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Student name: Sabrina Acham
Student ID no.: 816009465
Degree Program: B.A. Visual Arts (Special)
Supervisor: Dr. Marsha Pearce

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in facilitating the creativity of 2019/2020 BA Visual Arts students at The UWI, St.
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ABSTRACT

The purpose of this study is to gain an understanding of the relationship between the architectural elements of the Visual Arts Unit of The DCFA Campus and the facilitation of the students' creative processes of the BA Visual Arts 2019/2020 cohort at the The University of the West Indies, St. Augustine. This includes their proficiencies in producing a final work of art, and considerations for specific interventions to generate ideas that can be implemented to enhance the existing environment. This study employed a mixed research design using qualitative and quantitative methods. A convenience sample of 17 students were chosen. Data for the study was sourced through questionnaires, interviews, and secondary documentary analysis. Secondary sources were taken from existing literature, comprising articles, published books and research papers within the fields of architecture and environmental psychology. The instruments for data collection were an open-ended questionnaire, and a semi-structured, one-on-one interview. Questionnaires were administered via Google Forms and the interviews were conducted via Zoom and in-person. The Drawing Studio and exterior green spaces were chosen to be examined and analysed. The findings revealed that the indoor elements, such as floor space, access to windows to provide lighting, ventilation, and a view of the exterior, impacted the facilitation of respondents' creative processes in making artwork. Furthermore, DCFA's green spaces had little or no impact on students' creativity, as they were not appropriately designed for art students' use. In conclusion, recommendations for interventions within the Drawing Studio include implementing moveable walls for critiques, to allow access to natural light, ventilation, and a view of the exterior. Additionally, a suggestion to relocate the eastern storage space was considered to allocate for more floor space. Moreover, recommendations to include elements into the green spaces were considered.

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KEY TERMS

- The DCFA – The Department of Creative and Festival Arts
- The UWI – The University of the West Indies, St. Augustine
- Architectural element - The unique details and component parts that form the architectural style of houses, buildings, and structures. Examples are walls, flooring, materials, textures, colours, angles, and curves.
- Creative thinking – An inventive thought process which allows one to generate ideas from a new perspective, resulting in surprising conclusions and new ways of doing things.
- Creativity - The entire process by which ideas are generated, developed, and transformed into value.
- Creative process - a sequence of thoughts and actions leading to original and appropriate productions
- Neuroscience - The application of the principles of biology to the study of physiological, genetic, and developmental mechanisms of behaviour in humans and other animals. In addition to influencing our perception and behaviour, the environment has the potential to also affect our way of thinking
- Neuroarchitecture - A discipline that studies how the environment modifies the brain and our behaviour.
- Spatial Empathy - It means meeting the users where they are, discussing and co-creating with them to understand their needs and to respond to their needs with a design outcome

INTRODUCTION

i. Rationale

The article, “*Why Creativity Is More Important than Ever*” describes creativity as “the core of being human,” (ideou.com). It further explains that it is one of the most important aspects of daily life, as it helps people to open their minds to discovering novel solutions to challenging problems and can “give [individuals] renewed enthusiasm and energy—even in the most difficult circumstances,” (“*Why Creativity Is More Important than Ever*”, ideou.com). It is also an important competitive tool that makes one stand out, and adds value whilst staying relevant, ensuring a better world that is open for sharing. Hence, the world needs creativity because problems are not getting simpler. Thus, individuals’ creative abilities are an important asset to developing new ideas to solve today’s problems.

The article, “*Why We Need Arts in Times of Crisis*” states that “In a tumultuous world, art matters,” (artworkarchive.com). Art enables the artist and its viewers to “examine what it means to be human, to voice and express, and to bring people and ideas together,” which only the arts can create (“*Why We Need Arts in Times of Crisis*”). Therefore, “One approach to studying creativity in art focuses on the creator. This involves the search for aspects of personality or behaviour that might correlate to present creative achievement or future proficiency as an artist,” (Pelowski, 82). To this end, Britannica aptly defines visual arts as the arts that meet the eye and induces an emotion through an expression of skill and imagination (britannica.com).

In this light, Clarke postulates the idea that creativity involves producing new or practical products (3). Additionally, Pelowski states that “approaches to studying creativity in art have also focused on the art product,” (85). Therefore, the creative process is defined as, “a succession of thoughts and actions leading to original and appropriate productions,” (Botella, 1).

Nahavandi's work states that this process "involves the mutual influence of personal factors, environmental characteristics, and the nature of the task," (209). Hence, several studies have emphasised the importance of the creative process in facilitating the development of the creator's innate thoughts and abilities to produce the desired artwork, particularly those of Botella and Nahavandi. Nahavandi's work also suggests that although every individual possesses creative abilities, some may be more adept to certain parts of the creative process than others. It also states that creative activity occurs within a particular context, and that it must be practical and suitable to the imminent situation or problem. Hence, "this leads us to think about ways in which the environment may enhance or impede the development of creative ideas and solutions to problems," (Nahavandi, 210).

To this end, Rattner suggests that scientists have been uncovering evidence suggesting that specific design characteristics are aligned with improved creative thinking. One of these design strategies state that the hallmarks of the creative thinking process occur by inducing "fresh thinking, open-mindedness, and cognitive flexibility," within the creative process (*"How to Use the Psychology of Space to Boost Your Creativity"*). In lieu of this, neuroarchitecture studies how physical environments affect the human brain and subsequent behaviour. It focuses on the importance of design and architectural elements which influence one's mental state, so that they can be used and manipulated in appropriate contexts. Design decisions include angles and locations for walls and furniture, window locations, lighting, textures, and open space sounds (*"Neuroarchitecture: The Environment's Power Over the Brain"*). The architectural design elements, which include ceiling height, lighting, wall colour, floor space, window sizes and locations, various textures, proximity to nature as well as meeting spaces, induce creativity when implemented appropriately. In addition, architects and neuroscientists work together to design

spaces and buildings which optimize conditions for its users to reduce stress, anxiety and to promote productivity and overall well-being.

Employing empathy in design means that the architect studies users and their behaviour. “It means meeting the users where they are, discussing and co-creating with them to understand their needs and to respond to their needs with a design outcome,” (*“Designing with and for empathy — Architecture that empowers,”* Lehtinen). The empathetic approach enables the development of new approaches and innovations, which neither party would have conceptualized independently. In so doing, clients can ask questions, voice opinions, and influence the outcome of the design, since there is open dialogue and mutual respect and understanding on both sides.

One of the main sources of inspiration to an architect, is the ability to feel what the client feels and sees the world through the client’s eyes. If this is not practiced, the architect solves the problem with a familiar pattern, and the client is often less satisfied, resulting in a lack of connection with the client’s built space, because their needs would not have been met. As Paiva aptly states, “NeuroArchitecture and Empathy [are the] fuel to creativity,” (*“NeuroArchitecture and Empathy: fuel to creativity”*).

According to Nahavandi, this process has five identifiable stages of preparation, concentration, incubation, illumination, and verification (210). Research shows that architectural elements have a notable influence on students’ creativity, and their abilities to manoeuvre the subsequent creative process. Hence, leading the researcher to question, to what extent can the infrastructure of a university’s building impact art students’ creativity. Thus, this study seeks to investigate, ‘What impact do the architectural elements of the Visual Arts Unit of the DCFA play in the facilitation of the creative process of the 2019/2020 B.A. Visual Arts students?’

ii. Background and History of the Department of Creative and Festival Arts

The Department of Creative and Festival Arts (formerly the Creative Arts Centre) was established in one of the housing units on Agostini Street in the period 1980 - 1990's. The housing unit previously housed the Old Ministry of Works Department before being used as the C.A.C. The old ministry of works not only assisted The UWI, but they were the old site for the Ministry of Works' operation at that time. In the mid-90's a loan was obtained from the Caribbean Development Bank to construct a new building that would house all the various units of the arts department together in one building (Visual Arts, Carnival Arts, Dance, theatre, Music). According to the document, "UWI.DCFA New Building for Dance, Theatre Arts + Carnival Studies", the manager of the CPEU (Continuing and Professional Education Unit) agreed to merge CAC and SCS (School of Continuing Studies) and placed in a new building on the Savannah Lands at Gordon Street. They needed to move to a new location because the former was beyond repair, rendering the facilities unsuitable to conduct the necessary work. Additionally, it was vermin infested, and the loud vehicular noises presented an environmental hazard, plus the noxious gases from Agostini Street and the Priority Bus Route from the vehicles posed a safety hazard. The design for Phase 1 of the building was developed by architect Colin Laird. Colin Laird was a renowned English architect, who set up his practice in Trinidad and Tobago in 1952. He designed many prominent buildings and open spaces throughout the region, especially notable structures in Trinidad and Tobago. He noted for designing green buildings for tropical environments, paying particular attention to the climate. These types of design considerations created a new architectural culture in the 1950's, called "tropical modernism" which, according to Raymond derived from the functional, formal, and programmatic aspects of mid-century European architectural design, which was modified to suit tropical climates (65). Hence, Laird is

aply quoted for describing his practice as a “Caribbean and Trinibagonian expression in light and space encompassing the genus loci of the site – the physical, climatic, historical and cultural aspects,” (“Colin Laird”, *icons.niherst.gov.tt*). However, Phase 1 construction of the new DCFA building was scaled back due to budgetary constraints, and the additional funding had to be provided by UWI’s bursary for its completion. Laird designed the Master Plan so that other buildings could be implemented over time.

In this research paper, the classroom that will be studied is the Drawing Studio (refer to Fig 26). It has a floor space of 18 ft x 51ft, and a ceiling height of 16 ft from the centre of the roof to the terrazzo floor. The four walls are made of blocks, plastered with concrete, and painted white. Additionally, there are 11 ft columns which support the ring beam on the steel-frame, timber roof which is also white. There are five visible columns on the east and west walls of the building and are 5 ft and 10 inches apart. The west wall and columns are painted white, with white painted plyboard mounted between the bays created by the columns, with louvres located directly above. There are a total of 8 columns, with 6 visible bays while 2 bays are hidden by a retrofitted storage room, with walls made of plyboard, situated in the north-west corner of the room. Two windows are situated between each column bay, separated by a thin strip of block wall, and are covered the plyboard. On the east wall, white painted plyboard is mounted to the face of the unpainted, columns to the east of the room, creating a wall to enclose the storage space. Additionally, there are two 2 ft x 4 ft rectangular windows situated on the southern wall, which overlook the southern exterior wall of the DCFA campus, and Cheeseman Avenue. Lastly, three rows of fluorescent tube light fixtures are suspended from steel rafters and are evenly distributed throughout the space.

Additionally, DCFA's courtyards will also be examined. Referring to Fig. 29, the courtyard is bordered on the north by The UWI Open Campus' administrative office, on the east by The UWI Open Campus' auditorium and classrooms, on the south by a cafeteria, and bordered on the west by the Exhibition Hall, and covered walkway.

The courtyard is made up of a large, grassed areas with a total measurement of 98ft x 131ft, and contains 6 trees. One concrete bench is situated under the tree alongside the cafeteria's wall in the larger courtyard. Sculptures are placed for viewing at certain points of the academic year.

Moreover, the open, grassed area to the north of the Exhibition Hall as seen in Fig 32 and Fig 33 will also be examined. It is 112ft deep from the Exhibition Hall to the parking area and has a width of approximately 197ft. There are no trees or benches situated in this area. Additionally, there are no existing pathways, ramps, or accommodations for the disabled in any of the mentioned green space areas.

iii. Thesis Statement

The architecture of the visual arts unit of the DCFA has an impact of the creativity of the undergraduate Visual Arts students of 2019/2020.

iv. Parameters of the research

An investigation of the visual arts section of the Department of Creative and Festival Arts Campus sets physical boundaries to Trinidad and Tobago, specifically within the St. Augustine region, where the campus is located. The focus of the study is also restricted to a look at the Visual Arts unit, in a department that also teaches Music, Theatre, Dance and Carnival Studies. The parameters of the research are guided by a detailed understanding, evaluation, and comparison of the visual arts section in relation to the research problem.

v. Objectives

The objectives of this paper are to:

1. To investigate the relationship between the role of the architectural elements of the Visual Arts unit of DCFA and the facilitation of the creativity of the students in the Visual Arts Unit of the 2019/2020 BA Visual Arts students at The UWI, St. Augustine.
2. To determine the impact of the architectural elements on students' creative processes and ultimately, their proficiencies in producing a final work of art.
3. To determine the need for interventions, and to generate ideas that can be implemented to enhance the existing environment.

vi. Methodology

Genre of Study:

A case study is described as, “an intensive, systematic investigation of a single individual, group, community or some other unit in which the researcher examines in-depth data relating to several variables,” (Heale, “What is a case study?”). They are beneficial, as they allow for an in-depth understanding of a single phenomenon and involves collecting several different types of data.

This case study provides insight into the role of architectural design elements of the Visual Arts Unit of DCFA on students' creativity, and its impact on facilitating the creative process of the 2019/2020 cohort. The general approach of this genre is close and continuous observation using common techniques such as questionnaire, interview, observations, and literature such as field notes. This case study seeks to gather information using of questionnaires and conducting interviews.

Data collection:

The research participants for this study are Visual Arts students of the 2019/2020-year group.

The data was sourced through questionnaires, interviews, and secondary documentary analysis.

Secondary sources were taken from existing literature, comprising of articles, published books and published research papers within the fields of architecture and environmental psychology. The instruments for data collection that were used in this study are an open-ended questionnaire, and two semi-structured, one-on-one interviews. A questionnaire is a series of written questions for the purpose of collecting quantitative and qualitative data from respondents. These questions consisted of both open and closed questions to create charts and tables for the study. The questionnaire for this study consisted of 12 questions. The interview is a very flexible approach to collect qualitative information about the experiences, views and feelings of individuals and groups. It is a guided conversation between the researcher and informant and is used for open-ended conversations. It also enables the gathering of detailed information and the discovery and elaboration of information that may not have been previously considered by the researcher. Campus Architect of The U.W.I. St. Augustine, Korry Barnett was interviewed for this study. He holds a BArch and MArch from the University of Technology, Jamaica, Caribbean School of Architecture and has been working within the field of architecture for 20 years. He has been employed The U.W.I. St. Augustine as the Campus Architect since 2017. His work relates to this study, as he employs facets of empathetic design and neuroarchitecture to uphold his practice as, “Architects are charged with the development of the built environment which includes the understanding of the end users physical and psychological needs,” (Barnett, par. 5). Additionally, he is a LEED Green Associate with the US Green Building Council, meaning that he highly considers green building principles and practices within his work.

The convenience sampling method was employed, which enables the researcher to efficiently collect data based on respondents’ habits, opinions, and viewpoints to make generalizations about the entire population of Visual Arts students at the DCFA. Moreover, the convenience

sampling was paired with the simple random sampling method, which was used to avoid any form of bias.

A sample of 17 students were chosen from the 2019/2020 cohort, consisting of 82.4% of Level 3 students, 11.8% of Level 2 students and 5.9% of Level 1 students. These persons were chosen due to their regular interaction with the visual arts section of the DCFA and are considered the main users of the area prior to the Covid-19 pandemic and subsequent campus usage restrictions. Questionnaires were administered using the Google Forms platform. The interviews were conducted using the Zoom Conferencing platform, as well as face-to-face on the DCFA compound.

Data utilization

Empirical research is defined as any research that draws conclusions based on concrete, empirical evidence, that is verifiable. The evidence can be gathered using both quantitative and qualitative research methods (“*Empirical Research: Definition, Methods, Types and Examples*”, www.questionpro.com). The research is approached from an empirical standpoint and would be guided by the research problem. Both qualitative and quantitative approaches would be used to breakdown the findings. Therefore, the document would consist of scribal comments of the data as well as statistical interpretations presented in the form of charts, graphs, and tables.

To this end, this paper seeks to investigate the role of the architectural elements of the DCFA building in facilitating the creativity of the Visual Arts students.

vii. Chapter Outline:

This study consists of three chapters. Chapter 1 focuses on the literature review that elaborates on the role of architecture, and its facilitation of the creative process in visual arts students.

Chapter two unfolds the findings and analysis of the collected data. The third chapter proposes

design solutions for interventions concerning the selected areas. The fourth chapter will conclude the study and make recommendations for further research and the limitations of the study.

