



St. Michael's House

Services for people with intellectual disabilities

Canteen Project
Piet Mondrian inspired





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St. Michael's House

St. Michael's House is an organisation which set out to develop new community services and bring about change in how people with an intellectual disability were viewed.

There are currently 1663 people with an intellectual disability in over 170 centres in the Greater Dublin Area and Navan Co. Meath.

Services provided by St. Michael's include: individualised services, clinical therapies, early services, special national schools, inclusive education, vocational training, adult day services, employment support, residential, independent living, respite, social, recreational and specialised Alzheimer services.

The centre which we are designing for, located on the Ballymun road, was previously an industrial factory. Opened in 1984-1985, they began making packaging; earning less than minimum wage for their labour.

The workshop closed down ten years ago and the premises is now used as a centre for adults with intellectual disabilities. There are a range of activities put on for the users; activities such as baking, computer studies, aerobics and art classes.



Universal design

In Ireland:

- Disability rises with age.
- People with disabilities range from 9.3% to 20%.
- As economic growth has increased so have the cities. The buildings that were built or restored provided difficult access for people with disabilities.
- This environment does not fulfil the needs of all users.
- This lead to the conclusion that universal design was the key.



Layout and seating:

- The layout should be clear and logical. No obstacles should interfere with the route.
- All areas within the storey should be on the same level.
- Tables and chairs should be arranged in clear aisles.
- Random dispersion of tables should be avoided. It is important to keep enough distance between the tables to allow clear circulation.
- A minimum of 700-750mm clearance between the floor and the table is necessary.
- If tables are fixed, chairs should be removable to allow wheelchair access.
- Fixed chairs and tables should be avoided as they are not flexible.
- Tables and chairs should create a visual contrast. This allows quick and easy identification.
- Certain individuals could have a difficulty turning/walking on level ground, therefore frequent stops provided by seats or handrails are important.
- Structure and stability are crucial to universal design.
- Objects should contain a push factor rather than pull as individual find it easier to push, for example a door.
- Objects should be placed at a comfortable reach. This will also result in more individuals using it.
- Vision: There should be a major contrast between surfaces, objects, forms, size and colour. Markings on glass surfaces minimise danger.



Psychological Properties of Colours:



Red:

Physical

Positive: strength, warth, energy, stimulation, excitement

Negative: Aggression, defiance, strain

Red is a powerful colour and grabs our attention easily, hence its use in society (traffic lights, stops signs, etc) It stimulates us raising the pulse rate. Red is a basic colour (part of the primary colours) without subtlety. On one hand it is lively and even friendly but on the other hand it is aggressive and demanding.

Yellow:

Emotional

Positive: optimism, confidence, emotional strength, creativity

Negative: fear, anxiety, irrationality

The stimulus of this colour is again emotional. It has the power to lift our spirits and self-esteem, it is the colour of confidence. Too much of this colour or the wrong hue of it however can cause the self-esteem to plummet resulting in anxiety or fear.

Blue:

Intellectual

Positive: Intelligence, trust, serenity, logic, reflection, calm

Negative: Unfriendly, coldness, lacking emotion

Blue as a colour can have the potential to be quite soothing. It causes a reaction among us mentally as opposed to physically like red. Strong shades blue will stimulate clear thoughts, while softer lighter blues will calm the mind and aid concentration.

Anthropometrics and Ergonomics

The re-design of this canteen falls under the modules of Anthropometrics and Ergonomics; both of which we have studied in college. The following are brief descriptions of these design elements.

Anthropometrics is the study of human measurements

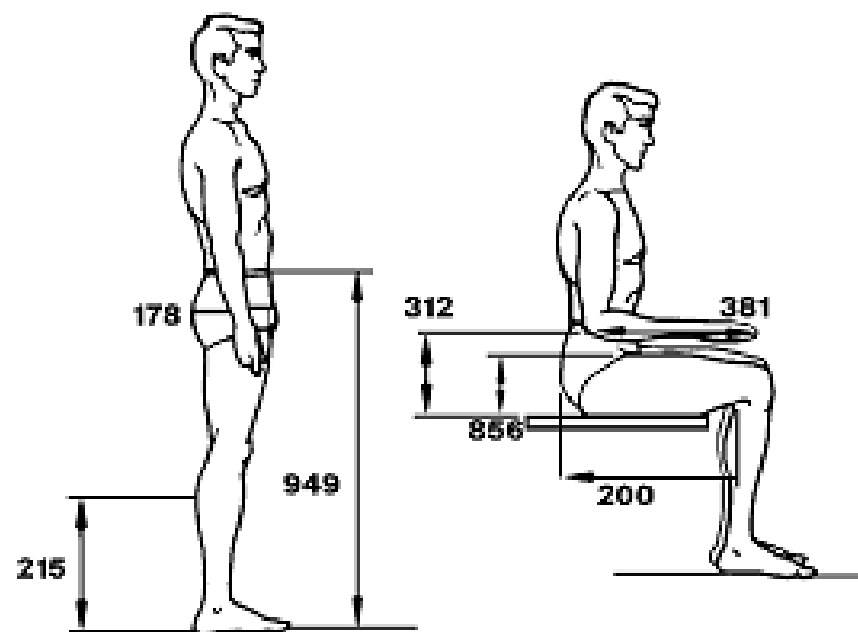
It is used in relation to design because designers need to know these measurements in order to create spaces, buildings, furniture, stairs, etc to the correct proportion in order for them to be comfortably useable.

