

THIRD PLACE - SKILL DEVELOPMENT CENTRE

Submitted in partial fulfillment of the requirements for the award of
Bachelor of Architecture

by

G.Mahaalakshmi (3621044)



DEPARTMENT OF ARCHITECTURE

SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

(DEEMED TO BE UNIVERSITY)

Accredited with Grade "A" by NAAC

JEPPIAAR NAGAR, RAJIV GANDHI SALAI, CHENNAI - 600 119

APRIL - 2021

DECLARATION

I G.Mahaalakshmi hereby
declare that the Project Report entitled Third place – Skill development centre done by
me under the guidance of Dr. /Prof./ Mr./Ms. _____(Internal) and _____(External)
at _____(Company
name
and address) is submitted in partial fulfillment of the requirements for the award of Bachelor of
Engineering / Technology degree in _____.

DATE:

PLACE:

SIGNATURE OF THE CANDIDATE



SATHYABAMA

INSTITUTE OF SCIENCE AND TECHNOLOGY

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Jeppiaar Nagar, Rajiv Gandhi Salai, Chennai – 600 119

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BONAFIDE CERTIFICATE

This is to certify that this Project Report is the bonafide work of _____
_____ (Names of each student followed by register Number
in brackets who have done the Project work as a team **Eg. N.Murali (2945515), M.Kannan
(2945525)** who carried out the project entitled _____
_____ " under my / our supervision from _____ to
_____.

Internal Guide

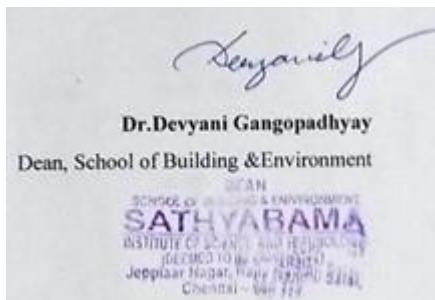
(Name in Capital letters

(Name in Capital letters with Signature)
signature)

External Guide (if Applicable)

with

Head of the Department (Name in Capital letters with Seal & Signature)



Submitted for Viva voce Examination held on _____

Internal Examiner
(Name in Capital letters
with Signature)

External Examiner
(Name in Capital letters
with signature)

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I am pleased to acknowledge my sincere thanks to Board of Management of SATHYABAMA for their kind encouragement in doing this project and for completing it successfully. I am grateful to them.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

India is one of the fastest growing developing nations. However the country still faces many challenges. Unemployment is a major concern that needs to be addressed as it sows the seed of various other unwanted social problems among the youth. But with the right skills, education and environment we believe that these challenges can be overcome.

Of late, these distressed youths are attracted towards antisocial activities for their livelihood. Also, women education snag - an elaborate set of issues and discussions encompassing education (primary, secondary education, tertiary education, and health education in particular) for girls and women. It includes areas of gender equity and access to education, and assist them their effort to accomplish self-sufficiency, enhance the quality of their lives, and thereby increasing their contribution to the advancement of our country.

As Gillin and Gillin define, "Unemployment is a condition in which a person is able and willing to work normally, dependent upon his earning to provide the necessities of life for himself and family is unable to obtain gainful employment."

This thesis is an attempt to understand how 'Social Architecture', as it has come to be known, can affect social change. It attempts to understand how, with right program and the right environment architecture may act as a social agency to help uplift under-served communities. All these clearly indicate the need for promoting self-employment entrepreneurial ventures among the community

1.2 Outline of thesis

1.2.1 Overview

Unemployment is the major challenge; India has been facing in the process of its development. Lakhs of youth are entering the job market every year after completing their school/college education. Millions of unemployed youth who could not access higher/professional education but oriented towards white-collar jobs are driven to despair for not finding a job. Of late, these distressed youths are attracted towards antisocial activities for their livelihood. Also, women education is a catch- all term of a complex set of issues and debates surrounding education (primary education, secondary education, tertiary education, and health education in particular) for girls and women. It includes areas of gender equality and access to education, and helps them in their effort to attain self-reliance, improve the quality of their lives, and thereby enhance their contribution to the development of our country.

1.2.2 Need

The community deals with the following socio-economic problems

- Youth delinquency/crime
- High unemployment rates-Often unsanitary living conditions □
Lack of education

A step towards addressing these problems is providing the right platform and injecting the right program.

1.2.3 Scope

My scope of the project will be basically designing of a Centre which comprises of five Different types of activity zones.

They are:

1. Institutional
2. Training
3. Recreational
4. Other amenities This Centre promotes:

- Socio economic growth
- Development in the field of terrace farming development, Infrastructural development, cottage and small-scale industries and territory sector like processing and marketing units.
- Rural employment.
- To overcome gender based inequalities/discrimination.
- To develop confidence in unemployed youth.
- To improve rural entrepreneurship.
- To strengthen the efficacy of poverty alleviation and self-employment strategies of the Government and the Bank.
- To train village level workers to work in rural development.
- To take up research and flourish in rural entrepreneurship and rural development.

1.2.4 Aim

The Skill Development Centre in Kannagi Nagar aims to assume the role of a social agency. By means of an architectural intervention. It aims to bring social transformation to the community. The project scope and profile was developed after researching the problems faced by the community

The intent of the project is as follows-

- To create an environment that nurtures community engagement and hence enhances community bonds.
- To create spaces and experiences that stimulates action and creativity and consequently leads to self-growth at a personal level.
- To connect and share ideas with mixed group
- To act as a common hub for the neighborhood. Through which the people feel a sense of ownership.

-To hit a balance between the aspirations of the community and the setting that they are aware of, to develop a fresh environment that fits into their needs and demands.

1.2.5 Objectives

- To train manpower and faculty to undertake such work including data based development and research whenever necessary.
- To prepare plans to initiate process of its implementation, to help people to undertake, work in that respective field of interest such as agriculture. Cottage industries, Animal husbandry and thus spread the concept of planned development.
- To communicate relevant ideas to large audience through different media and equip them to handle those ideas effectively.
- Recognize, orient, motivate, train and help the rural youth to take up self-employment endeavors as an alternative career.
- To train unemployed youth to take up wage work as a source of livelihood.
- To take up experimentation and improvement activities in Entrepreneurship and Rural Development etc.

CHAPTER 2: LITERATURE STUDY

2.1 Areas of research

With the objective and scope of the project the areas of additional research for the thesis are as follows:

- Public institutions and architectural Interventions as catalyst that brings changes in economic self-sufficiency of communities.
- Formation of public gathering spaces/ inclusive social spaces/multipurpose mixed use centers which incorporate various facilities (Institutional, cultural commercial) and explore how they might support each other (economically and programmatically) and as a community.

2.1.1 Architecture as catalyst

The Idea of architecture as catalyst for social or economic transformation is not new in Architecture, like most other things, a reflection of our society. However, it also has the power to help mold or change its context, both local and global. Architects dedicated to the design value of social shift often see their work as a tool for

renovating the built environment and those who live in it. The theories urban catalysis contemplates the Impact of architecture and planning towards urban rejuvenation so socio-economic advancement.

An urban catalyst has big picture than to solve a functional problem, or create an Investment, or provide an amenity. A catalyst is an urban component that is molded by the city (its "laboratory setting) and then, In turn, shapes its context. Its purpose is the incremental, continuous regeneration of the urban fabric (Attoe & Logan 1992). The significant point is that the catalyst is not a one end product but an element that impels and cues subsequent improvement.

Catalysis involves the introduction of one ingredient to modify others. In the process, the catalyst sometimes remains Unchanged and occasionally is itself modified.

Catalysis may be depicted as follows (Attoe & Logan, 1992):

1. The introduction of a new element causes a reaction that modifies existing elements in an area. Although most often thought of as economic, catalysts can also be social, legal, political, or architectural.
2. Prevailing urban elements of value are enhanced or renovated in positive ways. The new need not obliterate or degrade the old but can restore it.
3. The catalytic outcome is contained; it does not damage its context. To express a force is not enough. Its consequence must be channeled
4. To confirm a positive, needed, predictable catalytic outcome, the Ingredients must be contemplated, under-stood, and approved. A detailed awareness is needed to produce a promising positive limited outcome.