CHAPTER ONE: LITERATURE REVIEW

Nahavandi describes creativity as a “highly complex phenomenon involving multiple phases and stages,” (206). This process involves the generation, as well as the testing of ideas. Moreover, the creative process is defined as “a succession of thoughts and actions leading to original and appropriate productions,” (Botella, 1). Botella and Nahavandi have emphasised the importance of the creative process in facilitating the development of the creator’s innate thoughts and abilities to produce the desired artwork. “Neuroscience has shown us that ...the environment has the potential to also affect our way of thinking,” and that “The set of physical-sensory characteristics of spaces can stimulate more creative and imaginative thinking,” (Paiva, *“NeuroArchitecture and Spaces with a Focus on Creativity”*).

Neuroarchitecture studies how physical environments affect the human brain and subsequent behaviour. Its purpose is to design spaces which optimize conditions for its users to reduce stress, anxiety and to promote productivity and overall well-being. It focuses on the importance of design and the architectural elements which influence one’s mental state, so that they can be used and manipulated in appropriate contexts. Design decisions include angles and locations for walls and furniture, window locations, lighting, textures, open space sounds, amount, and projection of light as well as the height of ceilings.

Moreover, Paiva’s work suggests that neuroarchitecture also considers the appropriate architectural design decisions that influence creativity and productivity (*“NeuroArchitecture and Spaces with a Focus on Creativity”*). Such design elements include ceiling height, lighting, wall colour, floor space, window sizes and locations, proximity to nature as well as meeting spaces. In this light, Lehtinen postulates that empathy in designing spaces, can be understood as viewing the world from another person’s perspective, to experience their feelings. (*“Designing with and*

for empathy — Architecture that empowers”). Furthermore, her work suggests that designing with users in mind, is an approach which gives them the capacity to sustain and support their own living environments. According to Paiva, “the more precise and profound the exercise of empathy, the more the architect will have material to create according to the particularities of each client, raising the possibilities of identification and satisfaction with the project,” (*“NeuroArchitecture and Empathy: fuel to creativity”*). However, the challenge is to ensure that the design of the space is connected to and attends to the needs of the users. Therefore, the architect must be careful not to exclude any of the main groups of users, and to ensure that they pay attention to the main users by prioritizing the needs of those that are impacted the most by the built space.

According to Nahavandi, the creative process has five identifiable stages, namely, preparation, concentration, incubation, illumination, and verification.

Stage 1: Preparation

According to Nahavandi, the preparation stage is the first step of the creative process, and requires the most conscious mental activity, as it includes, “consciously gathering and examining information, defining the problem, and generating alternative ideas for addressing the problem,” (211). Furthermore, Botella’s research suggests that within the artistic field, this stage proposes, “a model of art production that includes a goal of creation,” (2). To this end, Joyner, Paiva and Molloy have proposed that several architectural elements, such as ceiling height, lighting, and appropriately designed spaces that promote informal forms of discourse, which propel the preparation phase.

According to Paiva, “higher ceilings can contribute to more creative mental states. They allow a greater sense of freedom, which facilitates more abstract thoughts and more holistic and

relational perceptions, important characteristics for creativity,” (*“NeuroArchitecture and Spaces with a Focus on Creativity”*). Furthermore, Joyner references a 2007 study that explored the influence of ceiling height on cognition (*“The Psychology of High Ceilings and Creative Work Spaces”*). It was discovered that, “subjects were more adept at coming up with out-of-the-box solutions to creative problems when placed in a room ten feet high than subjects who took the same tests in the same room, but with a hung ceiling installed at eight feet,” (Joyner). A later experiment using functional magnetic resonance imaging brain scans discovered that the part of the brain used to visually explore spaces was activated when subjects were shown images of rooms with high ceilings, but there was an opposite result when shown images of low-ceiling spaces. Therefore, Joyner’s work states that, “spaces with high ceilings instil a willingness in people to explore, to take a big brush abstract view of the world, while a less lofty ceiling plane induces a more focused, detail-oriented, and concrete outlook.”

Paiva suggests that room lighting is a factor that significantly influences our mental states. Her research emphasises the important role that natural lighting has in regulating humans’ circadian cycle. “Natural light helps our bodies reach their peak of energy, attention and productivity during the day and peak of relaxation at night, which allows better sleeping,” to the extent that, “some studies have been discussing the importance of REM sleep for creativity and problem solving,” (Paiva, *“NeuroArchitecture and Spaces with a Focus on Creativity”*).

According to Molloy, “the most creative spaces are those which hurl us together. It is the human friction that makes the sparks,” (*“Can Architecture Make Us More Creative?”*). His writing references Building 20, which was an extension of the Massachusetts Institute of Technology’s Radiation Laboratory that is considered one of the best spaces in the world that fostered

creativity. This is a result of the design of the structure, as it afforded users of different disciplines the ability to interact, generate ideas and subsequently collaborate on projects. As a result, M.I.T. amassed many breakthroughs during the duration of the building's existence, such as the first video game, and many other advances. Psychologist Kevin Dunbar states that "isolated eureka moments are rarities," (Molloy, "*Can Architecture Make Us More Creative?*"). He observed that the most important ideas were generated during everyday lab meetings, where researchers gathered to informally present and discuss their latest findings, which lead him to conclude that, "The most productive tool for generating good ideas remains a circle of humans at a table, talking shop. The lab meeting creates an environment where new combinations can occur, where information can spill over from one project to another," (Molloy, "*Can Architecture Make Us More Creative?*"). Similarly to Building 20, which held many specialists of different fields of work, studies state that academic environments have the potential to facilitate the same type of collaboration. Molloy suggests that this can occur if architectural design facilitates the "uncommon juncture of different disciplines" such as music and biology, or art and engineering, enabling him to pose the question, "how can contemporary architecture foster the same kind of creativity?" ("*Can Architecture Make Us More Creative?*"). The first step is to consider the variables of the existing space that contribute to students' experiences while on campus. These may include, "how they arrive, enter, and depart, how they greet their friends [and] where they eat lunch," (Park, "*What is good design and how can it be applied in a school environment?*"). Architectural firm M3architecture observed that during lunch breaks, the students of Mount Alvernia College gravitated towards sitting on the floor of a quadrangle area which often flooded when it rained. To facilitate this social custom, an elevated floor in the style of a large picnic blanket was erected, replacing an unappealing undercroft area, which is situated

between aesthetically pleasing gardens on one side and a delicatessen-style canteen on the other. Thus, three spaces were pragmatically designed to facilitate students' needs for respite, eating lunch and spending time with friends. Thus, if multi-purpose rest spaces such as those previously mentioned are implemented in universities, especially within different creative disciplines, there is a high potential for informal forms of discourse, which can lead to collaboration, subsequent innovation, and an overall culture of creativity.

Stage 2: Concentration

In the concentration stage, the individual focuses their energy, effort, and resources to solving the problem. According to Nahavandi, "There is a choice to engage with the process and a commitment to find a solution. This stage is not so much a matter of mental activity as it is a matter of choice," (211). *"Neuroarchitecture: The Environment's Power Over the Brain"* emphasizes the importance of appropriate artificial lighting in facilitating this stage, as insufficient light "forces the brain to work harder," which hinders productivity (*exploringyourmind.com*). Paiva's research also suggests that subjects displayed, "more analytical and logical thoughts when the environment was clearer and better lit," (*"NeuroArchitecture and Spaces with a Focus on Creativity"*). An additional factor to consider is a low ceiling height, which according to Paiva, "contributes to mental states of greater focus and concentration, facilitating analytical thinking." Another notable element is colour, which is known for influencing one's mood, and decision making-capabilities. Particularly, tones of red are known to, "stimulate cognitive and attention processes," rendering them useful for, "tasks that require mental concentration," (*"Neuroarchitecture: The Environment's Power Over the Brain"*).

Stage 3: Incubation

The third phase is incubation, where there is an unconscious internalization and subconscious ordering and reordering of information gathered in the preparation stage, which can potentially involve a “combination of previously unrelated thoughts and a subconscious struggle between what is and what might be,” (Nahavandi, 211). Considering that a person cannot force this mental thought process, and that conscious thought and effort may hinder it, Nahavandi suggests that, “the best that the individual can do is attempt to relax and allow the subconscious to work and ideas to surface,” (211). His research also suggests that “psychological distance leads to clearer and more integrated thought and judgement,” (Nahavandi, 211). Hence, Ricci’s work explains the importance of designing green spaces to facilitate relaxation, particularly in universities.

Nature and the natural environment is another crucial factor such, “that when absent, has the ability to completely derail the effectiveness of even good architectural design,” (Ricci, 29). Ulrich states that viewing nature, “employs the mind without fatigue and yet exercises it; tranquilizes it and yet enlivens it; and thus, through the influence of the mind over the body, gives the effect of refreshing rest and reinvigoration to the whole system,” (Ulrich, 204). Ulrich postulates that the presence of nature stimulates the “immediate, unconsciously triggered and initiated emotional [cognitive] responses,” that influence, “attention, subsequent conscious processing, physiological responding and behaviour,” (206). He elaborates that natural settings rehabilitate the mind, especially in instances of “severe and excessive exercise of the mind, associated with work demands that require sustained, effortful attention and thought,” (Ulrich, 206). This is because they effortlessly maintain one’s attention without triggering stress, and are aesthetically pleasing. As a result, natural environments are mentally engaging, and occupy the

mind without a purpose. McFarland's study attests to this, as one respondent states that, "being outside on campus puts me in a calm mood," while another suggests that "grass and plants are pretty and relaxing to have around the entire campus. Concrete isn't relaxing," (235).

Noteworthy studies are those of Samaržija and Park, who effectively designed schools, considering the emotional and cognitive benefits of nature to students. Samaržija refers to the design of Corona Del Mar high school campus in California, where corridors are situated in the outdoor greenspaces, "allowing students to gaze at greenery and the courtyard while transitioning between lecture rooms," (7). Likewise, Mount Alvernia College in north Brisbane offers students a "seamless experience of indoor and outdoor spaces" where the architecture facilitated easy access to the gardens from social spaces, cafeteria, and commercial kitchen (Park, "What is good design and how can it be applied in a school environment?"). In both instances, students are encouraged to spend breaks in surrounding green spaces.

According to the Paiva, another noteworthy element to consider within a space that has a focus on stimulating creativity, is the human body, especially while in motion. Her work discusses the benefits of walking, as it assists in stimulating creativity, both during and afterwards. Thus, assisting in facilitating the incubation stage as, "Walking allows a freer flow of thoughts, which can facilitate insights and connections between ideas. In addition, walks help to oxygenate the brain and improve mood, stimulating the production of substances such as serotonin and dopamine," (Paiva, "NeuroArchitecture and Spaces with a Focus on Creativity"). Additionally, considering the benefits of exposure to nature and walking as separate elements in relation to the facilitation of the incubation stage, Paiva's work features both in conjunction with one another. Thus, this can be made possible by carefully considering certain architectural elements in the design of a green space's layout, such as the placement of stairways, pathways and elevators that

can induce longer walks. Additionally, Paiva's work also emphasises the importance of implementing these architectural elements to encourage communication among the environment's users.

Overall, research has shown that exposure to nature is very beneficial in facilitating the relaxation that is needed for the incubation phase to occur. Therefore, green spaces, once designed appropriately, can promote the frequent use of the environment, forms of informal discourse, and thoroughfare which are important considerations when designing a space with the intention to promote creative thinking.

Stage 4: Illumination

The illumination stage is the moment of insight when the individual solves the problem after the period of subconscious mental activity. Joyner postulates, "our perception of mental space moves in parallel with our perception of physical space," meaning that the greater one's sense of spatial depth, the more open one's mind will be to "unorthodox ideas and fresh perspectives," (Joyner, "The Psychology of High Ceilings and Creative Work Spaces"). Architect Rattner attributes this psychological phenomenon to the construal level theory, whereby, "the observation or perception of things far away from us stimulates abstract thinking. Nearby objects or concepts...stimulate a concrete and detail-oriented mindset," (*"How to Use the Psychology of Space to Boost Your Creativity"*). His work recommends that expanding the perceived space in your workspace is critical to promoting a creative state of mind.

His first recommendation is to appropriately include windows, French doors, and screens in an interior space, to enlarge it beyond its closing walls. However, one must carefully consider what exteriors these elements frame, as, "Windows looking onto a blank wall across a narrow air shaft, for example, won't deliver the same psychological benefits as looking into the distance,"

(Rattner, *“How to Use the Psychology of Space to Boost Your Creativity”*). According to the aforementioned information in the preparation phase, ceiling height is also another important factor in creating more space. Rattner emphasises this by noting a 2009 study from the University of British Columbia, where subjects performed better at tasks requiring creative problem-solving skills under ceilings 10 feet or higher compared to 8 foot ceilings. However, if the intended space does not have the requirements to facilitate a tall ceiling, Rattner’s study suggests that the desired affect can be achieved by manipulating the perceived physical properties of the room.

In particular, Rattner recommends using vertically oriented elements as an optical illusion to, “fool the eye into thinking your space is loftier than it really is,” (Rattner, *“How to Use the Psychology of Space to Boost Your Creativity”*). An example of this can be through the use of vertically striped wallpaper, as, “a space decorated with [this] will appear taller than the same space painted in a solid colour or embellished with horizontal stripes,” (Rattner, *“How to Use the Psychology of Space to Boost Your Creativity”*). Additionally, using furniture which are, “configured to emphasize the vertical,” particularly, “Bookcases and panelling with upright proportions, window drapes falling straight to the floor, artwork and decorative arrangements configured to emphasize the vertical, and a ceiling border painted the same colour as the wall are other optical tricks, can be utilized to fool the eye into thinking your space is loftier than it really is,” (Rattner, *“How to Use the Psychology of Space to Boost Your Creativity”*).

Wall colour is another considerable element, as it can also affect the perception of horizontal distance. Rattner states that the use of cool colours such as blue or green, “make the space feel like it’s expanding outward,” whereas warmer hues like orange and red, “can make the same space feel as if it were contracting,” (*“How to Use the Psychology of Space to Boost Your*

Creativity”). Additionally, exposure to hues of blue and green also improve creative problem solving (Rattner, “*How to Use the Psychology of Space to Boost Your Creativity*”). Specifically in relation to the colour blue, the findings from a study conducted by the University of British Columbia state that, “Through associations with the sky, the ocean and water, most people associate blue with openness, peace and tranquillity,” which directly impacts creativity as, “[These] benign cues make people feel safe about being creative and exploratory,” (“*Effect Of Colors: Blue Boosts Creativity, While Red Enhances Attention To Detail*”, University of British Columbia). Additionally, Nierenberg’s article relating to the colour green, discovered that people’s creative output was maximized after glancing at the colour green for two seconds before doing a creative task, when compared to briefly looking at other colours. The details of that study include that 69 people were given two minutes to write down as many uses as possible for a tin can, where each idea was then rated for its creativity and cleverness. Prior to the test, two equally divided groups of participants were shown either a green or white rectangle. The results revealed that, “Participants who saw green before the task produced more creative ideas than those who saw white. The “green effect” as the researchers dubbed it, was also observed in creativity challenges that pitted the colour against those seeing a quick flash of grey, red, or blue,” (“*A green scene sparks our creativity*”, Nierenberg).

Stage 5: Verification

According to Botella, at the verification stage, the work corresponds to the development and implementation of ideas through a search for solutions by evaluating, selecting, and redefining the creative solution (2). It also involves the acceptance of this solution, which involves the promotion of the idea, looking for its strengths and weaknesses, as well as the testing and verification of the idea as being feasible for production (Botella, 2). However, Botella states that

there lacks a phase of application, or deployment of the creative production, which leads to a stage of planning. This results in two stages, the first one consists of searching for ideas through the creative gesture, using elements such as sketches, drafts, mock-ups, which essentially transposes the idea to a tangible medium. This last stage enables the artist to materialize the ideas that have been found, thereby solving the problem.

DM-Architects state the importance of designing an art studio, or any space with an intended purpose for art production, as a practically as possible ("*Beyond Hype and Gentrification: Designing Studios for Artists* "). Certain design criteria are common, such as the allocation of sufficient floor space for the artist to step back to view their work from various distances, a tall ceiling height to assist in facilitating creative thought and wall colour. However, other elements such as furniture, lighting, ventilation, as well as wall and flooring materials must be selected for the artist's specific character and work.

Conclusion

Altogether, Nahavandi suggests that this creative process particularly applies to the arts or design, as "the purpose of creativity [is] to achieve a particular aesthetic, provoke an emotion, or to make a statement." (206). Botella supports this statement by mentioning, "in the field of art, the realization of an idea occurs when the artist transforms that idea into a work of art," (2).

Additionally, the phases of the creative process stem from the work and insights of different types of individuals.

