perspective correctness and suitability, line work quality and hierarchy, effective use of indicators, and proper product representation (including user interaction). On the other hand, ideation is measured by the ability to rapidly conceptualize ideas, generate a variety of novel and aesthetically pleasing concepts.

Upon analyzing the results, a clear indication of skill forming among the learners emerges, as evidenced by noticeable improvements in both, idea generation and drawing quality. These advancements are evident from the initial exercise to the subsequent ones as discussed by Chamberlain et al., (2021).

Both students and instructors provided beneficial and practical feedback. While maximum students acknowledged the review of the curriculum, many felt that it would have been more beneficial if it had taken place earlier in the course. The progress demonstrated by the students indicated that their sketching skills had significantly improved, resulting in increased confidence and a more refined approach to ideation. During the six-hour studio sessions, students' early drawings were often uncertain and unguided, while later sketches showcased greater control and proficiency, demonstrating the development of their skills and self-assurance.

## **Conclusion**

In general, the warm-up exercises have been highly successful, leading to improved drawing skills and heightened creativity, which, in turn, increased student interest in manual drawing practices. The positive outcomes have ensured a continuous trajectory of growth. The method used to evaluate skill and drawing abilities was clear and apparent. Given that the participants were first-year design program, architecture program and Fine arts program students, our primary focus was to identify any potential challenges in the course that could be perceived as overly complex by the students.

In conclusion we made to nurture their individual qualities, such as freedom and self-assurance, while also achieving tangible and measurable course results.

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