2.1.2 Spaces

Social, public spaces which are truly inclusive are integral to the development of community. By giving secure open areas for interaction, such centers promote stronger social ties and also financial co-dependence (Relph. 1976). These spaces should be supported by programmatic functions such as restaurants, retails, and others helping in both socio and socio economic growth of the community, Which may act as draws to the site and generate activity (Wikipedia, 2013?)

2.1.2.1 The third place

The third place (also known as Third Space) is a term used in the concept of community building to refer to social surroundings separate from the two usual social environments of home and the workplace. In his Influential book *The Great Good place*, Ray Oldenburg (Oldenburg, 1999) argues that third places are important for civil society, democracy, civic engagement and establishing feelings of a sense of Place.

Oldenburg calls one's 'first place' the home and those that one lives with. The 'second place' is the workplace.

— Where people may actually spend most of their time.

Third places, then, are "anchors" of community life and facilitate and foster broader, more creative interaction. All societies already have informal meeting places; what is new in modern times is the intentionality of seeking them out as vital to current societal needs.

Characters of a third place

- Free or inexpensive.
- Food and drink, while not essential, are Important.
- Highly accessible: proximate for many (walking distance).
- Involve regulars — those who habitually congregate there.
- Welcoming and comfortable.

2.1.3 Integrating mixed use development

Mixed-use developments integrate residential, commercial, cultural, institutional, or Industrial uses. The programs are physically and functionally integrated via pedestrian connections (Wikipedia, 2013). Such developments generate stronger and more active neighborhoods, creating closer environments (Fte1ph, 1976) (Jaf-feeler, 2012). Nevertheless, another benefit is purely economic Evaluating the market values and revenue-generation capabilities of varying purposes allots the creator to combine them such that they cross-subsidize and support each other, leading to a more sustainable and long-term development.

2.2 Case studies

Considering the diverse nature of the project scope, there can be no one particular case study which encompasses the entire program. The case studies have been chosen to illustrate their competence while dealing with a particular aspect of the area program.



1. Inclusive social space



2. Community development



3. Economic development



4. Integrated mixed-use community development



5. Vocational education & training

2.2.1. Women Centre

Architect - Hollmen- Reuter-Sandman Architects

Site - Rufisque, Senegal

Year - 2001

Function - women's Centre

Total floor area - 700 m²

The women's Centre offers facilities for activities of various organizations formed by local women. The Idea and the spatial programme of the Centre were born in cooperation with local women's groups (Hollmen- Reuter and Sandman, 2005) (Hollmen- Reuter- Sand-man Architects, 2002).

The social goals of the project were to help:

- Women's gain 'social security by providing a place to create and sell handicrafts for supplemental income
- Acclimate women moving from rural areas to city

Selection criteria



Area programme



Training Centre



RWA + village community service



Hall / Auditorium



Catalyse development

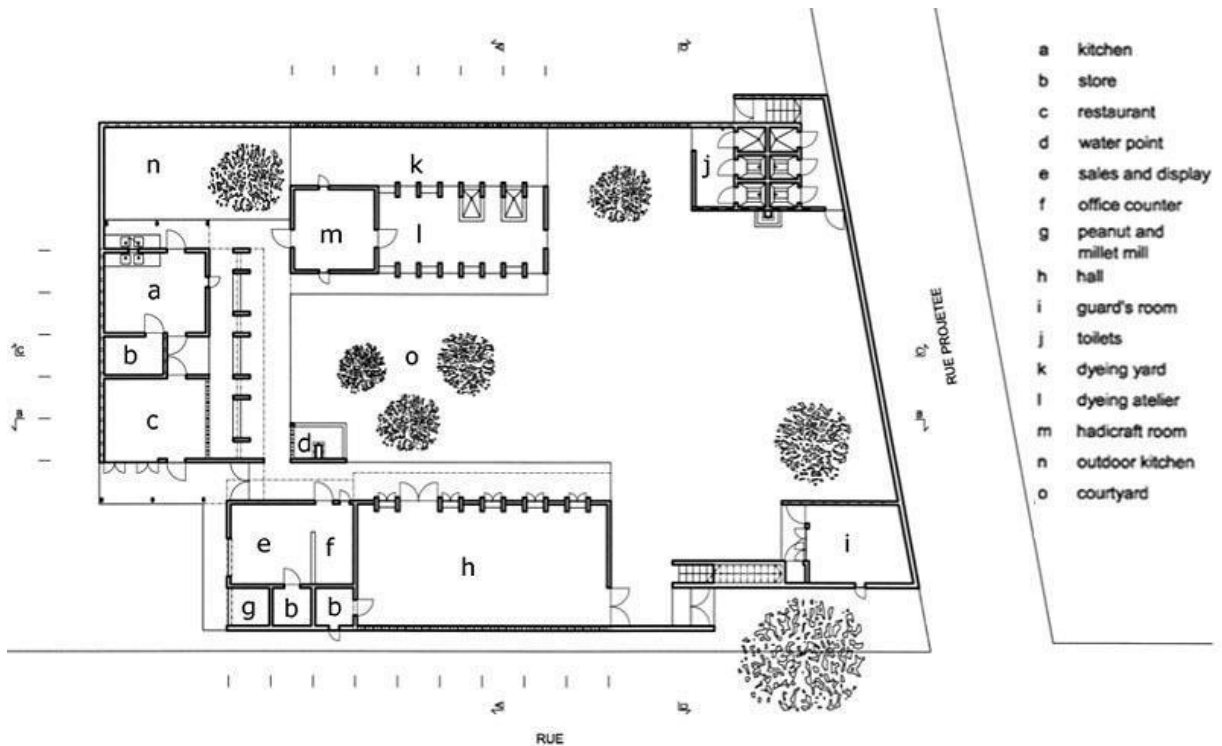


Figure 2.2.1. Error! Use the Home tab to apply 0 to the text that you want to appear here..1 Ground floor plan

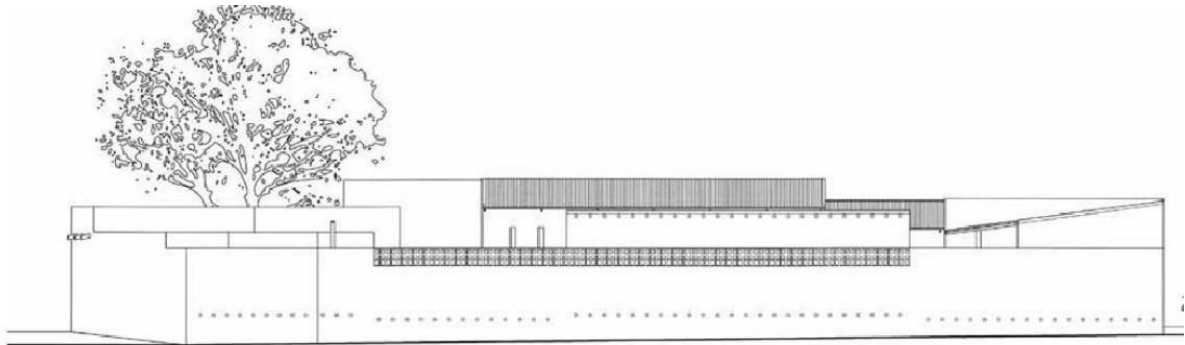


Figure 2.2.1. Error! Use the Home tab to apply 0 to the text that you want to appear here..2. Elevation