In summary, architectural elements play an important role in facilitating the creative process in visual arts. High ceilings have been shown to play a very important role in facilitating creativity in students who were found to be able to solve or find out of the box solutions to problems at a faster and more efficient rate than students who were placed in spaces with lower ceiling heights.

Creative thinking flowed more easily with adequate natural and artificial lighting. In addition, the use of appropriate lighting, a lower ceiling height and tones of red can influence cognitive thinking, which in turn enables the individual to focus on solving the problem at hand.

Furthermore, evidence from research has proven that exposure to nature has been an effective aid in facilitating the incubation process. Moreover, studies suggest that implementing openings onto wide expanses, using vertically oriented elements such as furniture, and employing tones of blue and green for wall colour is beneficial to expanding the physically perceived space, which induces the illumination stage. At the verification stage, the solution to the creative problem is transformed into a work of art, in which different types of individuals engage in varying roles. Overall, the design of environments intended to support the creative process must consider appropriate design decisions to facilitate each stage. Thus, allowing users to best optimize the space.

CHAPTER TWO: FINDINGS AND ANALYSIS

Introduction:

This study seeks to investigate the impact that the architectural elements of the Visual Arts unit of the DCFA play in the facilitation of the creative process of the 2019/2020 B.A. Visual Arts students. This study examined the architectural elements of the Visual Arts unit of the DCFA, and its relationship to the steps in the creative process of art making. To establish this relationship, interviews were conducted with UWI's campus architect Korry Barnett, one virtually via the Zoom platform and the other face-to-face on the DCFA compound. Additionally, a questionnaire was administered online to students via the Google Forms platform. This study employed a mixed research design using qualitative and quantitative methods, where a convenience sample of 17 students were chosen from the 2019/2020 cohort. These persons were chosen due to their regular interaction with the visual arts section of the DCFA and are considered the main users of the area prior to the Covid-19 pandemic and subsequent campus usage restrictions. The responses from the interviews and questionnaires were transcribed and summarized into an Excel spreadsheet.

This chapter presents the findings of the research question that was operationalized in the introduction. The research question presented for this study is as follows:

‘What impact do the architectural elements of the Visual Arts Unit of the DCFA play in the facilitation of the creative process of the 2019/2020 B.A. Visual Arts students?’

i. General information

Fig. 1 reveals that 70.6% and 29.4 % of respondents are female and male respectively. Furthermore, Fig. 2 states that 82.4% of respondents from the 2019/2020 cohort were in Level 3, indicating that their opinions were based on three years' experience on the DCFA campus. Moreover, Fig. 3 reveals that the Drawing Studio is the classroom which was used most frequently. Hence, we can infer that the Level 3 students had the most experience working in this classroom. Therefore, the Drawing Studio in the Visual Arts Unit of the DCFA building is the classroom that will be analysed for this study.

ii. Stage 1: Preparation

According to Fig. 4, 70.6% of the respondents reported that they were able to successfully perform some of the activities in the Preparation stage of the creative process, hence their response being 'somewhat'. According to the research within the literature review, the critical architectural elements that facilitate this step are ceiling height, natural lighting, and appropriately designed spaces to encourage discourse.

Ceiling Height

The ceiling height in the Drawing Studio is 16 ft, which is taller than Joyner's recommended height of 10 ft for a creative space. Campus Architect Korry Barnett states, "I think that the proportions are good in terms of width and ceiling height" (par. 10). Evidence from the findings reveal that respondents did not mention ceiling height as a factor to be considered or altered. Hence, this element was not a considerable factor that impaired this stage of the creative process.

Natural Lighting

Referring to Fig. 14, 16 respondents consider lighting to be a very important element in facilitating their creative processes, as it received ratings of ‘very significant’ and ‘significant’ from 11 and 5 respondents respectively. However, based on responses from Fig 5, respondents appear to be dissatisfied with the natural lighting conditions. A noteworthy response from a respondent states that, “there are few windows for natural lighting and some areas receiving more artificial light than others,” and “the natural lighting coming through the windows wouldn’t have always been the most reliable because it may not have lasted long because of its position,” (Fig 5). Subsequently, rendering one respondent to state that, “Sometimes the space didn’t feel conducive for creating,” (Fig 5). Therefore, it can be inferred that the inadequacies of the natural lighting in the Drawing Studio affected the facilitation of this stage of the creative process.

The site visit to The DCFA’s Drawing Studio, and in-person interview with Barnett reveal that plyboard is mounted on the west wall of the classroom, covering windows that are situated between the column bays. Statistics obtained by DCFA’s administration, as seen in Figures 24 and 25 state that during the 2019/2020 academic year, 24 Level 2 students and 27 Level 3 students used the Drawing Studio as a classroom for Fine Art Lab 2 class, as well as Fine Art 3, and Fine Art Lab 3 respectively. However, Barnett states that the OSHA standard for the occupancy of a classroom is generally 15 students (par. 12). Thus, according to Barnett’s expertise, the number of students enrolled supersedes the OSHA standard.

Referring to the nature of work that occurred during studio classes in the Drawing Studio, coupled with the large numbers of enrolled students, Barnett suggests that the reason for retrofitting the west wall with plyboard was to serve the purpose of pinning up artwork for critiques, as the plyboard on the eastern wall may not have sufficed. Hence, Barnett states, “the

solution therefore is to block the windows,” (par. 36). However, he continues to explain that “generally, we’re constrained by space and budget. And so some decisions are made not necessarily because it’s the best for the space. But it is the best for the space with the budget or timeframe available,” (par. 14). Hence, he suggests that decisions pertaining to The DCFA building by The UWI’s administration, are influenced by limited funding, and are not necessarily made to facilitate the creative needs of the students. As a result, the panels block access to the windows which provide natural lighting, ventilation, and exterior visuals. Therefore, this impedes the facilitation of the Preparation stage, as the natural lighting provided in the space is insufficient.

Meeting Spaces

Molloy’s research emphasises the importance of designing meeting spaces in creative environments to encourage discourse, which would facilitate future ideas, collaborations, and ultimately new creative products. Fig. 16 states that 47.1% and 23.5% of respondents best generate ideas alone, and in a group respectively, while 29.4% are neutral. With respect to the respondents’ experiences in the Drawing Room, one notable response states, “[what] was helpful for me to gather thoughts and my creative process were quietness and collaboration that would have happened when just a few students are doing work in the room together including myself,” (Fig 5). However, another response explains, “sometimes I would bounce off of ideas with friends but otherwise a lot of my problem solving took place at home, [because the room] was often crowded so one could only focus so much on work,” (Fig 7). Thus, these responses show the importance of collaboration to the students’ creative processes. Moreover, it can also be inferred that respondents desired for more collaboration to generate ideas but were unable to do so because of the size of the classroom in relation to the number of students that were enrolled.

Thus, this also suggests that the Drawing Studio was not a conducive space for collaboration and subsequent idea generation when all students in a class were present, due to the noise levels.

Moreover, research from Park discusses the practicality of implementing outdoor multi-purpose communal spaces in schools to encourage discourse. His work refers to Mount Alvernia College's outdoor area, where the design facilitated access to gardens from social spaces, cafeteria, and a commercial kitchen. To this end, within the context of DCFA, although the courtyards are bordered by undergraduate level classrooms, cafeteria, bathroom, and The UWI's Open Campus, statistics from Fig. 20 reveal that a total of 82.4% students answered 'Never' and 'Seldom' to the question "How often did you use the DCFA's green spaces?". Recurring responses from Fig. 21 reveal that a notable reason for the students' lack of green space usage is the little, to no seating areas, resulting in the general statement that, "There just wasn't much reason to use the space," (Fig 21). Moreover, Fig. 22 shows that only 17.6% of students used the existing green spaces to eat lunch and spend free time with friends, while Fig. 17 reveals that 70.6% of respondents ate lunch and spent time with peers outside of the DCFA campus. Also, Fig. 17 shows that 82% of respondents used the space as an access route to classrooms and other buildings while the other activities, such as making artwork, researching, or studying, relaxation, and spending time with friends have very low ratings. Reoccurring responses from Fig. 18 mention that the lack of access to restaurants, as well as that of seating areas were the major deterrents to using the green spaces.

iii. Stage 2: Concentration

Fig. 6 states that 64.7% of the respondents reported that they were able to successfully perform some of the activities in the Concentration stage, hence their response being ‘somewhat’. Work from Paiva suggests that the critical elements for the effective facilitation of this phase are artificial lighting, low ceiling height and the use of tones of red to encourage the focusing of energy, efforts and resources that are required for this stage.

Artificial Lighting

The responses from Fig. 14 reveal that lighting is considered a very important element in the facilitation of the creative process. Furthermore, Barnett states that the artificial lighting is adequate. However, he explains that “because of function, I wouldn’t have put in so many light fixtures [because] typically, you would probably miss every other row to avoid too much glare on the surfaces of the canvases, or whatever materials that students are working with,” (par. 54). Moreover, responses from participants suggest that artificial lighting is not an element of major concern.

Low Ceiling Height

The ceiling height of the Drawing Studio supersedes the recommended 8ft measurement postulated by Joyner for effective concentration. However, Barnett disagrees with Joyner’s theory. He states, “I just think that not feeling confined in anything you're doing is a positive thing...I don't think anyone likes to feel closed in. You like to feel like you can breathe...regardless of what I would be doing, whether it’s working on a math problem or trying to compose a piece of music,” (par. 12). Furthermore, he explains that designing a multi-purpose space with a dropped ceiling is infeasible, as it has the potential to hinder any stage of an

individual's creative process. This statement is particularly relevant to stages 1 and 4 of the creative process, as they both require large expanses of space to facilitate creative thinking. Therefore, within the context of The DCFA's Drawing Studio, it is impractical to include design elements that only facilitate the concentration stage.

Tones of Red

"Neuroarchitecture: The Environment's Power Over the Brain" notes that tones of red are known to, "stimulate cognitive and attention processes," rendering them useful for, "tasks that require mental concentration." However, Barnett disagrees with this sentiment, especially within the context of a multi-purpose room such as the Drawing Studio. He states that, "Reds obviously are very intense, and so it's not something that you can stare at for very long. So, if I wanted a room where people would not be distracted, then you know I would stay away from sharp colours like red," (Barnett, par. 14).

Responses from respondents

The data reveals that none of the elements of artificial lighting, low ceiling height, and tones of red impacted the respondents' abilities to focus their energy, efforts, and resources to solving their creative problem at hand. However, Figures 7 and 11 state that issues pertaining to the floor space in relation to the number of enrolled students, as well as time constraints impeded students from performing this stage to its full extent. Responses from Fig 7. reveal that, "[the Drawing Studio] was often crowded so one could only focus so much on work," and the, "Time limit in the space was limited." Moreover, responses from Figures 11 and 9 respectively state that, "I got some starting ideas but usually not much after that with all the noisy distractions," and, "I was a

bit uncomfortable. Unable to focus on getting work done.” Overall, it can be inferred that the factors mentioned above hinder this stage of students’ creative process.

iv. Stage 3: Incubation

According to Fig. 8, 35.3% found that they were able to relax, allowing their ideas to surface in the Drawing Studio. However, 64.7% of students, answered a combination of “No” and “Somewhat”. Responses from Fig. 9 explain respondents’ reasons for their answers. Responses express dissatisfaction with the space for relaxation, as it was mostly used for class sessions, creating high noise levels. As a result, a respondent states, “[it] was not a relaxing space since it was mostly used for class,” (Fig. 9). Hence, the data suggests that this classroom is insufficient to effectively facilitate the incubation phase. However, studies from Ricci, Ulrich and Paiva, state that the elements which help facilitate this process are exposure to nature, access routes to facilitate walking and students’ interactions with each other.

Exposure to nature

As seen in Fig. 22, only 17.6% of students used the green spaces for relaxation. According to Fig. 21, respondents’ reasons for not using the spaces for relaxation include, “The grass was often overgrown, and the afternoon sun was intense. Also, the ground didn’t seem treated for ants,” rendering the grounds uncomfortable to use. Additionally, there are repeated responses pertaining to the general lack of seating, which include, “There weren’t enough places to sit and enjoy the spaces,” and, “Trees can be good shade but there aren’t even much benches under them to relax,” (Fig. 21). Based on these findings, the DCFA’s green spaces do not adequately facilitate the incubation phase of the creative process.

v. *Stage 4: Illumination*

Fig. 10 represents the fourth stage in the creative process. 35.3% of respondents revealed that they were able to gain insight to solve the problem or answer pertinent questions relating to their creative process in the Drawing Room. However, 58.8% of students, representing a combination of answers “No” and “Somewhat” disagreed. Joyner’s study discusses that the architectural elements which best facilitate this process must be used appropriately, to give the illusion of an enlarged space. Such elements are windows and openings that overlook exterior landscapes, a tall ceiling, furniture, and décor that are vertically oriented to make the space appear more expansive, as well as wall colour, specifically using hues of blue and green.

Windows

Fig. 14 reveals that the size and location of the windows in the classroom are very significant elements in facilitating creativity of the visual arts students. The on-site visit to the Drawing Room on the DCFA campus reveals that the west wall has three bay windows measuring 3.9 ft x 5.9 ft. However, plyboard is mounted to this wall, blocking off access to the windows, inhibiting students from seeing the campus’ exterior views. As Barnett aptly states, “you’re physically not able to escape what you’re visually able to escape...[so] as a teaching space, I would definitely want to be able to have some sort of visual outside,” (par. 12). Moreover, he explains that access to green spaces is not only tactile, but it is also a visual experience, that can be gained from inside interior spaces through windows. One response quote, “Compared to the rest of rooms there, I would say it was easiest to relax, due to the view of outdoors,” (Fig.9). However, once the easels are used during class sessions, they block visibility of the windows on the southern wall, and the subsequent exterior views due to their height. Barnett explains, “when you start putting people [in the classroom], the easels start being distributed [and] you don’t get this view

of the windows [because]...You're looking through people looking through the easels," (par. 19). To this end, one response suggests that the classroom should, "have more or one very large window from ceiling down to the ground," (Fig. 15). Hence, these findings indicate that the lack of accessible windows impacts students' abilities to effectively perform this stage of the creative process.

Wall Colour

Barnett agrees with the sentiments of Rattner, Nierenberg and the University of British Columbia, that the use of tones of blue and green help to make a space seem as though its expanding outward, as well as induces creative problem solving. Barnett explains, "as a principle you would try to keep smaller spaces, with lighter colours," (par. 14). Nevertheless, with respect to the Drawing Room, he explains that he would avoid painting the walls with the current stark white colour, as it can potentially make one feel enclosed. However, he elaborates that the colour white serves the function of the classroom, as it is a multi-purpose space, that is used to pin up artwork. Moreover, because of this fact, he suggests another reason for larger windows, as they would allow students to see the colours of the outdoor greenspaces.

Ceiling Height

The data represented in the Preparation and Concentration sections state that the respondents, and Barnett agree that the ceiling height in the Drawing Room is sufficient for any stage of the creative process. This information is important to note, as including elements to create the illusion of an enlarged space is imperative, especially to support this Illumination phase.

vi. *Stage 5: Verification*

According to Fig. 12, 47.1% answered “Somewhat” to whether they were able to successfully perform the activities in the Verification stage of the creative process. Responses to ‘Yes’ and ‘No’ were 29.4% and 23.5% respectively. The literature review states that sufficient floor space, appropriate furniture, lighting, and ventilation are important elements to effectively facilitate this stage.

Floor Space

Barnett states, “I think you want to look [at] size of the space as it relates to the function and the numbers of occupancy,” (par. 78). Furthermore, the OSHA recommendation pertaining to the numbers of students in a classroom, coupled with statistics obtained by DCFA’s administration in Fig. 25 suggest that the floor space is insufficient for the number of students that are enrolled per class. Reoccurring responses from Figures 5 and 15 express displeasure with the floor space, as notable answers described the classroom as, “cramped” and “not [having] enough space” rendering subsequent responses that, “More space is required for larger classes.”

Furniture

Barnett states that, “Usually when we [design] a space, it's not just the building but it's also the furnishings that go with it,” (par. 16). Within the context of the Drawing Studio, the furnishings comprise of chairs, desks, and easels. However, many respondents express dissatisfaction, particularly pertaining to the tables. Noteworthy responses are, “Due to the nature of my work the big open space allowed for me to work well, I do wish we were provided with big tables however because much of my work had to be done on the floor,” leading to subsequent suggestions of, “larger tables rather than individual desks,” and “More large table space,” (Fig. 5, Fig. 15, Fig. 15). Therefore, this issue relates to the lack of floor space, as larger tables cannot be

provided for a room with insufficient space, thus impacting the students' abilities to effectively create artwork.