There are different 'average' measurements available for a range of different people. Our gender, age and nationalities are some factors that alter these 'average' measurements. The averages vary from country to country because we as people vary from country to country.

The function of anthropometry is to make everyday living more comfortable for people.

Ergonomics is the study of people's relationships with the environment surrounding them. For example how someone uses an object, whether they can easily figure out the function of an object

Ergonomics is linked to good design. Anthropometrics and ergonomics go hand-in-hand because the measurements taken from the study of anthropometrics is applied when designing any ergonomically sufficient product. The main function of ergonomics is to make a product comfortable and easy to use. Ergonomics usually involves extensive study of humans and how we interact with what is around us.



Site visit, Thursday march 19th



This area is to be multi-functional. It is used as a canteen for the majority of the time; it is used for small classes, gatherings and discos. It has to accommodate up to sixty people.

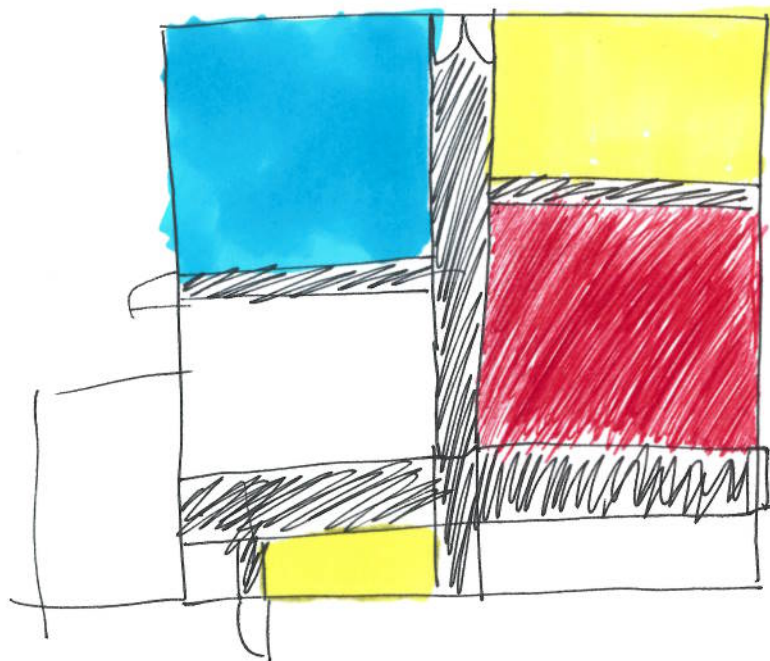
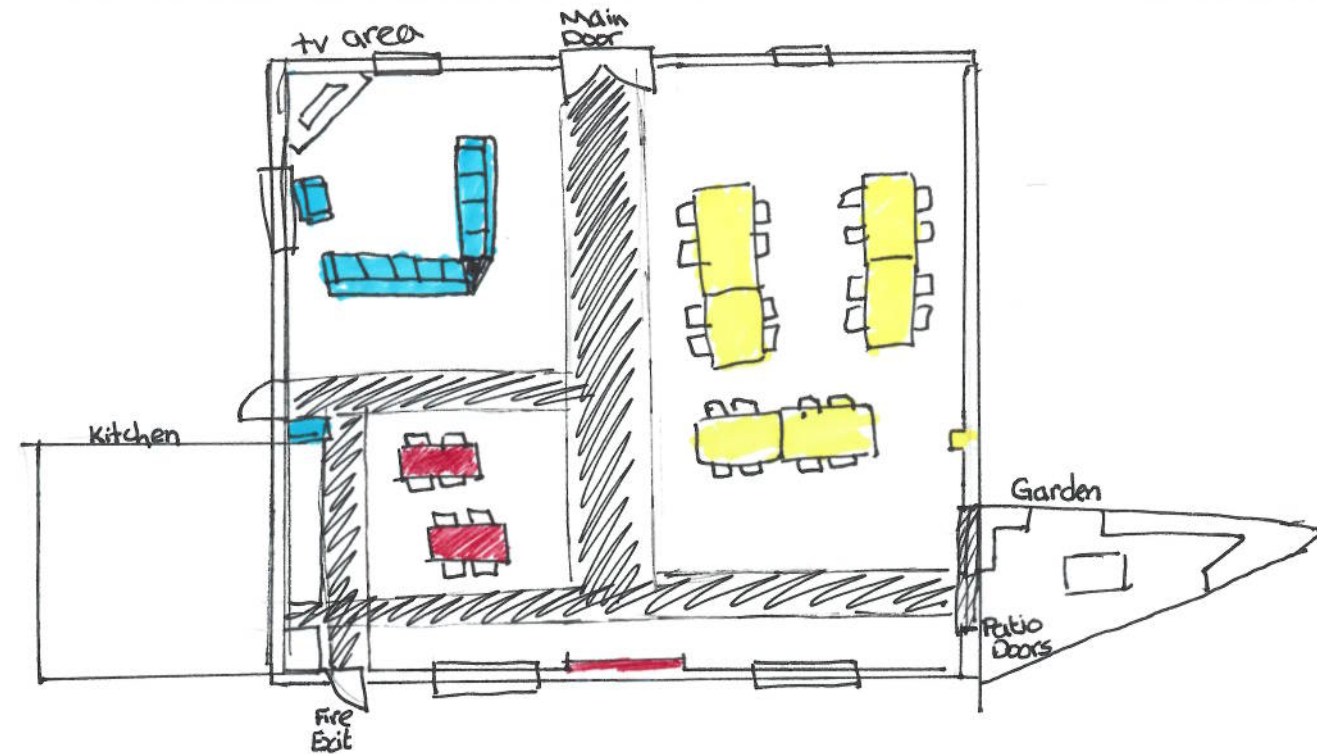
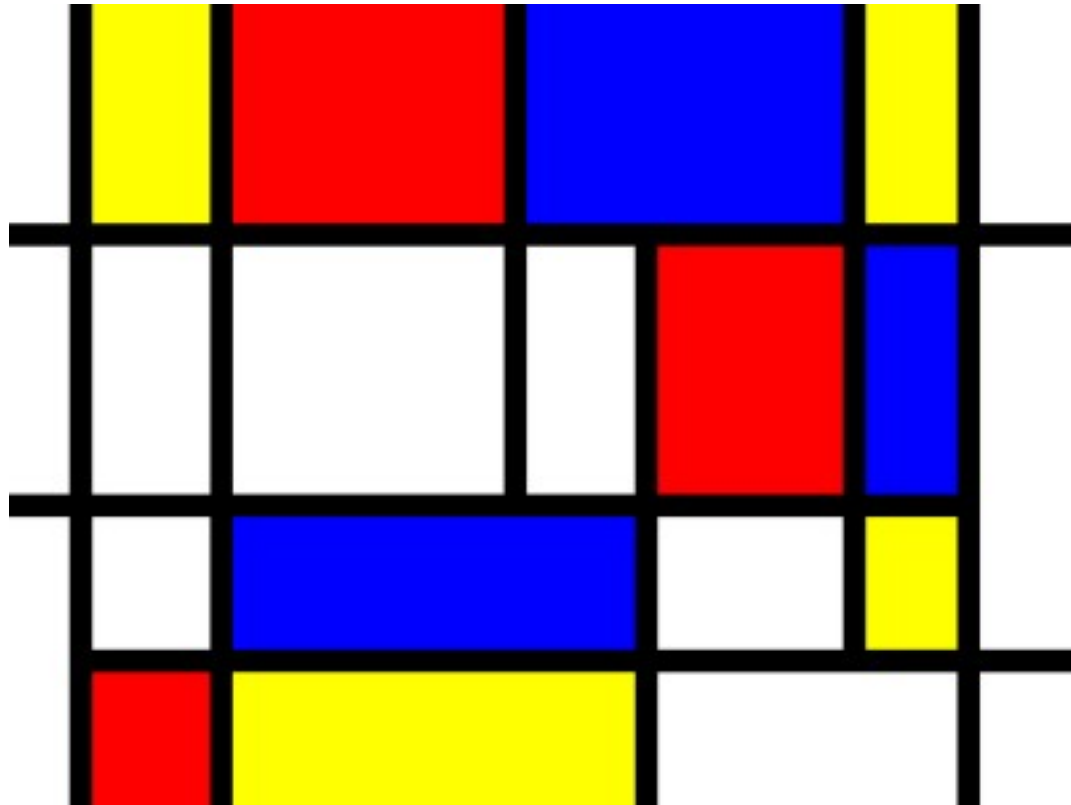
As the layout will be changing to suit different activities, there should be movable furniture. Strong, stackable, comfortable furniture is a priority. Tables with four legs assist with users lifting themselves up from their chair.