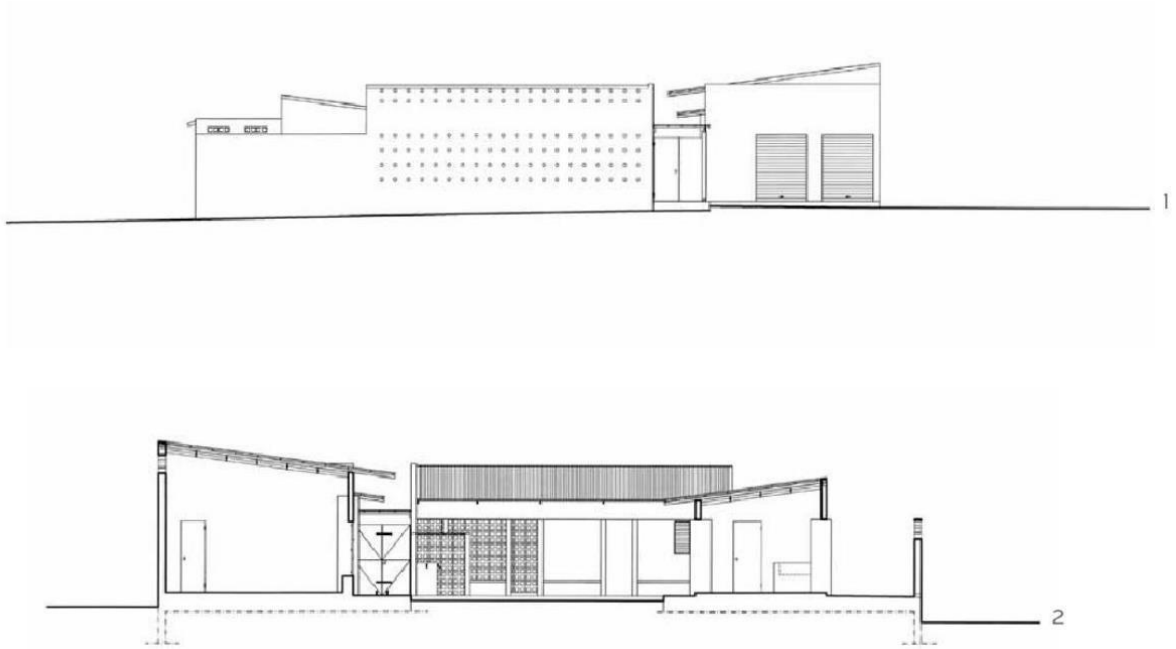


Figure 2.2.1. Error! Use the Home tab to apply 0 to the text that you want to appear here..3. Section 1, 2



Figure 2.2.1. Error! Use the Home tab to apply 0 to the text that you want to appear here..4. Views of women's Centre

2.2.2. Vaghaladhara Vocational Training Centre

Architect - Vaghaladhara Vibhag Kelavani Mandal

Site - Vaghaldhara, Gujarat

Year - 2010

Function - vocational school

Site area - 18000 m²

The vocational Centre is operated by a charitable trust for underprivileged tribal students In the Vaghaldhara area of Gujarat. The trust also operates a school in the same complex. The Centre provides training in (VVTC, 2013) (VVTC. 2009):

- Electrical and house wiring
- Electrician
- Refrigeration and AC technician
- Refrigeration and AC mechanic
- Draughtsman civil
- Junior civil supervisor
- Computer operator and programming assistant
- Computer and tally operator
- Welder
- T1G and MIG welder
- Plumber
- Turner
- CNC turning operator