Lighting

The previously mentioned data in the Preparation and Concentration stages discuss the importance of lighting in effectively facilitating students' creative processes. Within the context of performing the Verification stage, respondents expressed displeasure with the classroom's lighting, suggesting for "brighter" and "better lighting" (Fig. 15). Therefore, it can be inferred that the lighting is not effective for students to productively create.

Ventilation

Fig. 14 states that within the categories of 'very significant', and 'significant' 11 and 3 respondents respectively consider ventilation as important for facilitating their creative processes. Barnett observed that the space is retrofitted with plexiglass and plywood to accommodate air-conditioning which as a result "blocks [natural] airflow," (par. 78). Moreover, he explains that in the event of a power outage, "You're in trouble...we are 100% reliant on artificial cooling, you still have the window at the top, but the air needs somewhere to move. So, if everywhere is blocked up and you only have one window there...there is no movement of air possible," (par. 38). Additionally, because the louvres that are situated on the west wall cannot close, Barnett further suggests that the AC units are unable to work at an optimal level. Hence, two responses from Fig. 15 suggest that the classroom requires, "Better AC" and "better ventilation." Thus, the data suggests that the classroom's ventilation should be improved to better facilitate students during the Verification phase.

CHAPTER THREE: RECOMMENDATIONS

Introduction

Based on the data collected, this chapter explores the design interventions that can be implemented to enhance The DCFA's Drawing Studio and green spaces, to better facilitate the creative process.

i. Spatial empathy

Research from Paiva and Lehtinen, as well as interviews with Barnett emphasise the importance of employing empathy in the design of an environment. However, regarding The DCFA, Barnett explains that "I get the impression that [the spaces] were designed to hold classrooms and facilitate a function, and from that, we've placed these functions in them. But I don't think they were designed with the function in mind to be able to do anything other than facilitate the bare requirements," (par. 5). The data collected reveals that many aspects of the Drawing Studio and green spaces need improvements to facilitate the creative processes of Visual Arts students. Thus, thinking about the students' perspectives for future design concepts may result an improvement of their creative abilities. As such, one respondent suggests, "Maybe allowing students to help in redesigning what they think the creative space should look and feel like," would help the design process (Fig. 15).

ii. Drawing Room

The data suggests that one of the main issues pertaining to the Drawing Studio stem from the plyboard mounted on the west wall, blocking access to windows. Barnett elaborates that, "all of these panels are robbing you of light,...ventilation, [and]... the visuals outside," which are elements which impact the Preparation, Concentration, Illumination and Verification stages (par.

68). Therefore, Barnett recommends replacing the plyboard with moveable walls for critiques to solve this issue. He states, “you can hang up the work on [the walls], and when you’re finished you take all of them and you have a place where you are going to stack them one in front of the other.” This intended space is the storage room in the north-west corner of the classroom.

Moreover, both Barnett and responses from data suggest that including more, or larger windows in the place of the existing ones would be beneficial. Barnett states, “it would still make a massive improvement to the space...the extra natural light wouldn’t hurt either, so its beneficial on all accounts. Even if you do say we don’t want to have natural ventilation inside here...you can still have the artificial ventilation and you’re still getting the visual outside and...the light outside,” (par. 104). Moreover, as seen in Fig. 28, the storage room to the east of the classroom can be removed and relocated to provide much needed extra floor space. Additionally, a ceiling can be installed to provide sky lights to aid with access to natural lighting, and every other row of artificial lighting fixtures can be excluded to prevent glare. Furthermore, the columns can be painted in a light blue tone to create a sense of calm and to break the monotony of the stark white colour.

iii. Green Spaces

The data suggests that the Drawing Room is not effectively designed to promote discourse or relaxation for the Preparation and Incubation stages of the creative process. In this light, research from Park suggests the convenience of multi-purpose outdoor green spaces, especially in countries with climates that can facilitate these environments. Thus, The DCFA’s selected green spaces are an appropriate choice to facilitate relaxation and discourse due to its accessibility. Furthermore, the data reveals that the main issues that hinder students’ use of the space relate to its lack of accommodations for seating, eating, spending time with friends and access to

restaurants. Thus, Figures 34 and 35 display site plans for the greenspaces with potential enhancements.

Referring to the proposed green space in Fig. 35, benches align the periphery of the courtyard along the existing walkways. Proposed wooden decks for outdoor eating and spending time with friends is also placed to the north and east of the cafeteria, maintaining close proximity to food options, and existing vegetation for shading and cooling. Additionally, natural pathways through the grass were observed, revealing areas where formal pathways can be constructed. Thus, encouraging students to enter the space, ultimately providing more spaces to walk, as well as providing accommodations for the disabled. These proposed pathways will separate the courtyard into four segments, allowing different activities to take place within each area, such as the installation and viewing of art works, study, creating artwork and relaxation.

Fig. 34 shows a potential lounge and eating area for students located in the open grassed area to the west of the Exhibition Hall. It comprises of a central communal eating area, with lounge benches aligning either side. There is also an open landscaped area to the north of this section and is bordered by white gravel to create a psychological separation between hardscape and greenspace. It is also bordered to the north by trees to separate the parking area from the students' communal area.

CHAPTER FOUR: CONCLUSION

This final chapter will discuss limitations of the study, recommendations for further research, and a closing statement.

Limitations

Limitations to this study were experienced because of the inability to attend classes on campus due to Covid-19 restrictions. As a result, questionnaires were administered online via social media platforms. Unfortunately, cooperation issues were experienced, as the number of collected responses was less than what was expected, thus reducing the sample size. Additionally, as students have not been on campus since March 2020, the results collected from the survey may not be accurate due to recall bias. Furthermore, the research project's word limit resulted in the selection of the Drawing Studio as the only interior room for this study, as findings revealed that it was the most frequently used classroom. Therefore, other classrooms and workspaces were not considered, such as the Exhibition Hall, Design Labs, Ceramics room, Library, I.T. Lab and Wet Space. Additionally, background information pertaining to the DCFA's history was not readily available.

Recommendations for further research

Further research on all the rooms of the Visual Arts unit should be considered, to provide an overall perspective of students' abilities to carry out their creative processes in each space. If proven unsatisfactory, appropriate design interventions to promote these processes can be proposed. Furthermore, it was advised by architects that to attain the most accurate results for a study such as this, a case study approach should be utilized, where the architectural elements of the Visual Arts unit of The DCFA campus, and students' subsequent levels of creativity should

be juxtaposed with those another visual arts school whose campus is designed based on the principles of neuroarchitecture. Therefore, a comparison can enable more accurate generalizations and correlations between architectural stimuli and students' creativity and subsequent performance levels regarding the creative process. However, this expansive type of research was difficult to conduct given the circumstances and restrictions surrounding the Covid-19 pandemic.

Closing statement

This study has made it possible to learn about neuroarchitecture and neuroscience. In particular, how physical environments, namely architectural elements, affect the human brain and subsequent behaviour, particularly those of creative students. Through research, and especially interviews, practical knowledge about the importance of employing spatial empathy to inform design decisions were gained, notably for visual arts students, where the creative process is concerned. Hopefully, The University of the West Indies, St. Augustine will consider this research to make interventions to the Visual Arts section of The DCFA campus, as well for future reference when designing built environments for construction or renovation.

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APPENDIX A

Questionnaire

Section 1

General Questions

1. What is your gender?

☐ Male

☐ Female

2. In the academic year 2019/2020, which level were you at?

☐ Level 1

☐ Level 2

☐ Level 3

3. Which classroom did you use most frequently?

☐ Drawing Studio

☐ Design Lab I

☐ Design Lab II

☐ Exhibition Hall

☐ Ceramics Room

4 A. Did your chosen classroom successfully facilitate your creative process? Please refer to the stages in the creative process below, and answer accordingly

4 i. Were you able to gather information, ask questions, define the problem, and generate ideas for answering the questions or solving the problem?

☐ Yes

☐ No

☐ Somewhat

4 i. Can you give a reason for your answer?

4 ii. Were you able to focus all your energy, effort, and resources to answering the questions or solving the problem?

☐ Yes

☐ No

☐ Somewhat

4 ii. Can you give a reason for your answer?

4 iii. Were you able to relax, and allow your ideas to surface?

☐ Yes

☐ No

☐ Somewhat

4 iii. Can you give a reason for your answer?

4 iv. Were you able to gain insight, where you solve the problem or answer the questions after a period of relaxation?

☐ Yes

☐ No

☐ Somewhat

4 iv. Can you give a reason for your answer?

4 v. Were you able to effectively create artwork in the classroom?

☐ Yes

☐ No

☐ Somewhat

4 v. Can you give a reason for your answer?

4 B. Referring to the classroom you selected in #3, rate in order of priority by placing a ✓ in the table below, the role of following physical elements play in facilitating your creative abilities in visual arts, using the following key.

Key:

1 – Very Significant	2 – Significant	3 – Neutral	4 - Little Significance	5 – No significance
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Rating ✓	1	2	3	4	5
Ceiling Height					
Lighting					
Wall Colour					
Wall Location					
Floor Space					
Window Size					
Window Location					
Furniture					
Building Materials					
Green Spaces					
Building Location					
Air Quality					
Ventilation					

5. With reference to your answer for #3, how can the space be enhanced to facilitate the visual arts students' creativity?

6. Do you come up with ideas better alone or in a group?

☐ Alone

☐ In a group

7 A. Where did you eat lunch and hang out with friends?

☐ Common Room

☐ Stairways

☐ Empty classrooms

☐ Corridors

☐ Main Campus

☐ Other: _____

7 B. Why did you choose to eat and hang out at the chosen spot?

8 . Would you like a designated space in the visual arts unit for eating lunch and hanging out with friends?

☐ Yes

☐ No

☐ Neutral

The following questions are related to DCFA's green spaces

The following photos show the courtyard outside the cafeteria, alongside the visual arts unit, as well as the front entrance area



9. How often did you use DCFA's green space?

☐ Never

☐ Seldom

☐ Often

☐ Very often

10. Referring to to #9, please state the reason for your choice.

11. What activities did you use the space for?

☐ Draw, sketch, paint, etc.

☐ Study/Research/Work

☐ Reflection and relaxation

☐ Eating lunch and hanging out with friends

☐ Access route to classes, rooms, cafeteria, bathroom, etc.

☐ Other: _____

12. How can the space be enhanced to facilitate the visual arts students' creativity?

APPENDIX B

Zoom interview:

General Information

Korry: Tell me what your paper is about

Par. 1

Interviewer: I'm looking at Neuroarchitecture. Which from what I've researched is more or less, designing a space with someone's mental health in mind. My lecturers guided to me look at Neuroarchitecture, and how this can be used to examine the Visual Arts unit of DCFA within this context and provide changes if necessary. I'm looking at how architectural design can induce creativity. Is the existing structure good enough to induce creativity? Can it be improved? What enhancements can be made? That sort of thing.

Par. 2

Korry: Yes, yes and yes to all of those questions. So the area you're looking at is Open Campus, off Gordon Street, the section that's occupied by DCFA?

Par. 3

Interviewer: Yeah, specifically the Visual Arts section of it

Par. 4

Korry: So, I was involved in the new building. I don't have a lot of visuals in my mind of the existing structure, it may be a little hard for me. I prepared the concept, diagram and reviewed submissions for the new building. My concept was that the existing building structure had these

open corridors and isolated buildings, so you walk from building to building, and they're all linked by leading corridors. And to take that concept, and carry it forward into the new building, so I look at them as streets. So there are these external spaces, and external to the rooms, and the rooms act as the buildings, so the new building is sort of a miniature version of building typology that you see on the existing. Right, so the smaller buildings have these 'streets' that link them together. It's kind of a little bit of a....taking the concept and trying to translate it into a built form; one contained space. So, that's as much as I took from the existing to inform the new. I don't have a lot of visuals in my mind, but I can't see much that would inspire creativity from the layout. Y'know when I think about....so there are different forms of art, and you're focusing on the visual, right? So music, dance, y'know those things can take place in isolation, right, you don't necessarily need a lot of external influence for that. I think things like visual arts, which would include painting, sculptures, all of those things, you really would like to be inspired by or influenced, I suppose by what you see around you, and I just don't get the impression that the buildings were designed with that in mind. I get the impression that they were designed to hold classrooms and facilitate a function, and from that, we've placed these functions in them. Architects are charged with the development of the built environment which includes the understanding of the end users physical and psychological needs, but I don't think they were designed with the function in mind to be able to do anything other than facilitate the bare requirements. 'I need the space that is 30x60 to hold so many people, with so many desks,' - there it is.

Par.5

Interviewer: I'm also looking at this quadrangle area here, I might potentially, once I have enough space in the paper to do so. I'm essentially analysing one classroom, as well as this area.

I'm looking at exposure to nature, and if it can influence creativity. So, I'm also planning to ask students if they use the space, how often they use it, what purposes they use it for, and if enhancements were to be made, what would they like? And those sorts of things.

Also, I'm looking into the elements of the classroom that I choose. So, materials for windows, doors, etc, as well as lighting and also functional aspects. Also, how do you measure lighting?

Par. 6

Korry: The unit is called lumens. And there is a recommended number of lumens for a specific spaces. So you have a different requirement in a bathroom for example, than you would in a seminar room or a lecture room. Okay. All right. So that's how that's what we work actually.

So, there are recommended lighting levels. Obviously, it also comes down to what the individual or the owner of the space wants. So we could say, well, yes, 30 lumens is what's recommended, but I would like it to be brighter, so you go up to 14.

Someone may say well, you know, depending also on what is the composition of the wall, so let's just say you have lots of windows. If you have lots of windows, and you're not using this space so much in the late afternoon into the night, then you don't have to necessarily go to that level, that lighted level, Because you're also supplementing the artificial light with natural light. So you can design like that as well, but, all of that does have an effect, you know, light, color, scale; all those things have an effect on these individuals and these are all some of the tools that are architects use, for example, solid and void is used to evoke emotions. So yes, there is a psychological impact and I would think that if someone is trying to create, then they tend to be a little bit more, open, to the influence of the cycle. These things can have an impact on them, you know, you can't really block somebody away in a room with no windows and expect them to

create something, unless, that creation is going to reflect what you're experiencing. It may come out as, dare I say, a tortured piece of music, someone could develop something like that but it probably won't be happy-go-lucky, "I'm having a great day and birds are singing at the windows", it will be more sombre. I do think that all of these elements do have an impact on individuals and it's something that as architects we should be conscious of. We sometimes are less conscious than we should be, which is also determined many times by the budget. We may want more light in the space but the glass costs more than the block, so based on the budget constraints, we have to put less windows or smaller window openings. All these things have a big impact and on what happens. Usually when something is built on the university campus, we are not really in a hurry to make adjustments. We tend to want it built and that's the end.

Par.7

Drawing Studio

Korry: All in this space?

Par.8

Interviewer: Yeah, all in this space. To the side here, there's this little opening. There is a storage room in the back of this little space here through these blocks, and then, this space here, there's a sink, right by this wall here and everything else here, we just use this space.

I know from the literature that I read, they recommended high ceilings for any kind of creative space because they say more space helps on your level of thinking and your depth of thinking as well. They said lower ceilings would kind of promote more, logical, and scientific sort of work, so they are recommended more science/math and those sorts of things. For more creative things, we have to think outside the box and come up with problems or come up with solutions for

problems and those sorts of things. We kind of have to be a bit more free thinking. They advised large ceilings, possibly big windows, and more space.

Do you agree or disagree? What do you think of the space as is?

Par.9

Korry: Well, again, just looking at it as an image, I like the space. I think that the proportions are good in terms of width and ceiling height. It may be a little long. Immediately when I saw it with the high-level windows, I thought of an art gallery. You know, lots of wall space. There seems to be a very bright spot and it ends so I assume there's a window.

Par.10

Interviewer: Yeah, there are two windows.

Par.11

Korry: Okay. It feels to me like a nice space. Now, Is it a nice space for 60 students with easels? Maybe not. The OSHA standard generally for a classroom is 15. In terms of the requirements for a vaulted ceiling or a high ceiling to allow for expansion of creativity, I just think that not feeling confined in anything you're doing is a positive thing. If I were doing a library, for example, I would want as high a ceiling as I can get. My library would be used for various activities or various disciplines. I don't know for sure, but you're saying that there's a little literature suggesting that for logical thinking, you would want a little bit more confinement. Well, I'll take not on board and remind myself about that as I go forward, but I am a big fan of high ceilings, I don't think anyone likes to feel closed in. You like to feel like you can breathe. So regardless of what I would be doing, whether it's working on a math problem or trying to compose a piece of

music, or anything like that, it would have been nice to get some more windows. Well, windows at a lower level where you can see outward.