There are eight specially designed yellow chairs and a fish tank that is to remain in the room and should be incorporated into the design. Patterns should be kept to a minimum as it can distract users; there are some flowery table covers as well as plain in the room. Table covers which are easily washable are preferred and block colours help distinguish the tableware from the table.

Sound barriers and dividers can section areas off. The room is a large, open, loud place; with areas sectioned off, people can choose to seat at the dining area or the quiet area.



Our concept:

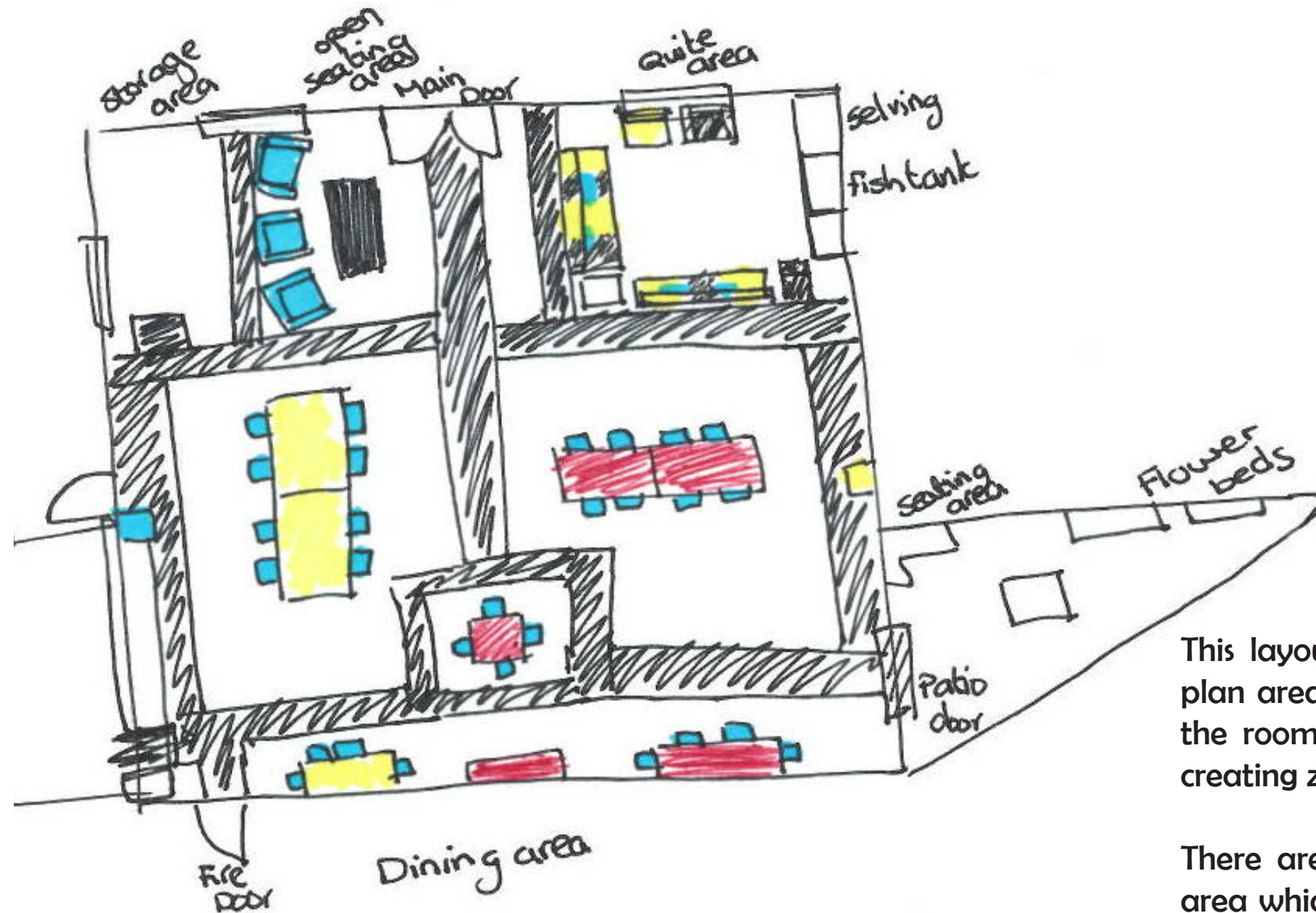


Piet Mondrian's use of colour and lines create a balanced structure and layout to his paintings. As layout is the key component in this design project we saw it as a great inspiration and guide to base our idea on.

Using the black lines as pathways from doorways and the kitchen area; we created sections or zones using the three primary colours.



Our chosen design:



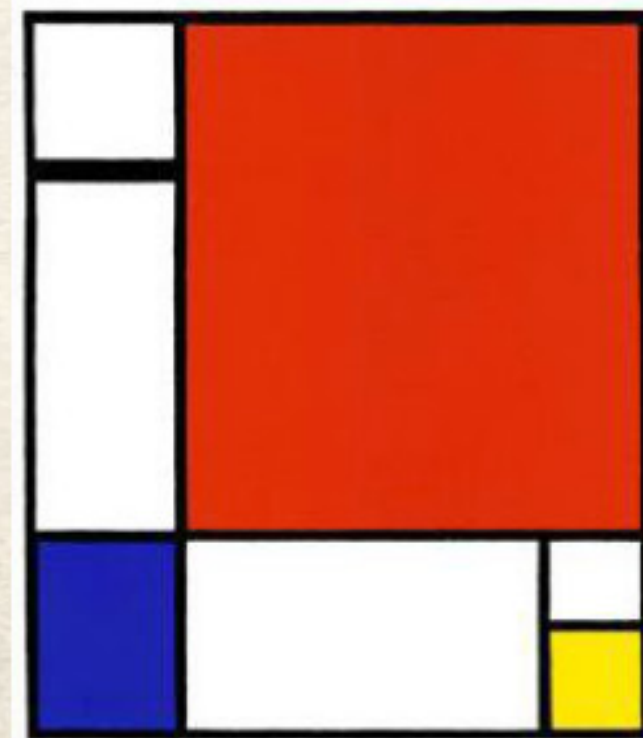
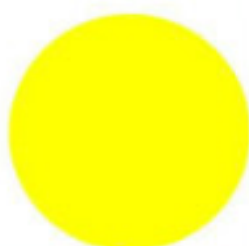
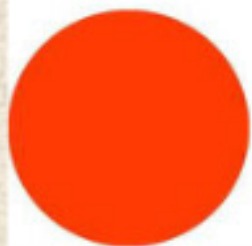
This layout has several zones; there is an open plan area towards the middle and back wall of the room, with different coloured table clothes creating zones.

There are two seating areas; a quiet, peaceful area which is closed off by tall shelving; there is also a seating area beside the main door which has a low coffee table.

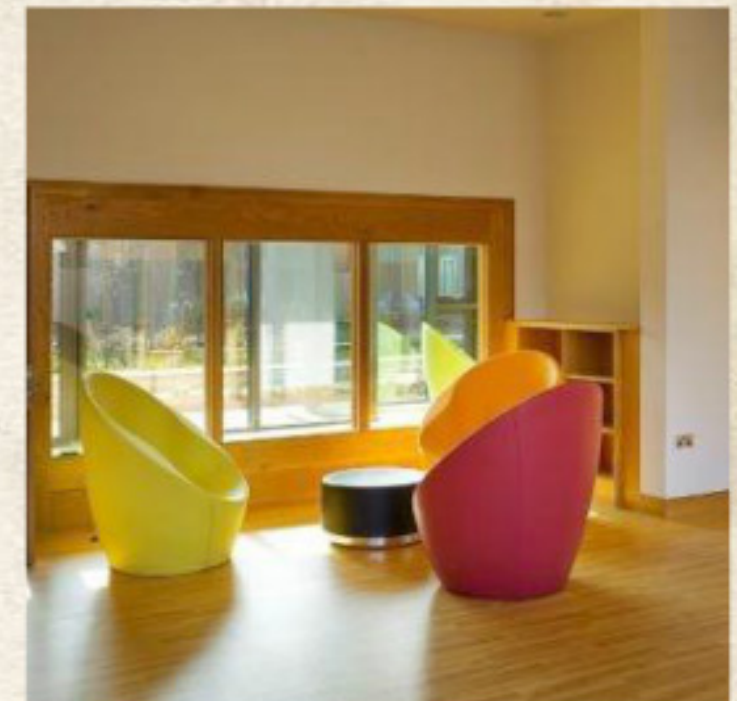
There is a storage area beside the open seating area, this area is closed off by the same type of shelving as used to section off the quiet area.