Selection criteria



Area programme



Training Centre



Mess hall



Community development



Residential



Catalyse development

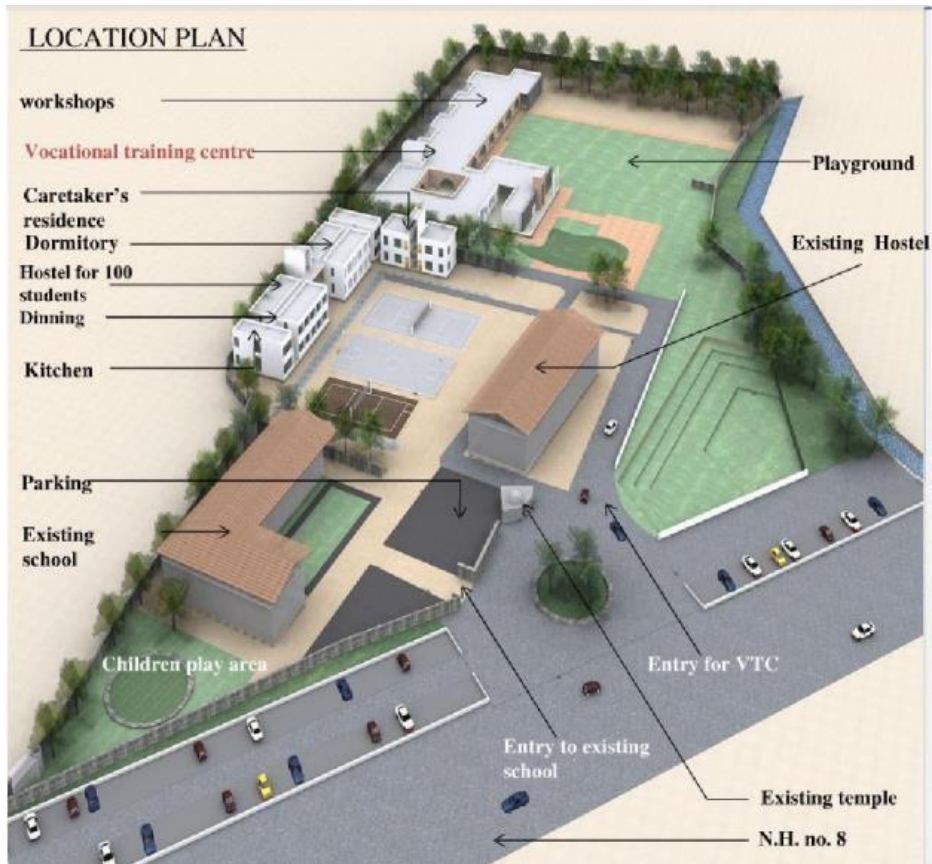


Figure 2.2.2.1. Model of VVCT



Figure 2.2.2.2. Views of VVTC

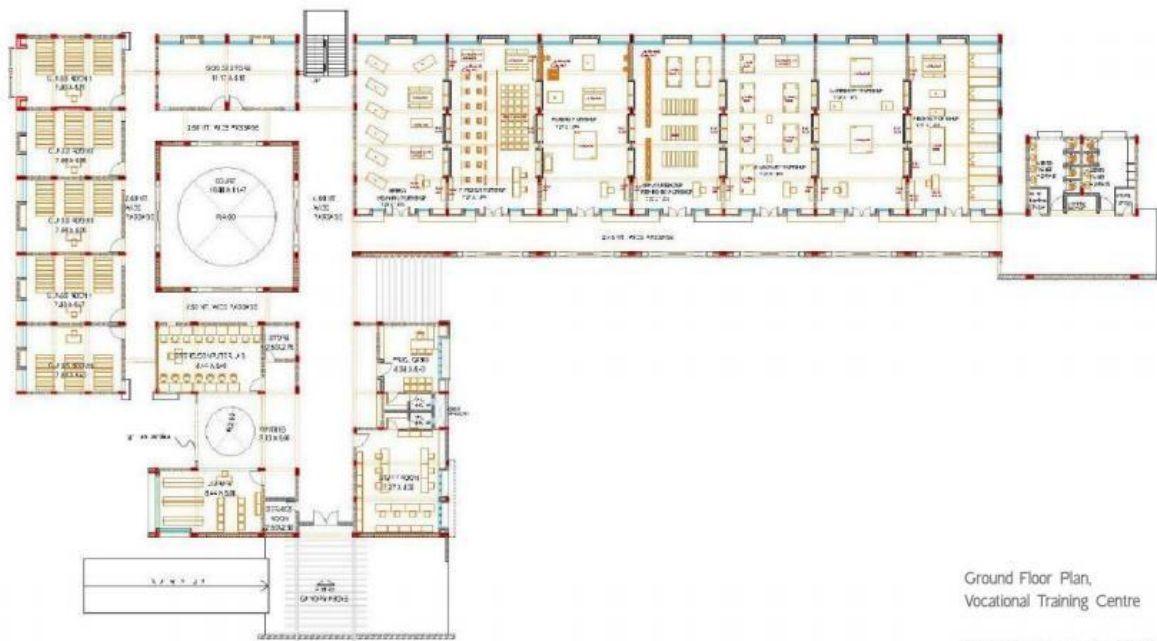


Figure 2.2.2.3. Ground floor plan

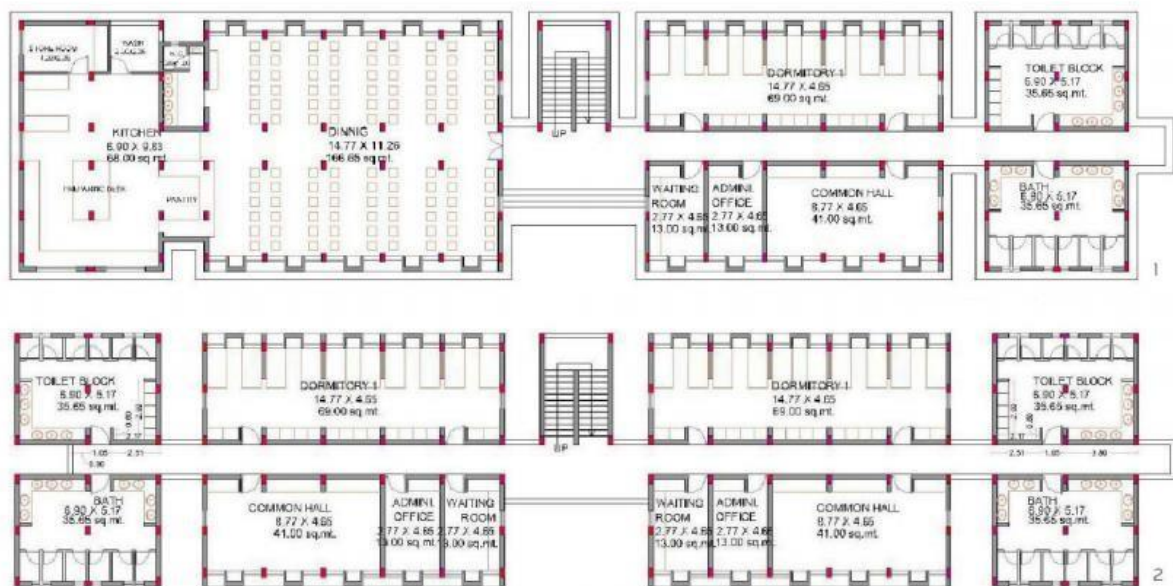


Figure 2.2.2.4. Hostel block ground and first floor plan

2.2.3. Herningsholm Vocational School

Architect - C.F.Møller

Site - Herning, Denmark

Year - 2014

Function - vocational school

Site area - 4700 m²

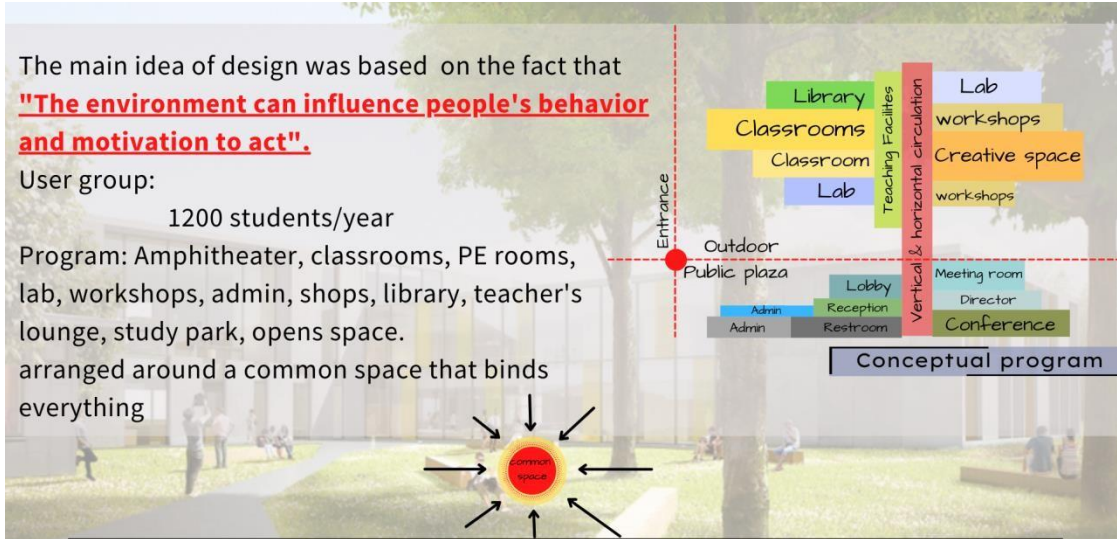
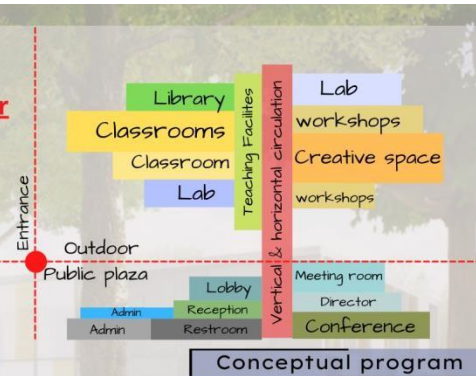
The main idea of design was based on the fact that
**"The environment can influence people's behavior
and motivation to act".**

User group:

1200 students/year

Program: Amphitheater, classrooms, PE rooms,
lab, workshops, admin, shops, library, teacher's
lounge, study park, opens space.

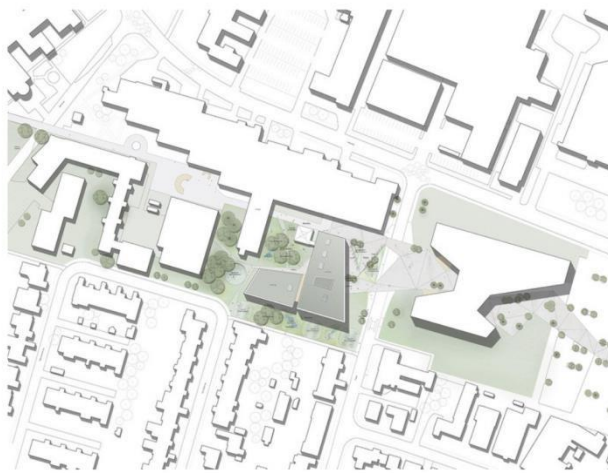
arranged around a common space that binds
everything



- Mobile furnishings - Diverse and flexible spaces in order to match needs.



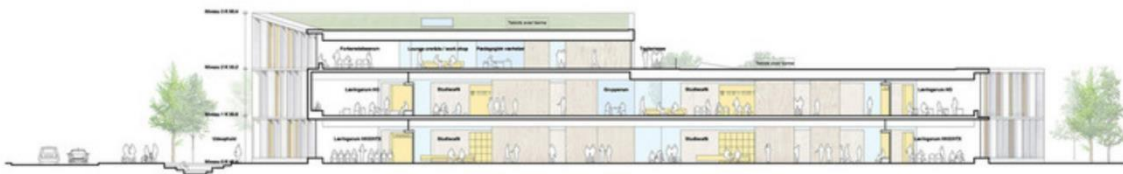
Site :



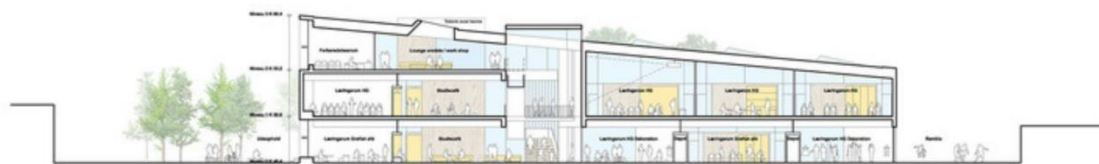
MASTER PLAN



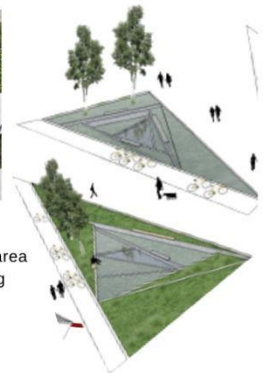
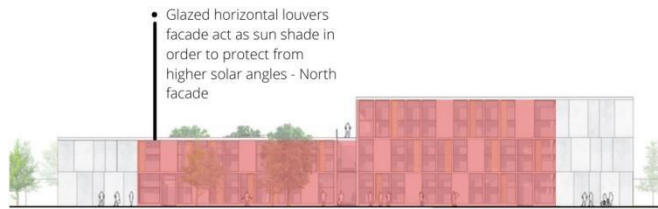
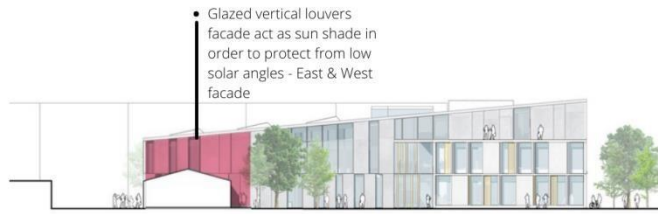
PLANS