It's always good to be able to break the monotony of your focus and allow your eye to see further. So in this room, you're bound by the walls. So if you look left or you look right, you know, let's say you only have 10 feet of visual depth, but then if there's a window then your eyes are able to go out that and pass that 10 feet and go 60 feet, 80 feet and it helps to sort of refresh. In the same way that they will tell you when you're looking at a screen, I think it's like every 20 minutes, you need a minimum of 20 seconds break from the screen to change the depth of focus as well as the impact on your eyes. So I think that's always good, you know, to be able to look up. People have offices and they're always angling for the office with the window.

There's a psychological reason for that! It makes the office feel bigger. Because again, you you're physically not able to escape what you're visually able to escape. Okay, so I definitely think that if it's not going to be used as an art gallery, which would typically have little to no windows because you want the wall space display, then yes. As a teaching space, I would definitely want to be able to have some sort of visual outside. Not to say that it needs to be all glass, but maybe even right now they can do the slivers of windows. So, you know, you can peek through something that, you know, is two feet wide or, you know, a foot and a half wide tall. So you can, you can, you know, from different areas, you can get different angles. So, people at different positions in the room, will have a different appreciation through window or windows.

Par.12

Interviewer: Yeah. Um, what do you think of the colour? I definitely do think that for art purposes, especially if like, I know for some of the walls, some sometimes, well, some classes,

might stick up some work, but it's not as often. As we have more serious studio classes, but we also have theory.

So I understand why they might have kept the white if we have any works for display. But um, some things that I read said that too much of one colour might potentially make something feel enclosed. But for this space, potentially, I feel like, okay, white, because we have to display work like, what do you think? Do you agree with the literature? Do you think because maybe ceiling heights and the floor space that the walls might work?

Par.13

Korry: White is the cheapest colour. And it is also perhaps the most widely accepted colour. If someone walks into a room and it's white, they generally don't get offended by the space. If you walk into a space and the wall colour is purple, you will have some people that absolutely love it, and some people that hate it. If the wall is blue, brown, black. You know, it's white is sort of generally, the general accepted colour. It's also the cheapest paint. So, there are reasons for that.

Now, as a principle you would try to keep smaller spaces, with lighter colours, right? It doesn't. It does not allow for that psychological feeling of, you know, something's coming in at you. It makes the space feel a little lighter and then therefore, a little bigger. But I tend to try and stay away from a stark white. Off-whites or, you know....the colour white has its place, don't get me wrong. I also like a strong contrast. So white, you know, right away. It has white walls, white ceiling, white lights. There's a little bit of raw concrete colour at the top of the columns and beam on the left hand side, lower is a terrazzo with white chips. If you're going for a white room then you're not far off from it here. What would I have changed again? Colours have the different colours of different impacts, you know, and they are recommendations for certain colours in

certain rooms. You know, green is supposed to make you hungry, green in a kitchen I think is acceptable. Reds obviously are very intense, and so it's not something that you can stare at for very long. What's very good, is a, as a pop of colour, something to draw your attention. So if I if I wanted a room where people would not be distracted, then you know I would stay away from sharp colours like red. So each colour is supposed to have this sort of psychological effect on you, where all different, you know, they pulled over many people and that's what they got at the time, you know, and they're not willing to change, especially now where I think we're more exposed globally to everything else that's happening. So I think people know, we're becoming more conscious of colour and more interested in colour, especially here in the Caribbean we've always been, you know, quite vibrant and the residences in the colours chosen have sort of reflected that, you know, you pass houses and buildings and you see blue, orange and purple and pink and green and yellow and all of these colour houses, where you go to other areas and you know, the colours are probably more muted. I went to I went to Las Vegas recently and it's just whites and browns and my sister's interior designer there and I asked her I said is there a covenant that says that you can't paint you know you can't use any other colours but this colour palette? She says not that she knows of, but there are cities in the US that have that. So I think this decision in Las Vegas, she says mostly because of all the dirt and dust, so you tend not to have white, you tend to have more browns, you know, to reduce the need to clean and repaint on a regular basis. So when I came across, you know, a house or a complex, that was white, you know, you're like oh, you're daring. So, colours do have an impact.

With me, I would say because I am doing most of my work with information from a very small sample set. So, I would meet with the lecturers and the heads of department to determine what is required. And I ask them if they have spoken with students and other staff members, sometimes

they say, yes, sometimes they say no. So I'm only working sort of what they're looking for, and there are times when I do have to, you know, bring a proposal to them for a colour and sometimes I have to paint it on the wall and leave it there for a week so they can get accustomed to it. So, it's not that they necessarily don't want colour, but that they may have another colour in mind, you know, and everybody draws from their own experience. People tell you, 'I like the colour green, I have a green wall at my house,' and once they start that then it becomes very personal. It doesn't come from a place of, 'What does the space need?' or 'What do the occupants need? it's what I like. Right, and we should try and stay away from designing for, for the individual, we should be designing for the collective. So once that wall gets painted, that wall is gonna stay that colour for the next three, five years. So when I'm thinking about, you know, students coming into a space for the next, you know, let's say even three years. Okay, what is gonna reaction to this colour? What is going to be the reaction to this, the window placement? What's gonna be the reaction to the flooring?

You know, does all of this meet the function requirements for the space. And also, so when I'm doing a design, I generally want to go and see the existing space. So, we're going to do an art studio, let me go and see your art studio now, what's working for you know, what's not working for you? What do you want to improve on? How do you use the space? Because we could say, okay art studio. There'll be easels or tables and a counter, but how does the individual use the space? What do they bring here? Should we have lockers? They need storage. You know, what is the typical day? You know, is art one module on Friday? Or is art a module that takes up all of Tuesday? Yeah, you know. So how long will they be in the space? You know, is this a two-hour session? Can they stay here as long as they want? Is this, is it their design studio? Would they be coming back to it at different times of the day or at different times of night to work through. And

how do they use it? Where would they put their things down? Where would they then walk, what do they have to do? Say it's paint - where do they wash their brushes? And if they are washing their brushes, do, they wash and take them home or they left here to dry? I want you to walk me through the entire process from when they get in, to when they walk out, so that I can better make allowances for what they need. Sometimes you get that information readily, sometimes you have to pull it out of the client, sometimes you won't, you know. Sometimes you just have to go into it, trying to do what you think is best. You draw reference from other areas, but the internet is a, it's a big help, right?

But generally, we're constrained by space and budget. And so some decisions are made not necessarily because it's the best for the space. But it is the best for the space with the budget or timeframe available.

So just to close off and in terms of colors, you know, sometimes you you're trying to pick something that is neutral enough that, for example, with this white wall, I can paint it, white, all white, and then if a year from now, there is a decision made that they want an accent wall, then that's something you could you could do internally. Whereas it is perhaps harder to for me to go now and paint it different colors and then you come back and, you know, there's a conflict. I know you want to paint more than one wall. You can start with a neutral and you can always layer on top of the neutral. It's harder to go back another way.

Par.14

Interviewer: Yeah. That makes sense.

Par.15

Korry: So. So, you know, it's like I said, white is in the cheapest colour, white is the most widely accepted colour. Anything can go white. So if you wanted a purple, red, blue, orange, yellow, whatever accent you were thinking about, you know, white would accept that, as well as the furniture. Usually when we do a space, it's not just the building but it's also the furnishings that go with it. You know, I'm always thinking about that as well, and if you can get the building, I try to have the building to have a relatively neutral expression.

And then the furniture is where, you know, we try to pull colour. I do like the value of flooring, and the flooring has beige and blue speckles in it. And then when I come back, I'm trying to pull some of those colours from there, or maybe I pulled the beige and I said, well, we're gonna paint that wall the beige, or you know put in the blue. We're gonna paint the accent wall the blue. Then try to tie the space in and then when you come to the furniture now you try to also pull from the existing. So, if you lock yourself in too soon at the beginning with a purple wall, then the furniture now has to kind of complement that wall; whereas paint is something that can be easily changed, the material of the furniture is not so easy to change. So it's better to try and give yourself some freedom in the furniture selection than to try and give yourself freedom in the paint selection. You can paint over the wall 10 times before the furniture is changed, so I really don't worry about paint too much. People like to ask the question "So, what colors are you thinking about right now?" We say "Right now we're not really thinking about colors". It's so wide that you don't really have to worry about paint colors.

Par.16

In-person interview:

Korry: Right, so this is plywood. It's all after the fact, you know they were trying to retrofit this space to accommodate the function. It's been air conditioned, so they've put in plexiglass over all of the blocks, the vent blocks, and ply board over all of the windows so there really is absolutely nothing that you get to see from here.

Par.17

Interviewer: Yeah. The only exposure to the outdoors that we have are those two windows in the back, but again normally speaking, those photos I showed you were taken pre-covid so you would've gotten a better sense of the space and the layout.

Par.18

Korry: Yeah, because when you start putting people the easels start being distributed. I'm on the floor. I mean you don't get this view of the windows. You're looking through people looking through the easels, so you never get this kind of appreciation but even that is better than nothing. Just being able to see beyond the confines.

Par.19

Interviewer: Oh, I should have taken measurements of the glass on the doors in those spaces downstairs.

Par.20

Korry: Its 5.61 and 15.77. That's the main stuff. There's a space outside here

Par.21

Interviewer: Yeah, that's the storage.

Par.22

Korry: So now that the walls have been put up just to create some barriers, again you know it blocks off the green space that we were looking into from ceramics and printing. Its right out there.

Par.23

Interviewer: These walls they were added in after.

Par.24

Korry: Yeah, these are like screens.

Par.25

Interviewer: What you think these are made from?

Par.26

Korry: It seems to be like plyboard.

Par.27

Interviewer: Plyboard, ok.

Par.28

Korry: There are windows back there.

Par.29

Interviewer: Oh, they are?

Par.30

Korry: Yeah, you can see the light, so each one of these bays have a window.

Par.31

Interviewer: Oh, so they put these up so you could hang up work. So, say if the put up hinges on this, so if you have to hang up work and it kind of comes in.

Par.32

Korry: Well how does it hinge? So, the other ones we had a sacrificial wall, but I would also probably say you could have put maybe just moveable walls. So, you know you have a place to store all of them and when you're ready you take them and you put them in place. I mean they need to have some sort of footing but it's like an easel.

Par.33

Interviewer: Yeah, that makes a lot of sense.

Par.34

Korry: Then you can hang up the work on it and when you're finished you take all of them and you have a place where you are going to stack them one in front of the other.

Par.35

Korry: Yeah, I mean look in the art class we are always trying to hang up something, always trying to stand back and look at things, when you have your crits and when you're working, you can easily work on a horizontal surface, but when you have your crits, you want to pin it on a wall and stand back and look at it but all the walls are window so where do we pin it up. So, the solution therefore is to block the windows.

Par.36

Interviewer: Because ideally, we use the AC in here most of the time, if power were to go...

Par.37

Korry: You're in trouble. So, the used plexiglass to block the vent blocks, so we are 100% reliant on artificial cooling, you still have the window at the top but the air needs somewhere to move. So, if everywhere is blocked up and you only have one window there, you know there is no movement of air possible. You'd have to have a very strong stream going on the outside to sort of suck the air out of here.

Par.38

Interviewer: There is something I've always remembered with here, is that those vents I don't think the can close.

Par.39

Korry: Sorry say that again.

Par.40

Interviewer: Those vents there

Par.41

Korry: The louvered windows

Par.42

Interviewer: The louvered windows, they can't close and the AC is on.

Par.43

Korry: So, its short circuit. You know it's like I'm in a return air duct right beside a supply duct. So, it never gets to cool down here.

Par.44

Interviewer: It's not terrible but sometimes it could be a little chilly.

Par.45

Korry: I mean you have three units so it's not ideal but that definitely not giving you 100%

Par.46

Interviewer: I know but that one cools the best if I can remember. Oh, can we get the ceiling height?

Par.47

Korry: Sure, remember I already gave you the width and length. Let's say 14.7m. I like the proportions of this space in terms of the width to the height. I like the proportions of this space, again at different times of day it will feel different, like the pictures you took kind of had it a little darker and then you had these two rectangles of light at the end and it felt very much like a church. You know when you walk into a church and there a light at the end you know and you kind of have an emotional feeling, you're trying to have a little reverence, stay quiet, you know all of these things. I like the proportions of the space it would be even nicer being able to open up and see at minimum.

Par.48

Interviewer: So, I think the lighting in here so far is the best out of all the areas.

Par.49

Korry: You have quite a bit of light in here.

Par.50

Interviewer: Yeah, the lighting is pretty good.

Par.51

Korry: Typically, you would probably miss every other row to avoid too much glare on the surfaces of the canvases, or whatever materials that students are working with.

Par.52

Interviewer: Oh really, wow.

Par.53

Korry: Again because of function, I wouldn't have put in so many light fixtures.

Par.54

Interviewer: The only criticism with this space really is maybe to have a bit more windows or larger windows.

Par.55

Korry: Well, you have them already. What you want is access to them. Each of these bays has a window. You can see the light coming around. You can look there and see the light that's not coming from the louvers above. When you open this here. That's what you have all along here.

Par.56

Interviewer: Oh wow.

Par.57

Korry: And it's just being closed off.

Par.58

Interviewer: Can we measure the space of the window?

Par.59

Korry: Sure, that's 1.8m just about 6 feet by 1.2m. So, it's just about 6 feet wide and 4 feet high.

Par.60

Interviewer: That's both of them?

Par.61

Korry: That's overall.

Par.62

Interviewer: So individually you said its 1.8m by...

Par.63

Korry: No so it goes from column to column. 1.8m by 1.2m

Par.64

Interviewer: Okay.

Par.65

Korry: That would be the same size they would replicate for each bay.

Par.66

Interviewer: Throughout.

Par.67

Korry: So, all of these panels are robbing you of light, robbing you of ventilation, robbing you of the visuals outside. I understand the function, but again is there a way in which we can have, It's not like you need the surface to work at, you're working up here, you're working on the easel, if you're up here working on the easel, the only time you need this is presentation. You present once a month?

Par.68

Interviewer: That's the thing.

Par.69

Korry: So twelve days of the year you're using this, but it's up 365 times for the year.

Par.70

Interviewer: It makes no sense. Can we actually test those windows too or are they the same.

Par.71

Korry: They're are going to be the same height, but it may be close to half of the width. In meters again right, 0.772m. 610mm is 2 feet so it will be 2 feet 6 inches.

Par.72

Interviewer: It will be 1.8

Par.73

Korry: No, 1.8 was the width, 1.2 was the height. So, it's going to be the same 1.2 high by 0.772 wide. You can see the window behind.

Par.74

Interviewer: I never really noticed those.

Par.75

Korry: You can see the light coming through.

Par.76

Interviewer: You can see the light coming through.

Par.77

Korry: If there was anything I would say that seems to be consistent in the spaces is one I think you want to look is size of the space as it relates to the function and the numbers of occupancy. All of them seem apart from ceramics and printing, all of them seem to block and they aren't doing so great either but all of them seem to block visibility. It blocks airflow and it blocks light all of them. If you just think about what you would want in the space because we're arguing for more green space or more access to green space and access is both visual as well as it can be tactile. So, I want to feel the air on my skin, I want to see into the space and also another thing

we get to is light. Let's think about all the things that comes through that window. If you had a window what comes through that window and also what gets to go out the window.

Par.78

Interviewer: Ideally, something else a read to spoke about wall colour and how blue's and green's also help with like relaxation and sparks creativity but just off the bat immediately I think if you have larger window spaces to look onto green space, or up to the sky. Even just the colours may help.

Par.79

Korry: That's very true. It would be a completely different experience, if you stand and you look at this wall, let us say for 20 seconds and then you turn and you look at this wall for 20 seconds.

Par.80

Interviewer: There's a difference.

Par.81

Korry: This wall is the wall you want to continue looking at. This wall gives you more dimension.

Par.82

Interviewer: It does.

Par.83

Korry: There's something beyond here, there is something happening out there, there's life out there. This is just blank, dead, you know your mind doesn't get to go anywhere.

Par.84

Interviewer: For sure.