PRIMARY COLOURS

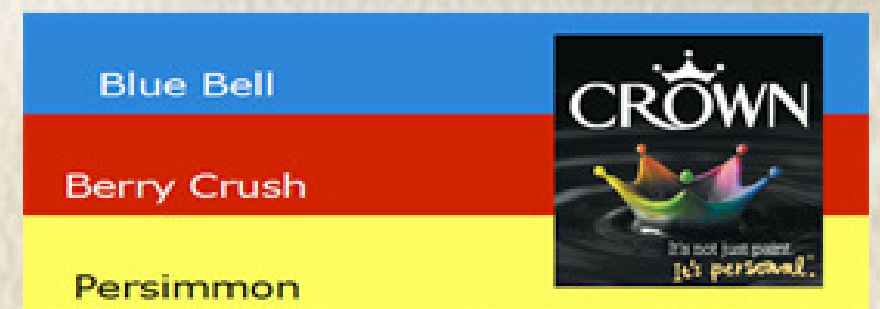


Piet Mondrian



MOOD BOARD

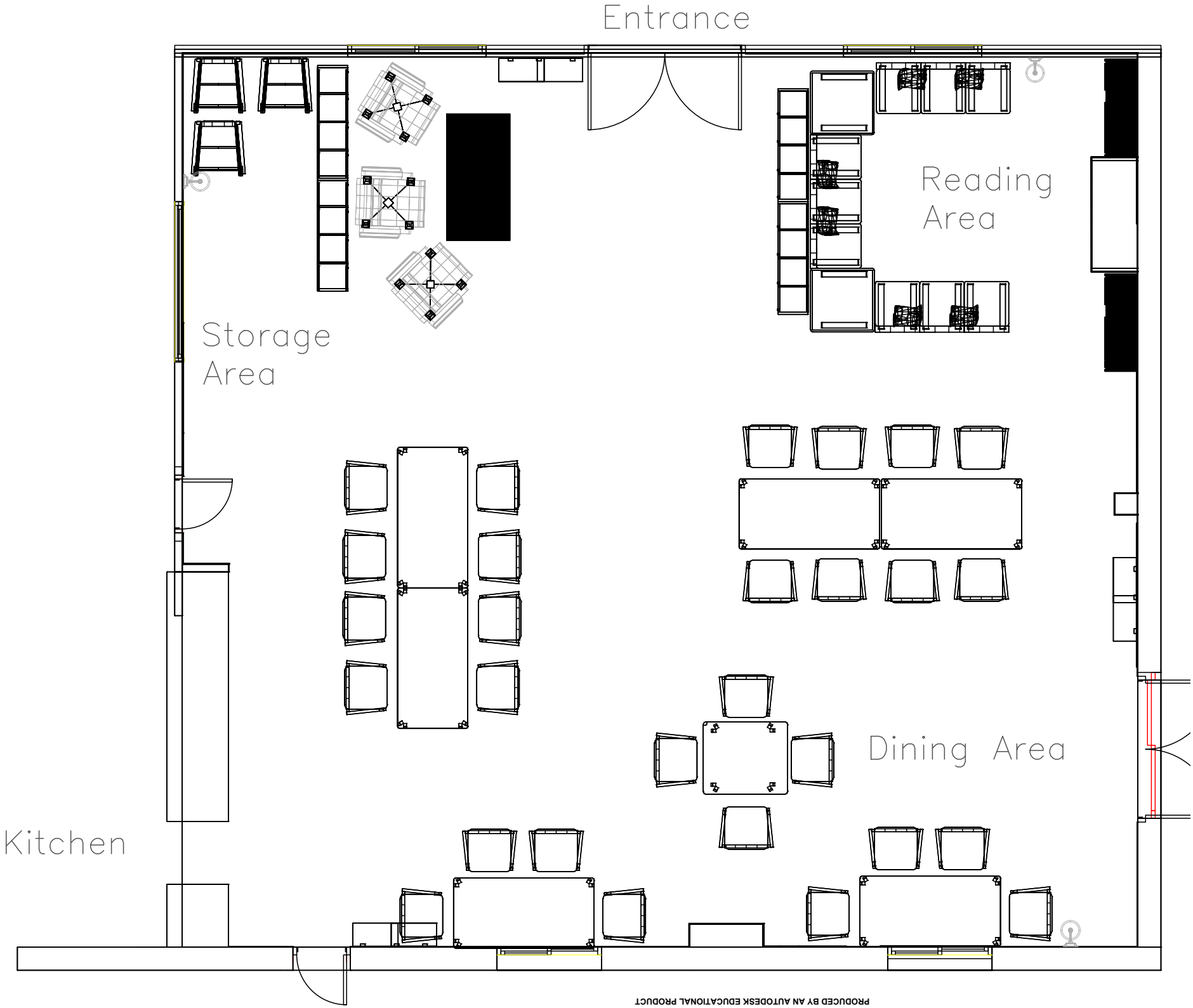




SAMPLE BOARD

Plan:

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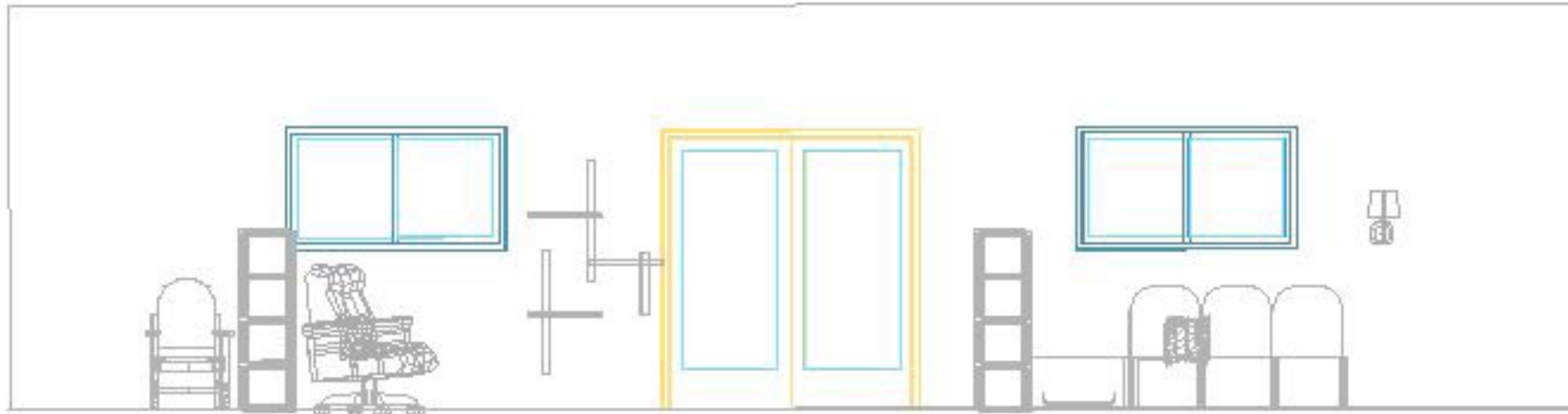


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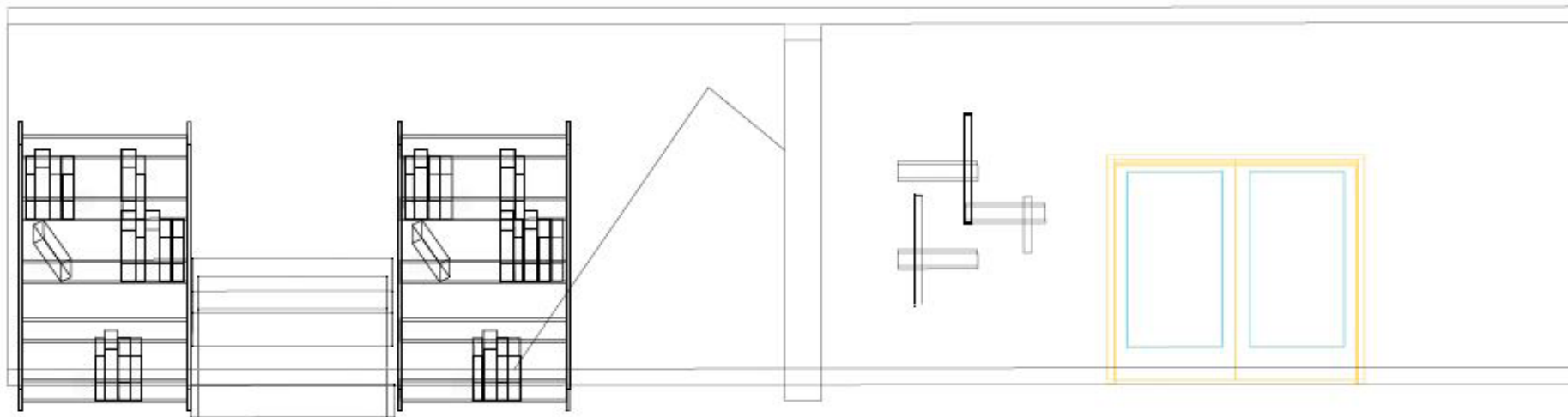
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PRODUCED BY AN AUTODESK EDUCATIONAL PRODUCT

Elevations:

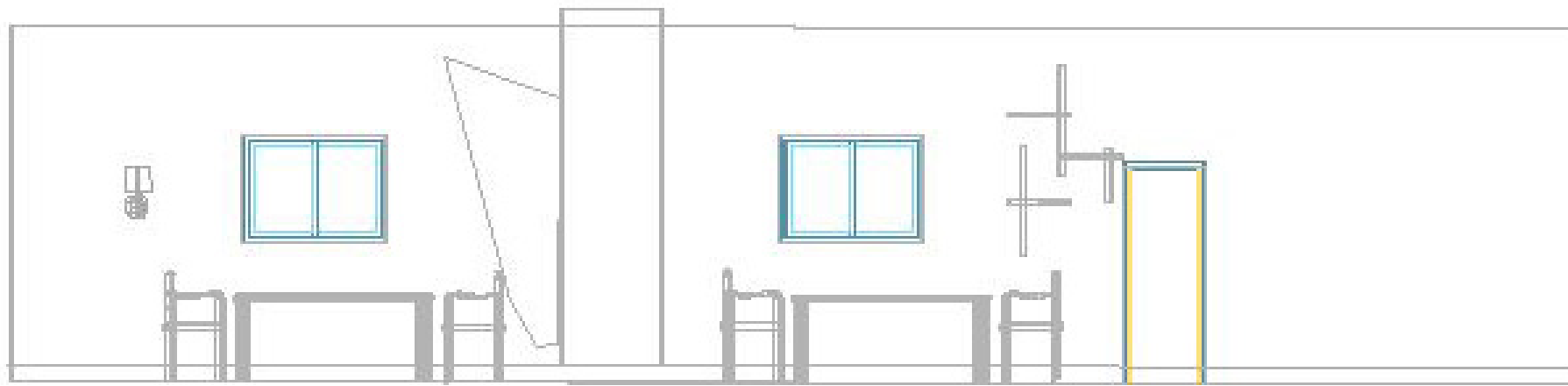


MAIN ENTRANCE

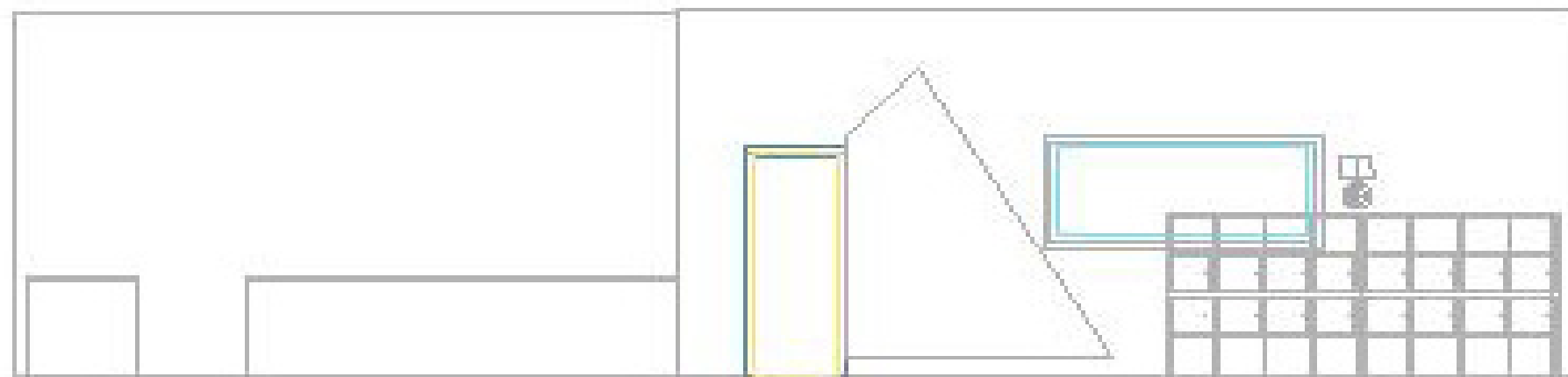


LEFT WALL





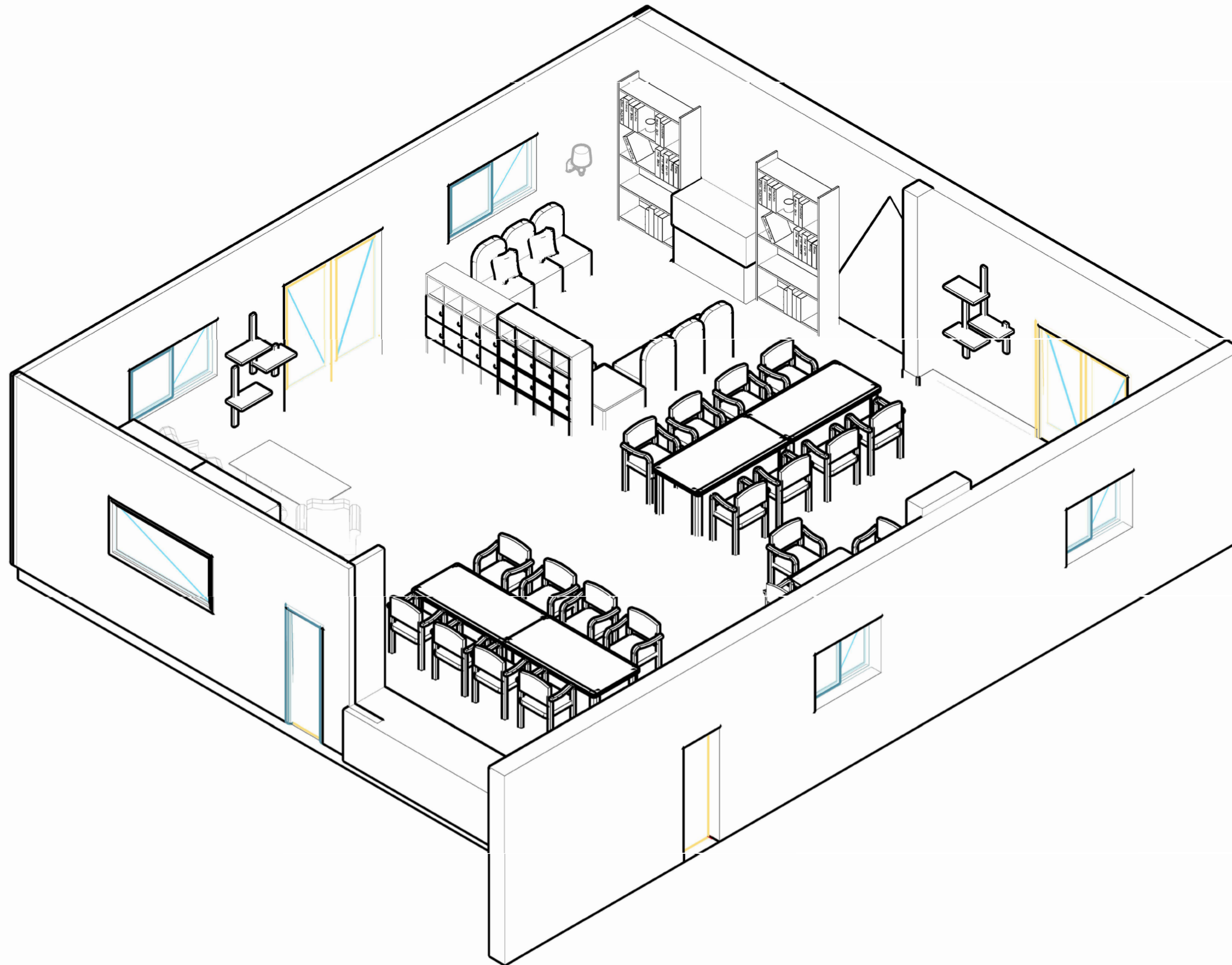