SECTION AA



SECTION BB



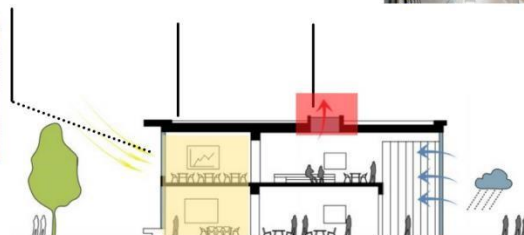
- Greens
Helps with Stress reduction, Improved concentration, improved air quality, positive effect on children.



- Good daylight

- Green roof

- Natural ventilation



2.2.4. Art & Innovation Hub at Agastya International Foundation

Architect - Mistry Architects

Site - Avulathimmanapalle, India

Year - 2018

Function – Innovative learning space

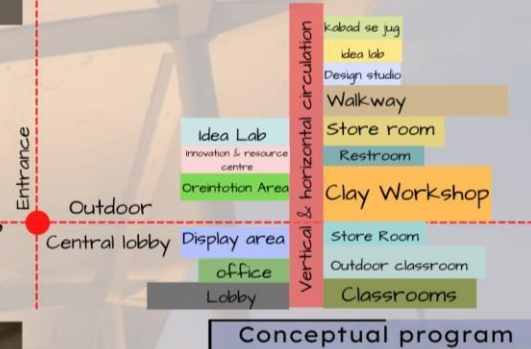
Site area - 1487 m2

The main idea of design was based on **"bringing together the arts and science - making learning happen with the flow"**.

User group:

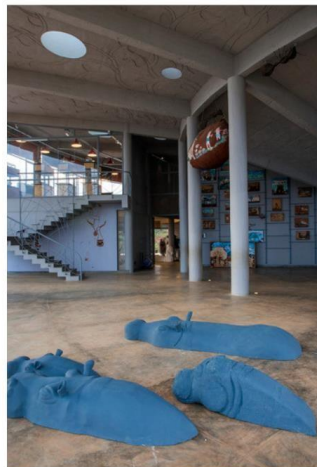
400 students/year

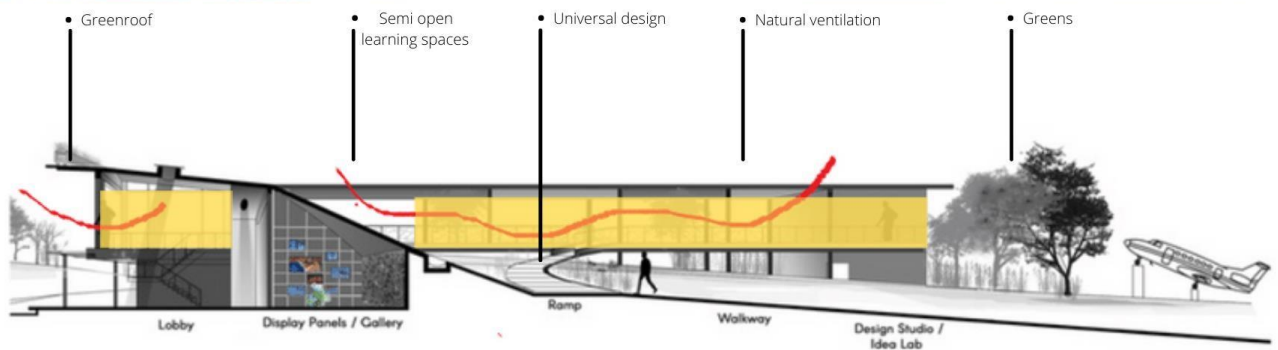
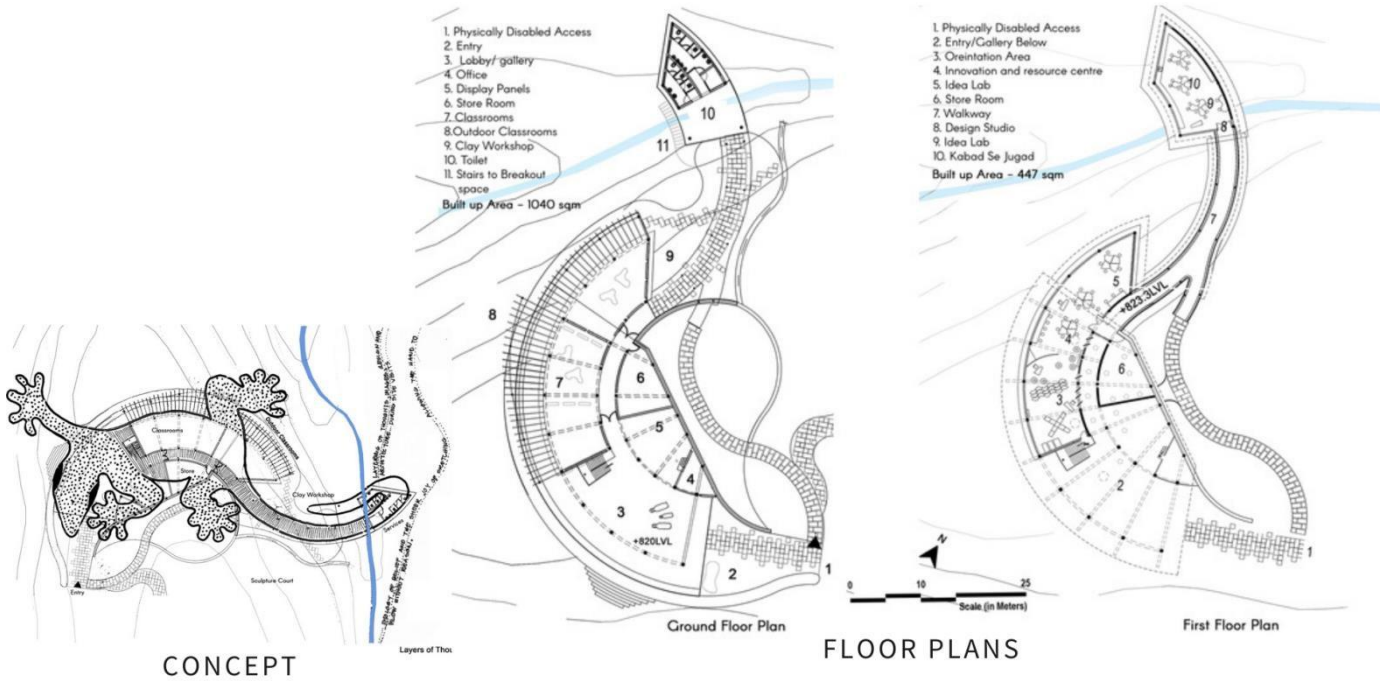
Program: Classrooms, outdoor classrooms, idea labs, workshops, office, store room, orientation area, design studio, display area, innovation & resource centre.