Par.85

Korry: We always perceive space like that, you know when I said to you in a room if you put a wall with mirrors, it makes the room feel bigger. The room isn't physically bigger but your mind perceives it to be bigger because you look there and you don't see a blank wall, you see more space, even though you see yourself in it, you still perceive it. Like this room, feels twice as big. A similar thing is happening here. Your eye stops here and your mind cannot project beyond that point. Your eye goes through the glass past that tree, across the street, over and that's what your mind is perceiving. You know again when you're working on something here, when you look up, I don't want to be working on something here and look up and it's like sigh, alright you know. My perspective really hasn't changed. I want to be able to look up from here and look out there.

Par.86

Interviewer: Yeah.

Par.87

Korry: Kitchen windows, the sink is usually by the window. So, you're standing and you're washing, you want to be able to get that escape. When you're cooking generally, because you need the backsplash with the heat and the spilling, that's really closed up but not many people sort of stand at a stove stirring, you know you come and you attend to it, you leave it to simmer,

you put it in the oven but when you're at the sink washing dishes, you know 15 minutes you're there, depending on how long you made it pile up. If you're more like me more like half an hour. So, its perception and that's the psychological side of architecture which is very important that we don't sort of tend to pay a lot of attention to we always talk about how much space. So, people always ask a question, how much space? Well yeah, a student needs, and there are standard to this, how much space does a student need. So if we are sitting in a classroom at a desk or at a tabling chair, I can tell you how much square footage a student needs, but if that is all that they are doing then that is fine. But am I asking the student to stand up and come to the front of the class, am I asking them to break out into groups, where they are going to have to turn their chairs. I would need more space for that, how many students are in this room. If you tell me, you need 3 feet by 2 feet, that's 6 square feet. You need 6 feet square per student but if you then tell me Well okay great 6 square feet perfect. I have 1 thousand students. Woah, you can't have 1 thousand and put them in these little slots. They only allow something like thirteen seats. So, from an aisle, movie theatres, performance theatres. So, when you go if something should happen and you're in the middle, you only have about six or seven people either way but if I'm the thirteenth person up against the wall, I'm just like you know, hurry up, get out the fire is coming up. So, all of those things are some of the standards, you still have to look at exactly what you're doing and tailor your presentation, tailor your proposal to that. Yes, we can fit 20 easels in here and people can stand up at an easel and they can work, great. But what is the experience? How comfortable are they. If I have to stand back from my easel, how close am I to something else.

Par.88

Interviewer: It's pretty choked not going to lie.

Par.89

Korry: There is no elbow room and again like I say just being able to escape, how do I escape? Do I have to stop what I'm doing and walk back outside and take my breather out there and then come back in? You kind of want to just create the best environment it's not always possible, there are always constraints. Whether it be budgetary or just location, geographic. Any of these things can play a part but it's just how can I make the best of it and I think that right now like I said if we are using these boards to pin up. Once let us even say twice a month, that's 24 times a year. That's 24 days out of a 365-day, year. So, 25 of 365, 25 days this is what I need.

Par.90

Interviewer: Yeah.

Par.91

Korry: The 340 days this is what I get and the math doesn't work out to me.

Par.92

Interviewer: It really doesn't.

Par.93

Korry: You know, it doesn't. Yes, you can say its inconvenient, where are we going to store them? Its 25 days, you know its 25 times.

Par.94

Interviewer: There are two storage spaces in this room, so they can more than do it.

Par.95

Korry: I don't think it's a big issue, I think it's just that this was easiest so let's just do it. I think you have a strong case to make, to speak about all the spaces. Again, coming back to the same thing I just did, 25 days out of a year, so 25 vs. 340. 340 should way out, in the same way I think you have a strong enough case to speak about the 3 to 4 spaces that we've visited to say what the impact is of the existing and what will come. Right so I think you have a strong enough case to be made for all the spaces in terms of the impact of the external space or the lack thereof right now. You can speak to what you think would be the improvements, again not forming a solution necessarily as the detail solution but just like I said crit happens so many days for the year, so therefore 25 days are taken up with crit and then the 340 days that we don't have crit we are not able to experience the outdoors. It would make more sense to have movable panels that can be placed for those 25 days. They could be stored in a location within the space and we just move it here and we can decide that those panels want to be placed in the centre of the room instead of on the windows. You put and you're back-to-back, on this side for something and then you move around to the other side, it still allows the windows to stay free. You do have options even in the presentation you can decide to put the panels across here, forma 'T' or an 'I'. You have flexibility in it but to have permanent shuttering of the windows just seems like a complete and utter waste of what you have out there.

Par.96

Interviewer: Question, the beams are concrete.

Par.97

Korry: Correct, columns are concrete, timber frame roof. I think that's called solartec or something like that, that's really neither here nor there. In terms of the finishes, the finishes are

fine, they are durable, the floor is terrazzo, this is a very durable floor. This even as terrible as it looks now you just bring in a machine, like a scrape or a cut and then you polish it again and it like brand new.

Par.98

Interviewer: Its good as new. I guess that why they would have chosen terrazzo because people are painting.

Par.99

Korry: Thats right, it's very durable material. The finishes are fine, I think. I would just say that we could do a little bit better. I know that there is always a budgetary constraint, I don't know it just feels like the space wants some love.

Par.100

Interviewer: Yeah.

Par.101

Korry: It just feels like the space wants some love. I don't think any of the spaces require you to do any major adjustments to the structure or even the panels that are into the structure. You just need more windows. You already have all that you need, you just need to uncover them.

Par.102

Interviewer: Okay.

Par.103

Korry: Again, maybe you decide well maybe we can't lose all of that space so we are going to uncover 2 bays or 3 bays. I mean it would still make a massive improvement to the space. I mean the extra natural light wouldn't hurt either, so its beneficial on all accounts. Even If you do say we don't want to have natural ventilation inside here because, we are concerned about the simple thing as the breeze blows in, blowing paper all over. You can still have the artificial ventilation and you still getting the visual outside and still be getting the light outside. So, it's all positive stuff.

Par.104

Interviewer: Okay, great.

Par.105

Green Spaces:

Zoom Interview:

Korry: Well, based on where the courtyard is, are the classrooms are alongside it?

Par.106

Interviewer: Yes, it is.

Par.107

Korry: So you know you can speak about visibility into the courtyard. The courtyard could be a center. Do you have a site plan for the complex?

Par.108

Interviewer: Yes, I do.

Par.109

Korry: Okay. All right. Yeah, once you have that, you know, then you can start, you know, looking at relationships or the courtyard in relation to the classroom, one, to one three, and, you know, what is the impact? We can also look at that courtyard space, if it becomes a really meaningful space to you, how often do students pass the courtyard? So, maybe classroom one is right alongside the courtyard. But rooms, two and three aren't? How often do students get to have an interaction with this courtyard space? If you say, well, yeah, I passed that courtyard four or five times a day. And okay, well, you know, but if it's no, well, I have to kind of walk to that courtyard, and that's what I want to see. And like, it reduces the impact on the individual.

Par.110

Interviewer: Yeah, and let me see if I have any better pictures. Yes, the staircase is right up there. Yeah but if i were to, yeah the staircase is right here going up. Oh this is actually another room I'll show you that afterwards. So for the courtyard area that would be, the quadrangle area outside. So this space here outside the cafeteria, so more so if we were to put windows. I mean because the exhibition hall is around this area as well, if this quadrangle area here is a space that ends up making the cut for the paper. Again im considering just for myself like if i were to improve it. Something that the lecturer mentioned was creating spaces where people could actually meet, well a collaboration itself would of course encourage creativity. Spending time in nature again allows the brain to relax which might encourage creative thoughts for problem solving, any type of abstract ideas, make it kinda come to life in your head when you're thinking. As well as sometimes I remember we had a class where had to actually go outside and actually do some plein-air drawings. So if i were to, ideally for me just based off of the literature i read, if i were to make implementations to facilitate all those things, because again nobody uses this

space, like barely because even for myself, my experience in school, i realized i think i only walked through the space to get from one end to the other once because i think i forgot my wallet in the cafeteria and i had to like run across, otherwise everybody just uses the pathways because thats whats there you dont think, you know, because even sometimes they have the certificate students there, if they make any like big sculptures they might put them in the center. But nobody, from a distance you may look at it but nobody really goes up close to look at it, you know. So ideally like me personally, to facilitate meeting spaces, which will lead to collaboration, to facilitate i guess if we have any drawing sessions and i guess maybe like a place that you can walk through because again too like those corners it's kind of wide, you know when you have to get from place to place.

So ideally i was thinking possibly to maybe like put some pathways maybe some benches, just to facilitate those things. But um do you have any other recommendations?

Par.111

Korry: Well i mean you're correct in the sense when you say that people need space to interact right and that's why when i was speaking about the new building like referred to the corners as streets because when i had done the layout, you know something ten feet wide.

Par.112

Interviewer: Yeah they're wide

Par.113

Korry: They are actually smaller than I wanted.

Par.114

Interviewer: Oh wow.

Par.115

Korry: Again the thought is just like a street you know you come out to your gate and you're lining with your friends on the sidewalk traffic gets to move, you're on one side and another group is on the other side. This is where you pass people, you know instead of stopping in the road you can pull over and you can have a space where you can talk, and it doesn't interrupt the flow of traffic and it's a similar thing with people when they're walking, you know you kinda want to have a sort of central section that is really just movement you know and then along the edges of the rooms there's a space for milling around, there's even outside that lecture room on the ground floor, there's a sort of recess in the wall and eventually some benches there and the idea was to create soft seating, you know like bean bags and these things force students to sit down there and interact and they can still do it, but you know it was wider before and in the one that runs north to south is quite wide and the intention there was also to create an area for art exhibition. It was an exhibition space and they have used it as such before and that was rather successful. But again they came and they nailed stuff to the wall and so you know when they pulled it off all of the screws in the wall paint was stripped off. So a little more thought needs to go into how exactly we're displaying things, right? But the intention is to create these spaces.. Now these corridors are very wide so once you start walking down, if i see you and i stop to talk to you then i'm already blocking it up so you almost feel compelled to keep moving, "yeah Sabrina how you doing?, I'll call you later." You know, you feel pushed by other people. So i

really thought of creating a space like just off the corridor, you know it's a sort of bulge where i can step off the road unto the sidewalk and have a conversation and maybe as you say, not too many pathways because you want to kind of retain the natural element with the grass and trees. Although it seems to be a struggle, grass doesn't generally grow in shade, so that's a bit of a struggle to put grass under the tree. But it could be landscaped with other flora, that doesn't require a lot of sun and yes definitely a space where you can sit, sorry, a location where you can sit within the space. You know it's good to drive by and see it. You know you drive by the savannah, you like seeing the savannah, it looks great, it looks nice, it has trees. But then you also want to go in the savannah. You want a space in there, you don't want to just keep driving by, so you know getting something below the trees or something. So again that speaks to a kind of relaxation, you know a reset and one could say yes it's linked to creativity but you have to be careful. I think if you're making an argument that is not about improvement, because okay, we want benches in the area we want some of this in here. That's an improvement in the space, will the students like it? Sure they will. How are we linking that to the increase in creativity?

Par.116

Interviewer: Yeah, I understand.

Par.117

Korry: All of your research has to be really brought to bare on a more comprehensive view. So not just, okay we're going to do these two little things and then that's gonna be it. We have to look at more holistic and that's why i also ask you if you have a map.

Par.118

Interviewer: Yes, I believe I do

Par.119

Korry: You can then start looking at the routing. You know how do people move through the complex generally and if there's something we can do along this routing leading to these classrooms and then you can zone in on one class. So just as you were talking about the quadrangle, you know it's all linked.

Par.120

Interviewer: Yeah it's all linked together.

Par.121

Korry: Yeah even in school too, you know you get there and you kind of put on your blinders and you shuffle really quickly to your classroom and "sigh" finally i'm home. You know you kind of want this experience, you know it's a journey from when you park, as you walk in and what you're passing and what you're experiencing so that along the way you can continue to build your, if you want to think of it as anticipation of the classroom, it's more of a holistic thought process rather than just this one classroom because if you think about the end product, if they were to then take your thesis and say okay listen she's put forward something good here let's do this. Right, these are the changes that she's recommended and they go and they change one classroom.

Par.122

Interviewer: Yeah, I know that would kinda suck.

Par.123

Korry: You may be looking at a master plan, you know as to what could be done. Now you don't have to go into great detail on every single thing in the master plan. But you want to be able to give enough of a statement that this is a concept. We need to improve meeting spaces for the students along the circulatory parts. You know we need to improve spaces for students to gather and to stay within the green spaces so that they can take full advantage of what is being offered. Those are the general statements, it's not saying exactly what needs to be done, so you can use that as the buildup in the master plan and then you can say we have chosen to focus on classroom 'X' because we believe that students spending majority of their time in classrooms and this classroom is used by the wider majority of students and you know, this classroom I think needs the most help or this classroom is the one that has the least issues and we think its a good candidate to be used as a model and then you can zone in, so you kinda start wide

Par.124

Interviewer: And bring it in

Par.125

Korry: Right and that's how you can build up your work, right. So after all the history then you start going into this, so this is all building up your work.

Par.126

Interviewer: Oh okay, thank you so much for that advice.

Par.127

Korry: The only other thing that I'd think is important, again, bringing it back to thinking about the design for everyone's use...a design should allow access to all, especially those who are disabled. there really should be a ramp, or some sort of accomodations for disabled people.

Something else to consider are the pathways...again you want to think about the function of the space and the people who are using it, and for what purposes? Also, it's not only visual arts students along this courtyard. There are the open campus students as well. Since one of your focus points is on meeting spaces, why not consider their access to the space as well? What if they wanted to come across to the Exhibition Hall to view an exhibit? Or vice versa? You should consider all of those things. So, I would advise including pathways along the circulatory spaces.

Par.128

APPENDIX C

Presentation of Data

1. What is your gender?

17 responses

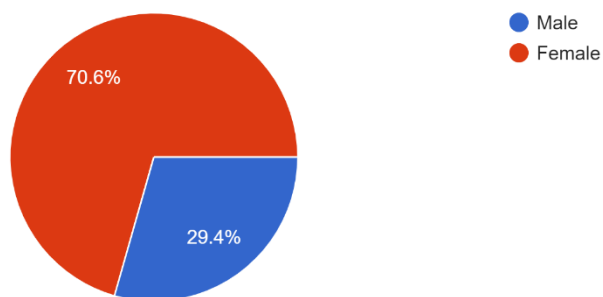


Fig 1. Pie chart displaying respondents' genders

2. In the academic year 2019/2020, which year were you at?

17 responses

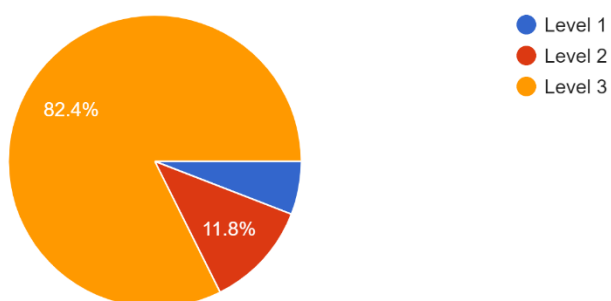


Fig 2. Pie chart displaying the level that students were at during the 2019/2020 academic year

3. Which classroom did you use most frequently?

17 responses

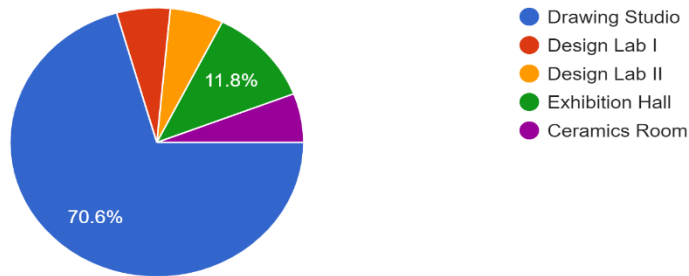


Fig 3. Pie chart displaying the classroom that students used the most

4 i. Were you able to gather information, ask questions, define the problem, and generate ideas for answering the questions or solving the problem?

17 responses

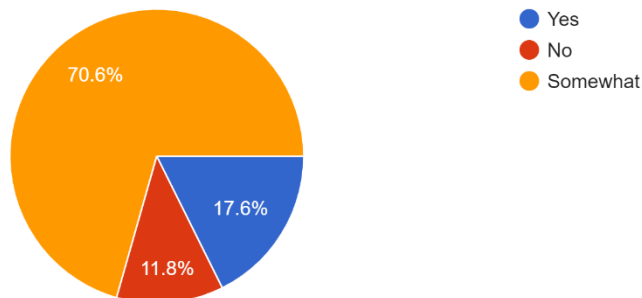


Fig 4. Pie chart displaying students' abilities to engage in the Preparation stage of the creative process

4 i. Can you give a reason for your answer?