BACK WALL

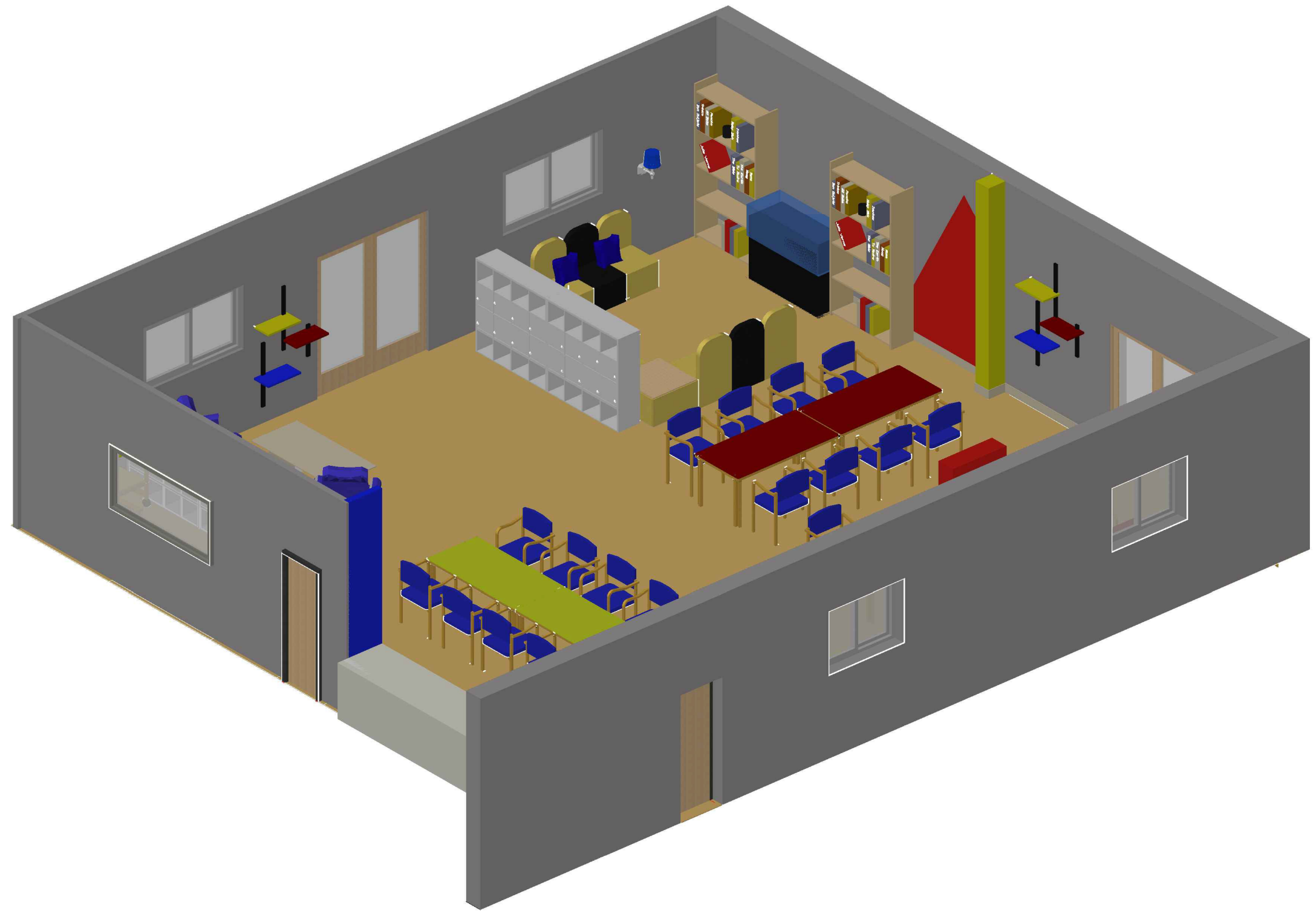


RIGHT WALL



3D isometric view:





Camera views:





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