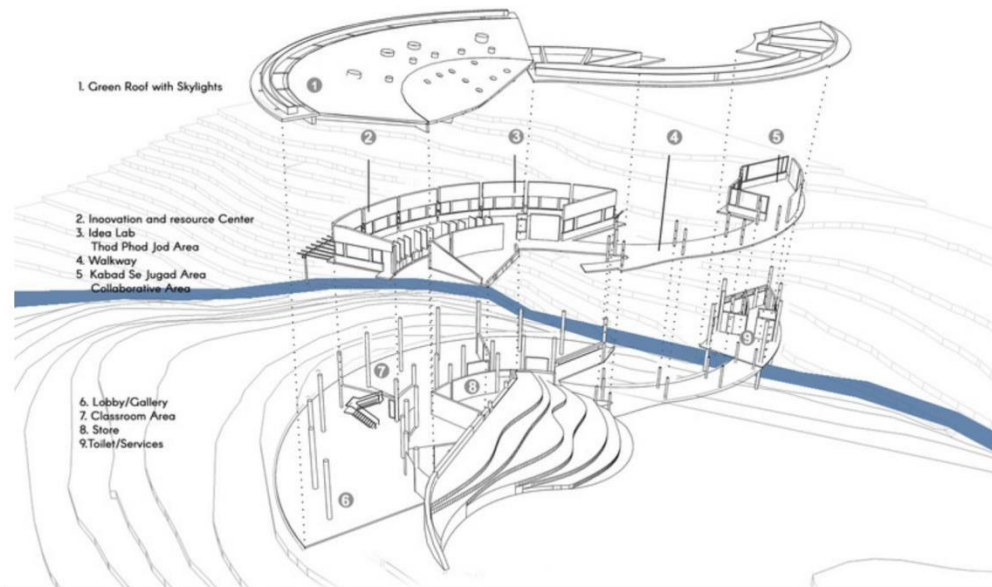


“Fun based interactive learning environment” can be seen even in small details.

A simple, fun intuition connections

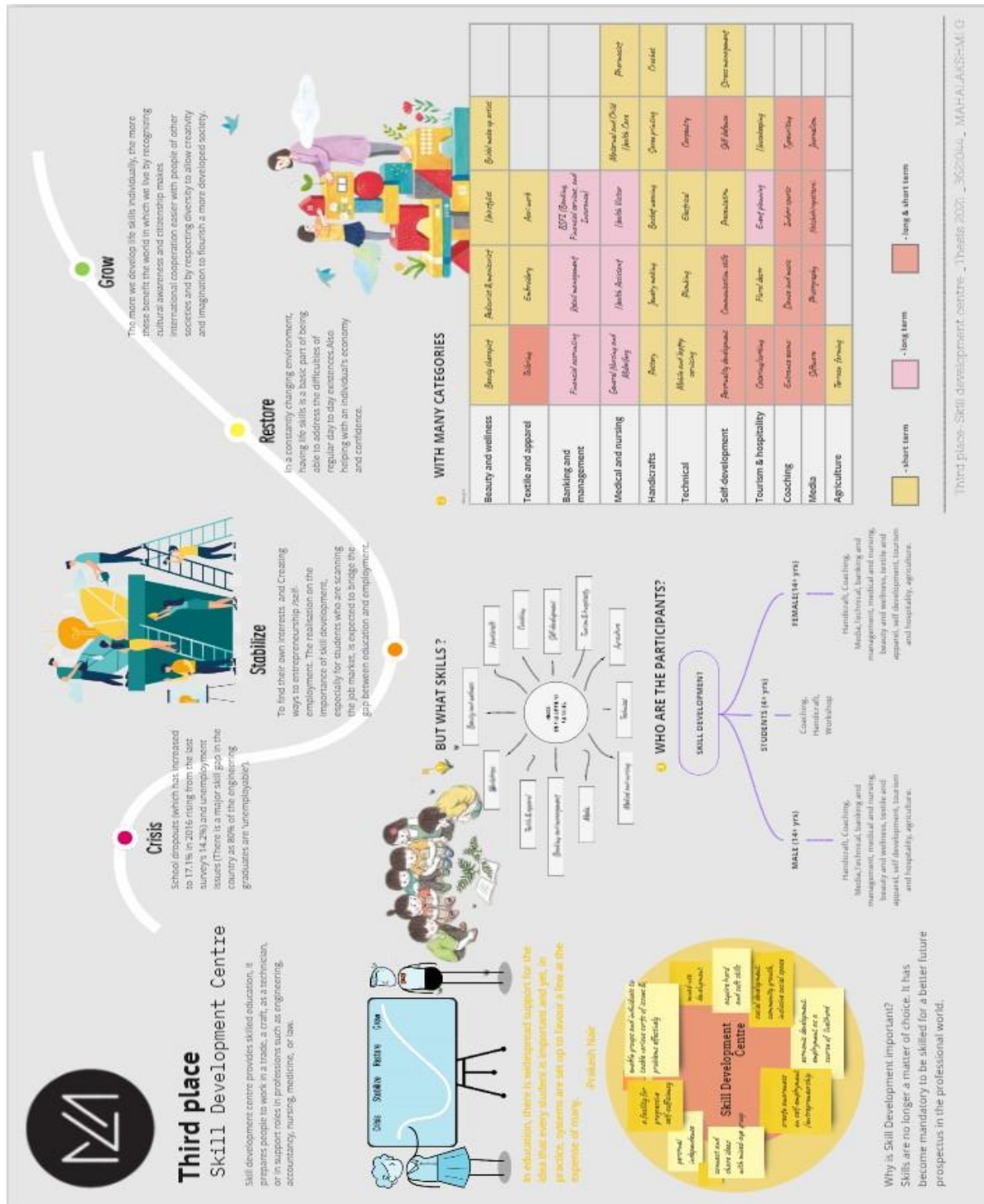






CHAPTER 3: SPECIAL STUDY

3.1. Background study and analysis



3.2.Size and Standards

3.2.1 Pedagogy

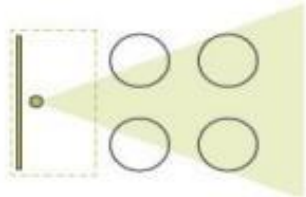
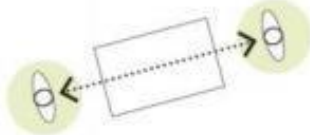
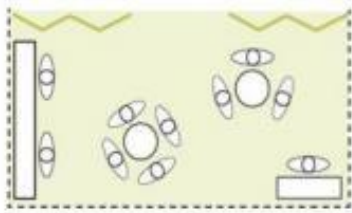
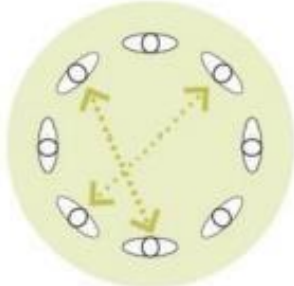
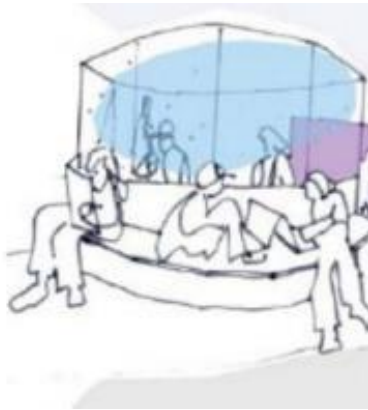
PRINCIPLE	PEDAGOGICAL APPROACH	PEDAGOGICAL ACTIVITY	SPATIAL ICON
The learning environment is supportive and productive	Learner centred pedagogies with multiple learning settings collocated	Delivering	
The learning environment promotes independence, interdependence and self motivation	Peer to peer learning Integrated problem and resource-based	Applying	
Students are challenged and supported to develop deep levels of thinking and application	Integrated, problem and resource based learning	Creating	
Students' needs perspectives and interests are reflected in the learning program backgrounds	Theory linked to practice problems integrate both aspects, resources used continually and creatively integrated curriculum delivery	Communicating	

Table 1 Types of pedagogical approaches and connected implication on Built environment

Individual pod



Space

Quiet Spaces for individuals or small groups.

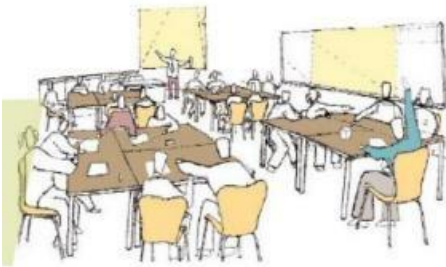
Pedagogy

Provides quiet place for work, study, reflection, or rest.

Size

10 sqm.

Group learning space



Space

Individual or team spaces for staff that has adjacent material preparation area and meeting space.