I liked the largeness of the space but not the physical look of it.
The drawing room facilitated students of different years and levels. You couldve simply walked in there with this questionnaire and gotten different perspectives on it
Sometimes the space didn't feel conducive for creating
The space itself didnt have any effect on ideas or questioning, being in the art program was the first time I have experienced any kind of studio learning space. So for me I guess it seemed ideal enough to do work.
The classroom had good lighting, and air conditioning but that's about it. There weren't any IT facilities in that room and the wifi connection was poor but we made it work
I was too unconventional
The lecturer would always leave enough space to ask questions, solve problems and gather enough information between the application process and the discussion itself.
It was quite, clean and no distractions

It had one table where everyone was seated around and that was a bit claustrophobic which impaired my thinking.
The place was cramped
Not sure
Somewhat is more like sometimes for me. It depended on which space or corner in the room I got access to before others; due to many things: room space being relatively small and narrow, various types of lighting; few windows for natural lighting and some areas receiving more artificial light than others, and more... depending on the location left and space you had to work in not necessarily by your choice...you wouldn't have felt comfortable. Persons passing through may have been interruptions... and even the lighting (natural) coming through the windows wouldn't have always been the most reliable because it may not have lasted long because of its position. When and why it was helpful for me to gather thoughts and my creative process were quietness and collaboration that would have happened when just a few students are doing work in the room together including myself
I had to improvise sometimes because of the lack of equipment/materials. The importance of collaboration and feedback from peers can't be understated, it probably helped me the most. The space made that possible, you could get and give realtime feedback
Although in the space, I was provided with basic resources needed for research.
Due to the nature of my work the big open space allowed for my to work well, I do wish we were provided with big tables however because much of my work had to be done on the floor
The space does nothing for the imagination.
I was never comfortable working in the space as it personally didn't feel like a safe space to create and also there I couldn't stay back to work on pieces due to security issues.

Fig 5. Table displaying students' responses to 4 i

4 ii. Were you able to focus all of your energy, effort, and resources to answering the questions or solving the problem?

17 responses

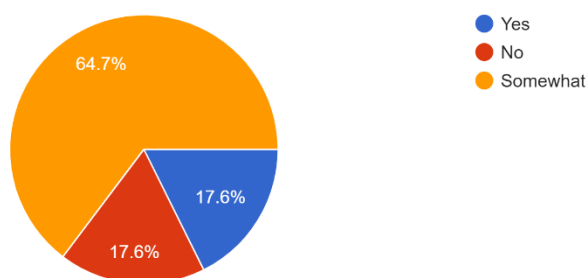


Fig 6. Pie chart displaying students' abilities to engage in the Concentration stage of the creative process

4 ii. Can you give a reason for your answer?

Just was not conducive to learning or problem solving
We had specific times to be in the drawing room to focus. When my time ran out, id have moved down to the wet space. Spent really late hours there too.
Sometimes I would need to leave the space to focus better because of the nature of the work I am doing
I focused more at home, especially when it comes to problem solving. The studio space in dcfa doesn't really do much to help you energy or creative process.
Because it was one of the few rooms at the campus, it was often crowded so one could only focus so much on work. Sometimes I would bounce off of ideas with friends but otherwise a lot of my problem solving took place at home
The inner machinations of my mind are an enigma
The comfortable environment facilitated and enhanced my performance.
Although the room had no distractions there were no points of inspiration to focus on either, as I would get outdoors.
The room echoes and doesn't have good ventilation so it required a loud fan which was distracting at times.
It became repetitive
Because of friends
Most times the circumstances were not my ideal circumstances for my creative process... Ideal being Spacious, quiet, full of natural light and one place to store all my materials...having it nearby so I can choose and use whenever necessary
Personally, it would take a while to set up my work area because I would have to look for functioning equipment and sometimes it wasn't the most comfortable. I would have trouble focusing because of the position I was in or from too many people being in too small of a work area
Time limit in the space was limited
I really wanted to do well and I was very interested in my chosen topic so I made do with what was provided and tried to work around that
Refer to 4i
There were minor distractions based on physical settings and view of the outdoors.

Fig 7. Table displaying students' responses to 4 ii

4 iii. Were you able to relax, and allow your ideas to surface?

17 responses

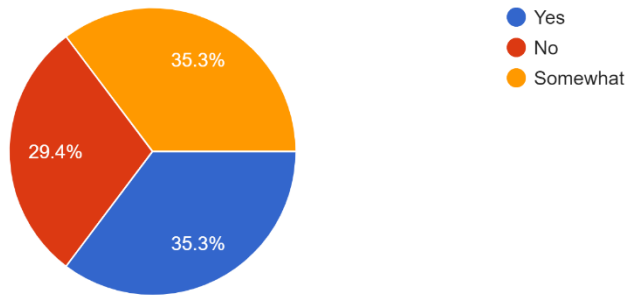


Fig 8. Pie chart displaying students' abilities to engage in the Incubation stage of the creative process

4 iii. Can you give a reason for your answer?

Was not a relaxing space since it was mostly used for class
See previous answer.
Sometimes I could and sometimes I couldn't, no specific reason
While in year 3 I would choose a more closed up part of the drawing studio to be by myself and focus in what I was working on. That space was the small storage room in the drawing studio, which wasn't really relaxing but because the room was basically closed off from the main space I a bit more relaxed.
Compared to the rest of rooms there, I would say it was easiest to relax, due to the view of outdoors and also the air conditioning
Relaxing is for the weak
Yes as enough time was given to do so.
Because the space was quite
Noise was also an issue here.
Deadlines
I was a bit uncomfortable. Unable to focus on getting work done
Not enough time and peace
When it came to ideation, I had little/no issue with external factors.
Headspace would vary according to the project given
I really love art and was glad to be able to do a degree in it so that overshadowed the obstacles
Refer to 4i
I often need personal space to create freely and the drawing room didn't have that as our year group was quite large and sometimes we would have to move into different spaces.

Fig 9. Table displaying students' responses to 4 iii

4 iv. Were you able to gain insight, where you solve the problem or answer the questions after a period of relaxation?

17 responses

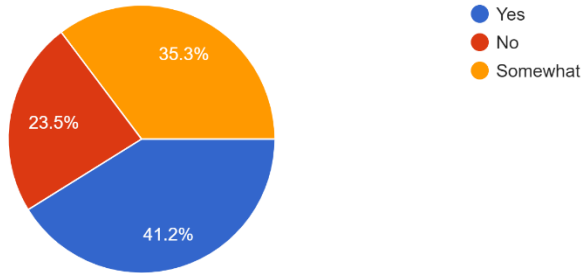


Fig 10. Pie chart displaying students' abilities to engage in the Illumination stage of the creative process

4 iv. Can you give a reason for your answer?

Did not have any eureka moments in that space,
Sometimes the benefit can be a bit distracting. Students of different levels may have walked in during your session etc.
Relaxation helps to clear the mind and introduce new thoughts
As in a previous answer, majority of my problem solving happened at home for me when there was no distractions. So I would improve on whatever I had to improve on before I go to class the next time.
Sometimes I was able to but again, the environment was often distracting with other people being there. I hardly ever felt to do actual work on campus because it more felt like a "lime". Maybe part of the questions were answered there and partially on my own time
My actions are beyond your feeble mortal understanding
Yes as enough time for breaks was given when necessary.
N/a
When I was out of that space I felt more clear minded
I always saw everything as a grade
Helped me feel energized and allow my ideas to flow
I got some starting ideas but usually not much after that with all the noisy distractions and me not having the best working space where I can set up and work continuously. I normally get ideas while working on the piece itself
Rest refreshes my mind. Art can be very mentally taxing
Breaks are often necessary so that the intense energy in the working space doesn't affect your mental health.
My lectures did well in terms of guiding me and invoking thought
4i
At times, but mostly when I moved into a different space on the compound.

Fig 11. Table displaying students' responses to 4 iv

4 v. Were you able to effectively create artwork in the classroom?

17 responses

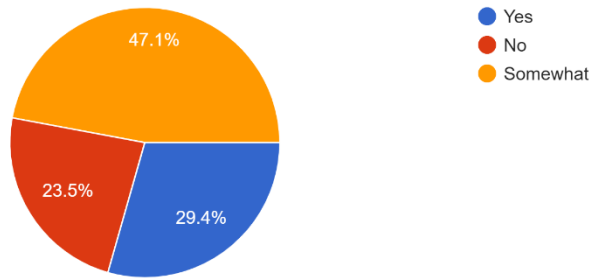


Fig 12. Pie chart displaying students' abilities to engage in the Verification stage of the creative process

4 v. Can you give a reason for your answer?

This was only because I was well prepared and not necessarily because of the space.
I can work in different environments quite easily
For the most part, I was able to create artworks in the classroom especially if the medium was drawing or painting. Anything else such as sculpture or other conceptual pieces I would get done at home before I go to class.
Too distracting, not enough easels or too much effort to find an easel that balanced well, poor wifi connection, seemed more like a place to hang out
Art is an explosion, not classroom appropriate
The lecturer ensured that as we were given smaller objectives that would aid in a bigger accomplishment.
Because i was inspired at times and had to do the work in class at some point
I created work there but not substantial. The work wasn't of my best quality
Depends on the area, drawing etc
Because it was a bit dark and tight in terms of space which usually negatively affects my thought process
Sometimes the space is suitable for me as mentioned previously but most times no...
All things considered, it's on me as an artist to create regardless of the environment
Inability to completely relax into my own creative process.
Would've preferred if we were allowed to stay back after class hours and if we had better table space to work on
Too small, crowded, uninspiring
Not enough space

Fig 13. Table displaying students' responses to 4 v

4 B. The following question is based on your chosen classroom for #3. How do the following elements facilitate your creativity in visual arts? Rate them in order of priority, by selecting a number from 1-5 in the table below.

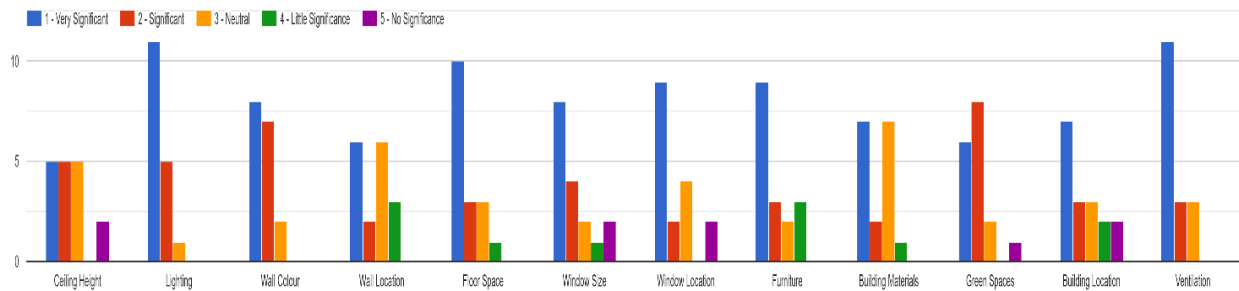


Fig 14. Bar chart displaying the importance of architectural elements in facilitating students' creativity

5. Referring to your chosen classroom in #3, how can the space be enhanced to facilitate the visual arts students' creativity?

More colour and light in the space. Better AC.
Lights that can be directed because we use the drawing space as an exhibition space as well. Props for models to be on. A way to see outside a bit more with a way of closing that window view off when needed.
More floor space as well as more available equipment
Maybe allowing students to help in redesigning what they think the creative space should look and feel like. Something that makes you inspired to come to class and fuel creativity. Could be something like geometric and strategically placed ceiling lights that would still function as good lighting for a studio.
Junk could be removed, floors could be redone, space could be expanded, distracting beams on ceiling replaced for more modern/sleek ones, more lighting that's meant for art on display, windows With blinds that could block outdoor lighting completely in order to customize the lighting, larger tables rather than individual desks, at least 2 computers so one doesn't have to go to another location to research something
Give them money
If every inch of the compound is utilized efficiently, I think more students will feel more motivated to create more
Bigger windows to show more nature or ceiling windows to expose the sky
The room could be less sterile. Have more floor and desk space. Have better ventilation and noise reduction.
Bigger space, functional desks & chairs.
Have comfy furniture
Perhaps have better lighting (have more or one very large window from ceiling down to the ground) and proper storage for tools of students like lockers maybe. I don't see the possibility of major changes being done, though they may be helpful, like making the space itself larger.
Open up the space by removing clutter and better organizing furniture. Functioning and more comfortable equipment and furniture

Brighter lighting
More large table space, better lighting
Throw away the entire building and start back from scratch
More space is required for larger classes.

Fig 15. Table displaying students' responses to question 5

6. Do you come up with ideas better alone, or in a group?

17 responses

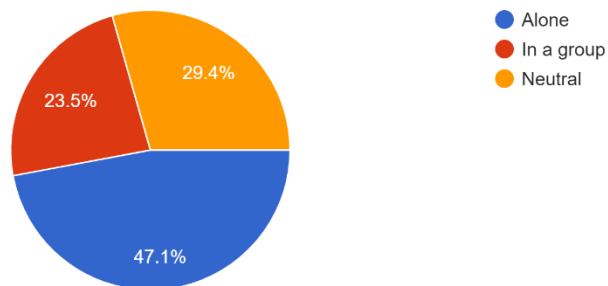


Fig 16. Pie chart displaying students' answers to question 6

7 A. Where did you eat lunch and spend free time with friends?

17 responses

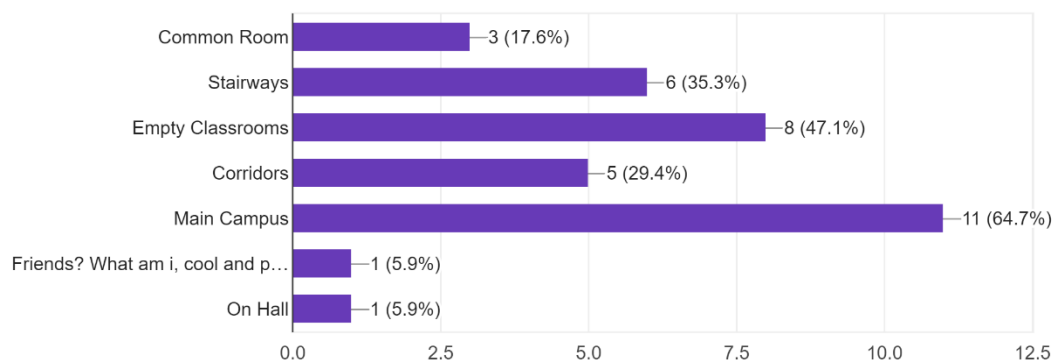


Fig 17. Bar chart displaying the areas that students ate lunch and spent free time

7 B. Why did you choose to eat and spend free time at the chosen spot?

More food options and shelter
It was where everyone else hung out and at each location, you can see the flow of foot traffic, bump into new people. I personally use to go Urban Groundz.
Convenient and also Food options
Because that's were most of my friends would eat as well.
I chose many because it was wherever we had available. There was no area in particular that was designated for a large group to eat (cafeteria didn't count because that was for open campus)
I was alone
Greater access to restaurants and other facilities.
Nature, open space
It had a microwave and air conditioning.
Availability
Because it was convenient and mostly frequented
Any time I spent at the DCFA site that could be considered 'free' would have been most times because I'm waiting for another class coming after. Because as a Visual Art student and the spaces (rooms and classes etc) that are designated for visual art specific classes were not always available and are not the most convenient or at least were not designed for loitering or just liming due to not much benches and seating areas outside, I and other students would have had to resort to sitting on stairways and empty classrooms if we were allowed; the only thing that kept me doing it comfortable is my purpose for being there (the next class) and too, that I may see other students there together doing the same. Apart from that, the majority of my free time is spent on main campus for more and different reasons too. I would have more friends there as well, there are more opportunities to purchase items and places to sit, relax and hang out with friends. But for a similarly, I'm mostly only there spending free time for a purpose which would have been waiting for a class or club meeting
Comfort and convenience
Comfort
Felt like a home base, was comfortable
Because it's nicer, more convenient
There was no place for us at DCFA to this except in the chosen areas.