Pedagogy

Encourages team teaching, mentoring of other faculty, integrated planning, and informal discussions.

Size

20-25 sqm

Collaboration space



Space

Idea generation space, team meeting space, access to technology and other resources and display space for models and ideas.

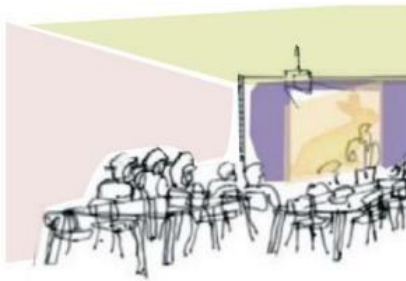
Pedagogy

Support creativity, idea generation, teamwork and prototyping of concepts. Encourages involvement of local employers in the development of projects.

Size

20 sqm.

Presentation space



Space
Places for individuals or teams to demonstrate and perform.



Pedagogy
Gives opportunity to practice, share acquired skills and knowledge with learners, staff and the public and receive feedback.



Size
40-50 sqm, generally dividable.



Display space



Space
White boards, black boards, tack surfaces, and show cases. Place furnishings to display work in progress or completed projects. Can overlap with circulation.



Pedagogy
Provides places to show ideas, work-in-progress and finished products.



Supports and shares learning process by showcasing concept development, learning activities, development process and finished products and services.



Size
20 sqm.



CHAPTER 4: SITE STUDY



Third place Skill Development Centre

Site access

The site has three major roads through which you can access it. The site has a very good connectivity by means of both public and private transportation.



Major road connecting the site



CONNECTIVITY

Velachery Railway station, Perungudi Railway station are the nearest railway station				
Name	From	Frequency in mins		
XT21	Broadway	12 mins		
M19B	T.Nagar	30 mins		
21C	Central	44 mins		
05G	Tambaram East	55 mins		
M151K	Egmore	120 mins		
21F	Egmore	130 mins		
M70S	C.M.B.T	150 mins		
70S	C.M.B.T	150 mins		
Share autos run between the settlement.				

PROXIMITY OF SERVICES WITHIN 1KM



Neighborhood Areas	Services
Bethel nagar, Indira nagar, Vivekananda nagar, Karapakkam,	
Religious Place	
Health care	
Banking	
Ration shop	
Security stations	
Amma unavagam	

Availability of services

PROBLEMS CAUSED AFTER RELOCATION

They were resettled here from different slums in the city of Chennai between 2000 to 2010. The consequence of displacement reveals that many have become poorer.



Lack of space for children in ICDS centre

Lack of sport facilities

PHYSICAL SECURITY



Not safe for women and girls. Many girl children have been compelled to drop out of school, as their mothers choose to take them along to their workplaces because they are afraid to leave their daughters alone at home after school hours.

EDUCATION



The schools in the area has only 2000 seats for the 20000 school-going children. 35% (15-18 age) were dropouts and 42% were forced to commute more than 20 km to schools. The 19 ICDS accommodating 400 children, but there are 4,900 children.



Many children forced to drop out of school

Rise in Unemployment



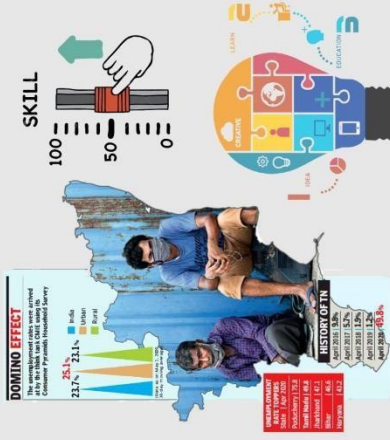
Rise in travel expense
(Main reason: 35% children dropout)



Third place Skill Development Centre

WHY? SDC? This site?

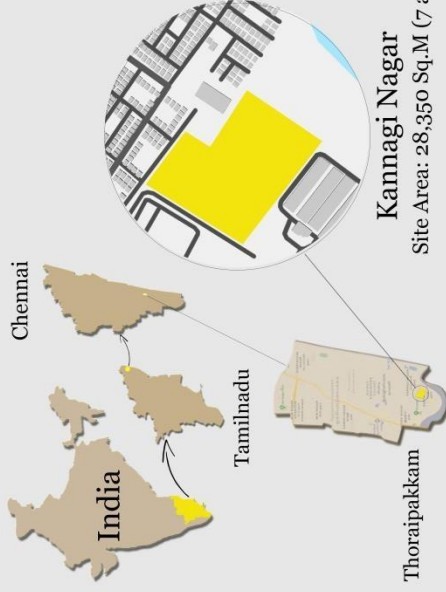
India is one of the fastest-growing developing nations. Though the country still faces many challenges, unemployment is one of the major issues, that needs to be dealt with, as it sows the seeds of various other unwanted social dilemmas among the youth. But with the right skills, education and environment, it is the belief that these challenges can be overcome.



Kannagi Nagar, a colony built by the TN govt as a resettlement area, is often associated with crime, ghost corridors and resentment. The area has now, however, been given a facelift (an art district has been created in the area) Even after the facelift the problems of that area continues.

This thesis is an experiment to interpret how 'Social Architecture', as it has come to be known, can influence social transformation. It seeks to explain how, with the right program and the right atmosphere, the architecture may function as a social medium to boost undeserved neighborhoods.

Site location



Kannagi Nagar, one of the largest resettlement sites in India, is located on OMR, in Okkiyum Thoraipakkam Town Panchayat, Kanchipuram District. Since November 2011, this settlement is part of Division 195 of Zone XV, under the developed areas of the Corporation of Chennai. Kannagi Nagar was built in a phased manner from 2000 and is still under expansion and construction.

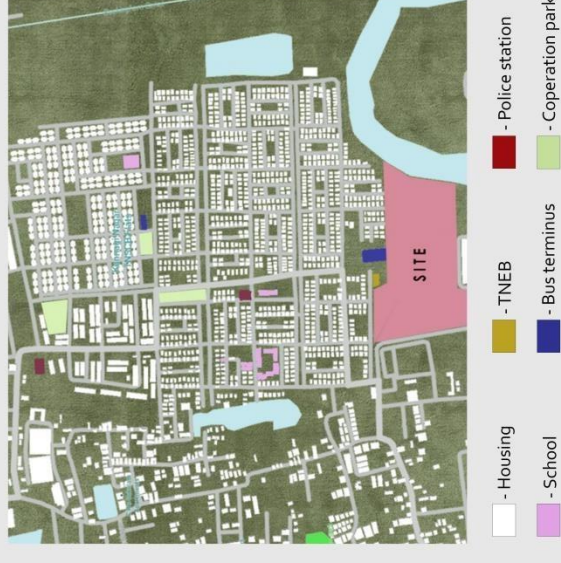
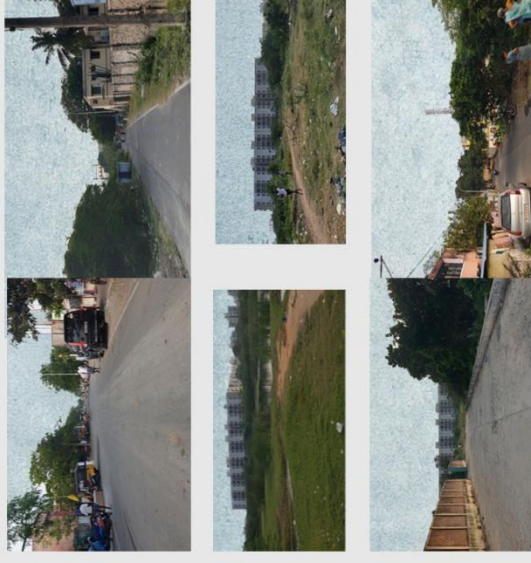
Context



The site for Intervention of this thesis is Kannagi Nagar is one of the largest built resettlement areas in India with housing over 80,000 people have lately transformed into the city's first art district.

Kannagi Nagar has many objectives such as being the largest built resettlement in India and with a population that comes from various backgrounds, especially fisherfolk who have experienced displacement. Unfortunately, this neighbourhood became popular some period back. There are a lot of people who discover it hard to find Jobs Just because they dwell here.