Fig 18. Table displaying students' responses to question 7B

8. Would you like a designated space in the visual arts unit for eating lunch and hanging out with friends?

17 responses

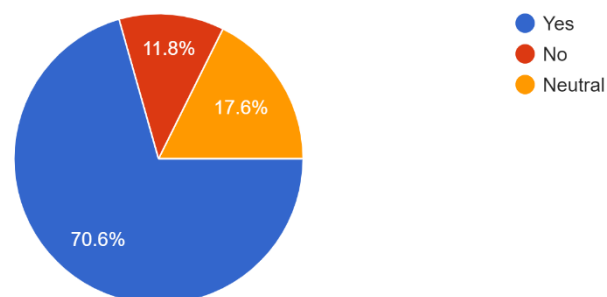


Fig 19. Pie chart displaying students' answers to question 8

9. How often did you use DCFA's green spaces?

17 responses

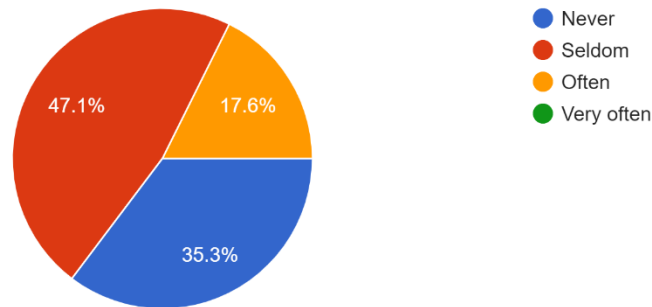


Fig 20. Pie chart displaying students' answers to question 9

10. Referring to #9, can you give a reason for your choice?

There just wasn't much reason to use the space
I do very big pieces and i use there to mount them.
Never had much reason to
I prefer sitting in class to do work or chat with friends.
The grass was often overgrown and the afternoon sun was intense. Also the ground didn't seem treated for ants
I didn't have a need to use it. I simply saw it as the ground and a shorter way of walking to classes.
It was a space to relax and just think and be, and observe nature
No seating area
Never had a reason too, it was usually occupied by open campus
Because it I'd rather go main campus and there are not many places to sit
I would only be in those areas when perhaps I'm sitting by a stairway or pavement spending the few free times I have and use on site but I never saw much other opportunities and reasons for me to use the space. Some rare occasions I would have moved around the site to get inspiration, maybe if I have an assignment to draw the landscape, then I'd be outside doing my plein air but that's about it. Trees can be good shade but there aren't even much benches under them to relax
No particular reason
Sat wherever the group sat. A/c was also necessary.
To park
It's ugly and not nice
There weren't enough places to sit and enjoy the spaces.

Fig 21. Table displaying students' responses to question 10

11. What activities did you use the space for?

17 responses

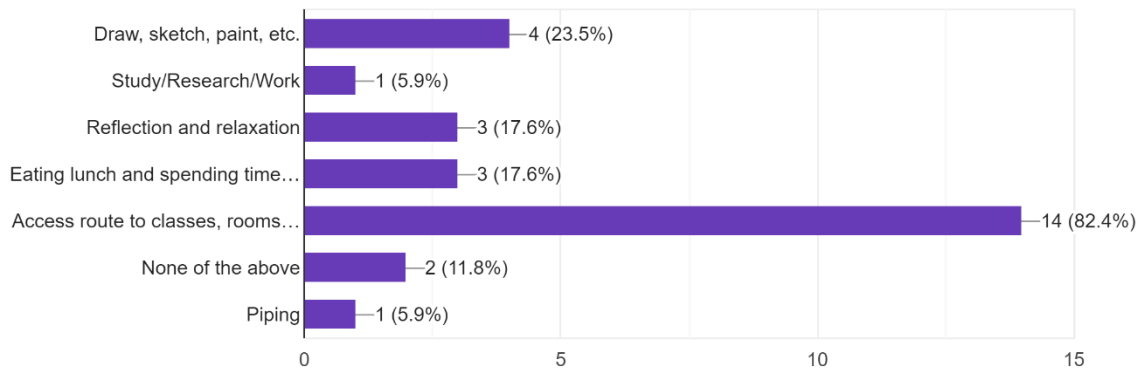


Fig 22. Bar chart displaying students' reasons for using DCFA's green spaces

12. How can the space be enhanced to facilitate the visual arts students' creativity?

More seating and shelter for between classes and more colour and visual art like murals.
I think its great the way it is.
More creative inspiration around the facility
Maybe more seating areas out on the field. Or maybe having something along the lines of the whisper wall on main campus near SAT.
Nicer foliage, treatment for ants and mosquitoes, more shaded parts or more seating
I'm not sure. I think if more art is displayed on the walls it'll help create a more friendly and encouraging environment to create.
Add benches, have open save classes once in a while out there
Have a shaded area for sitting and creating
Add seating areas
Add stuff like more benches/furniture for students to be comfortable, have more visually appealing and stimulating colours
More benches around the trees. Plant more and different trees too. I love nature.
Also have more inviting locations to sit and gather and think designed in a way that might even invite persons from main campus to come across
Not sure
More seating facilitation
Furniture and gazebo
A great deal of landscaping work
More sitting spaces

Fig 23. Table displaying students' responses to question 12

Level	Class	Number of Students enrolled	Classroom
II	Fine Art I	27	Exhibition Hall
II	Fine Art Lab I	24	Exhibition Hall
II	Design I	12	IT Lab
II	Design Lab I	10	Design Lab I
III	Fine Art 3 (yearlong)	27	Drawing Studio
III	Fine Art Lab 3 (yearlong)	26	Drawing Studio
III	Design 3 (yearlong)	8	IT Lab
III	Design Art Lab 3 (yearlong)	8	Design Lab I

Fig 24. Table depicting statistical data for students enrolled in Semester I

Level	Class	Number of Students enrolled	Classroom
II	Fine Art 2	24	Drawing Studio
II	Fine Art Lab 2	23	Drawing Studio
II	Design 2	11	IT Lab
II	Design Lab 2	10	Design Lab I
III	Fine Art 3	27	Drawing Studio
III	Fine Art Lab 3	26	Drawing Studio
III	Design 3	8	IT Lab
III	Design Art Lab 3	8	Design Lab I

Fig 25. Table depicting statistical data for students enrolled in Semester II

APPENDIX D

Images



Fig 26. Sabrina Acham. May 5th, 2022. Photo of Drawing Studio.



Fig 27. Sabrina Acham. May 5th, 2022. Photo of West wall and storage room in the Drawing Studio



Fig 28. Drawing of Proposed Drawing Studio with Design Interventions



Fig 29. Sabrina Acham. May 5th, 2022. Photo of Courtyard #1.



Fig 30. Sabrina Acham. May 5th, 2022. Proposed space for pathway



Fig 31. Sabrina Acham. May 5th, 2022. Photo of Courtyard #2



Fig 32. Sabrina Acham. May 5th, 2022. Photo of front entrance #1.



Fig 33. Sabrina Acham. May 5th, 2022. Photo of front entrance #2.

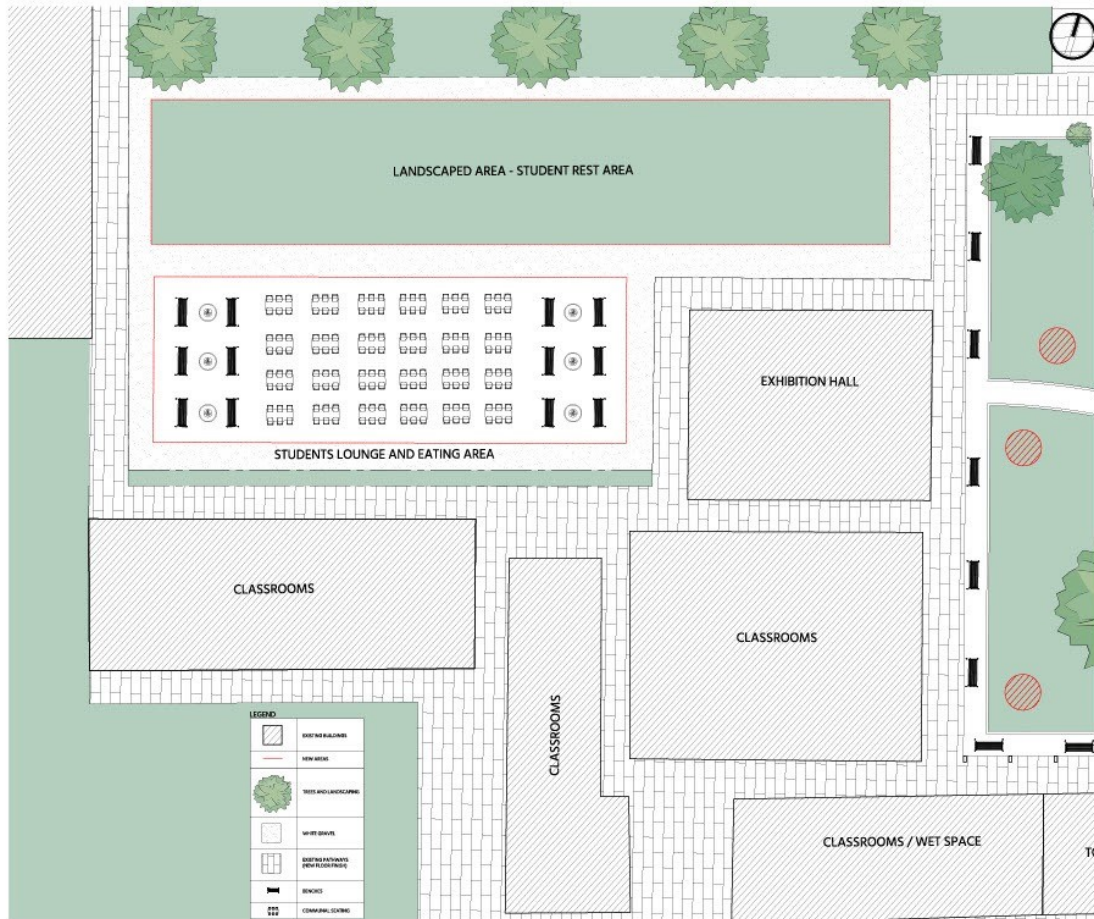


Fig 34. Blown Up Image of Site Plan of DCFA'S Front Entrance with Design Interventions

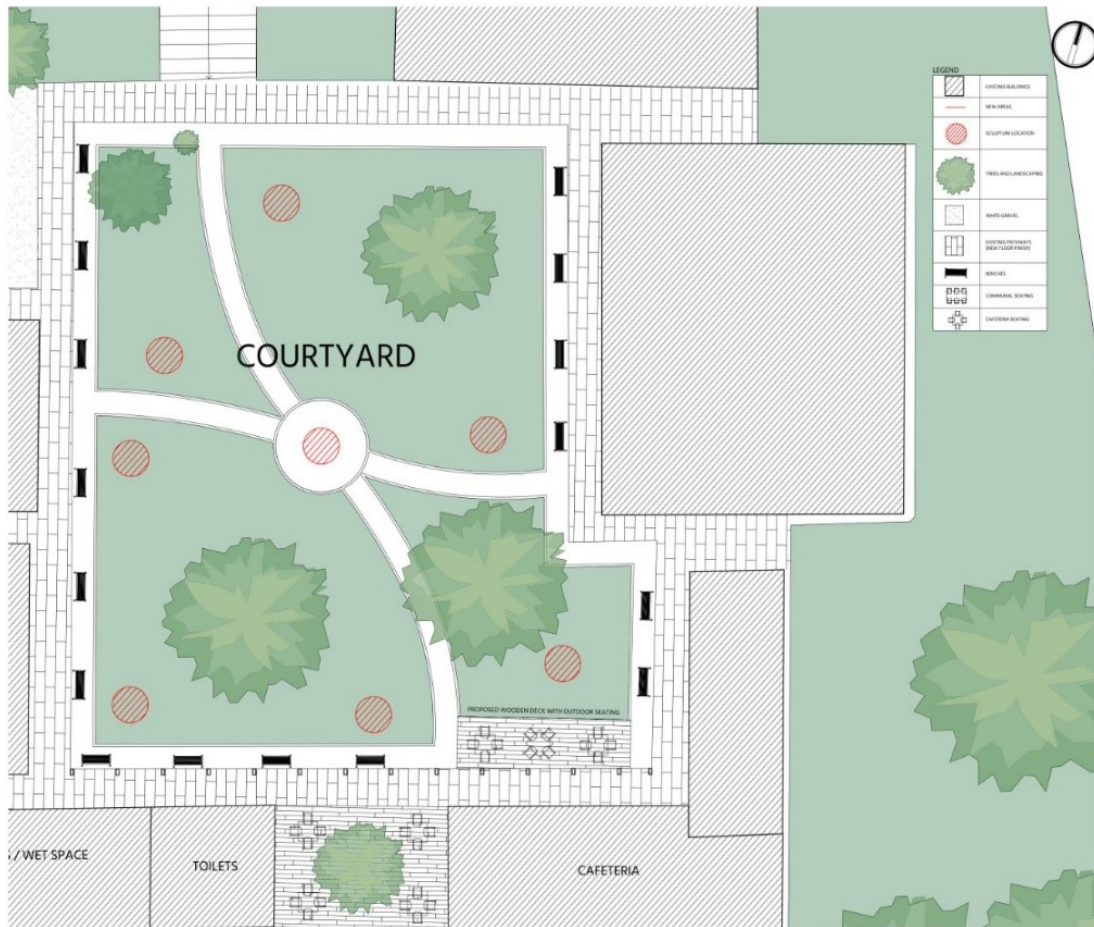


Fig 35. Blown up image of Site Plan for Courtyard with Design Interventions

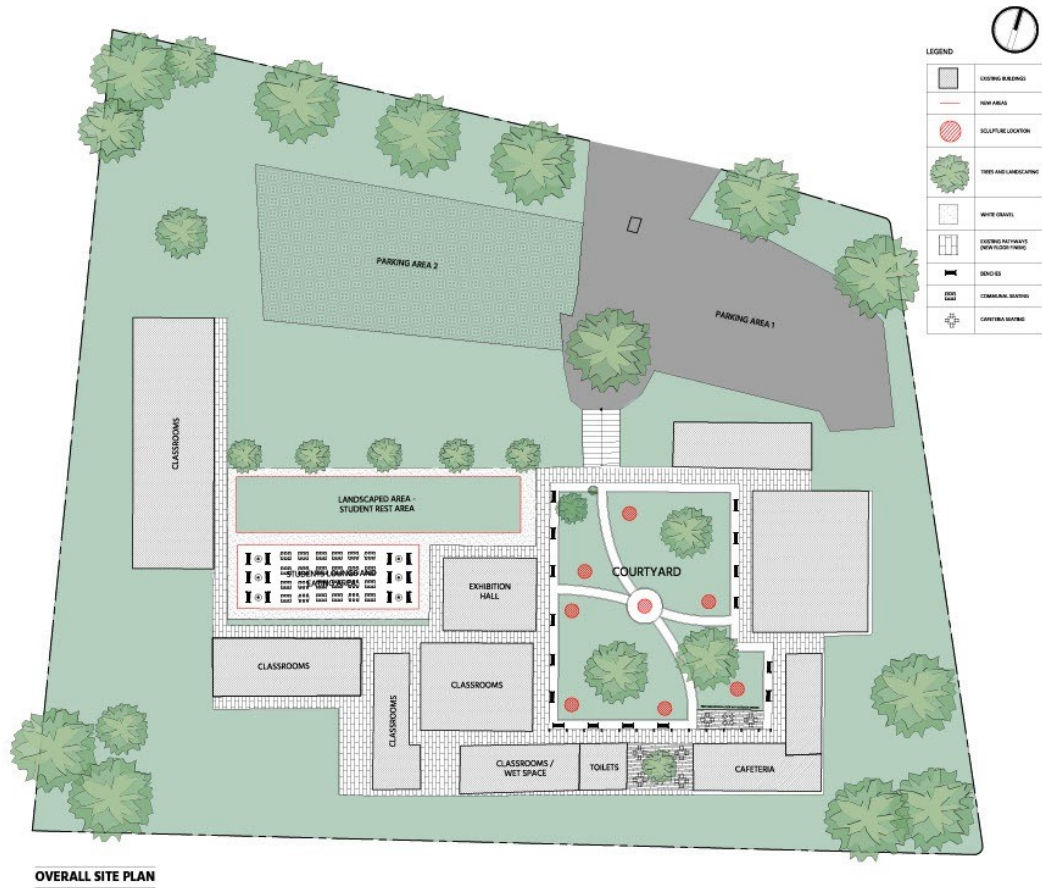


Fig 36. Image of Overall Site Plan for Courtyard with Design Interventions



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