Site photos





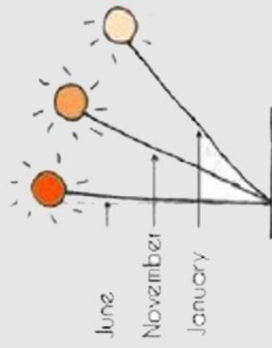
Third place

Skill Development Centre

Site access roads

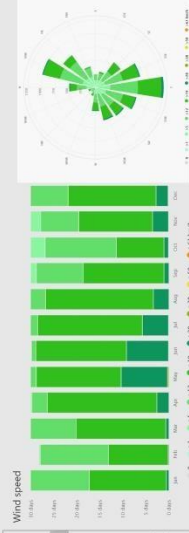


Contour on the site



Sun angle according to the month

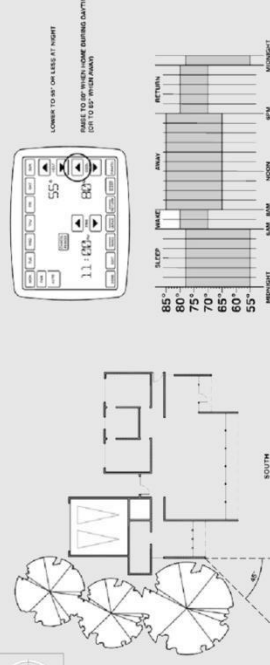
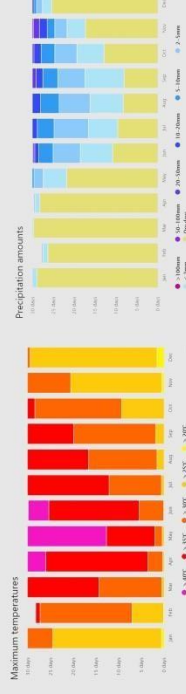
Analysis on building orientation according to the sun path in different months like June, November, and December. As longer side of the building should be facing north and South, and facing side will get more harsh radius to avoid that V shaped edge is provided and more shadows are also formed due to this orientation of building.



Wind analysis

Wind is predominant in south and south-east direction. Some V shaped orientation can also disperse wind into the side rather than blocking them with a perpendicular wall.

Temperature-Tropical wet humid climate



Use plant materials to minimise heat gain

Raise the indoor comfort thermostat set to reduce the air conditioning energy consumption

To block the radiation from southern sun same V shaped orientation of the building can reduce the heat.



Third place

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STRENGTH

NEIGHBORHOOD COMMUNITY

Diverse community

A thriving public place to demonstrate art and artists—that's one of the main reasons for identifying this place

Transportation is easy since the site is located very near to kannagi nagar bus terminus.

ART DISTRICT -TOURIST ATTRACTION

The neighbourhood has become the first port of call for youngsters seeking vivid backgrounds for their selfies, for photographers and for tourist.

THE EXTENDED PART OF THE SOCIETY

To show commitment to the area, plans are being made for artists, volunteers and NGO's to host workshops and help to develop the society.

WEAKNESS

Negative image associated with the locality
Detached from the city

OPPORTUNITIES

Change the way its residents and the whole view of Kannagi Nagar.

Change the life of the people especially the kids of the area, inspire them to get to a better version of themselves.

Increase the economic state of both as a community and individually

There are lots of microbusinesses and active purchasing which can be improvised for its good and can create opportunities too.

THREAT

The waterbody near the site may cause flooding in the site

The negative image of the area can affect the people of the area

NEED IDENTIFICATION

The community deals with the following socio-economic problems:

- Youth delinquency/crime
- High unemployment rates -Often unsanitary living conditions
- lack of education

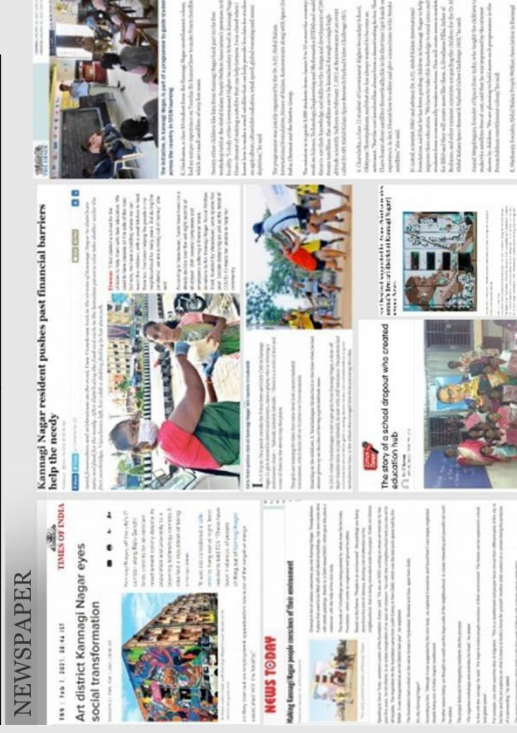
A step towards dealing with these issues is providing the right environment and implanting the right program.

AIM

- To create an environment that nurtures community engagement and hence enhances community bonds.
- To create spaces and experiences that stimulate action and creativity and consequently lead to self-growth at a personal level.
- To act as a common hub for the neighborhood, through which the people feel a sense of ownership.
- To hit a balance between the aspirations of the community and the setting that they are aware of, to develop a fresh environment that fits into their needs and demands.

PROGRAM IDENTIFICATION

Handicraft	Agriculture
Media	Coaching
Technical	Workshop
Banking and management	Textile and apparel
Medical and nursing	Self development
Beauty and wellness	Tourism and hospitality



CHAPTER 5: EVOLUTION OF DESIGN



Third place Skill Development Centre

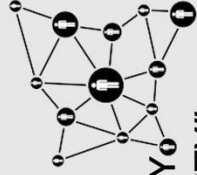
"Flow Of Streets"

Focusing in the urban lines of livelihood the street flows here is reflected in the layout and can be combined between the planning area and the housing. so the flow will be created.



Concept

"NETWORK : CONNECTIVITY"
VISUAL & SOCIAL CONNECTIVITY"

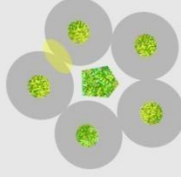


- MORE INTERACTIVE SPACE

- Helps in visual connectivity



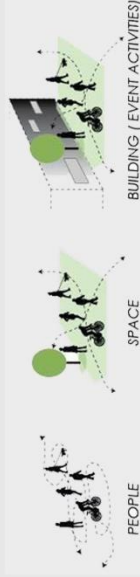
INTERACTION AND CONNECTIVITY IN THE INNER CIRCLE, BETWEEN TWO CIRCLES AND AS A WHOLE.



-INTERACTIVE SPACES AS INTERACTING SPACE.

- A SOCIAL CONNECTIVITY

- CREATING A WHOLENESS AND ONENESS



SOCIAL INTERACTION

- PLAYING WITH VOLUMES AND LEVELS.



- GIVES MORE INTERESTING ROOF PROFILE.



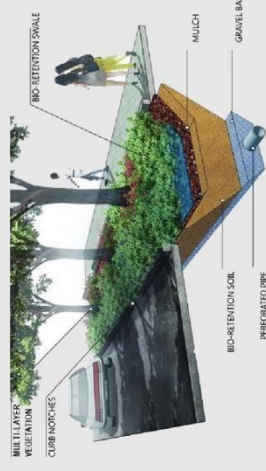
THE IDEA OF CLOUDBURST AND BIO SWALE INORDER TO CONTROL THE RAIN WATER.



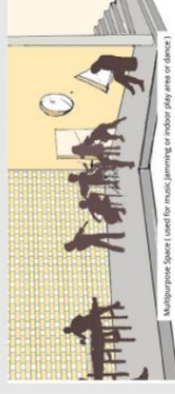
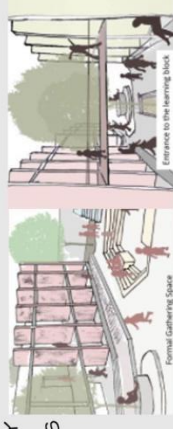
Dry, Normal



Cloudburst



IDEAS



Skill Development Centre

