



A Space
For Tyler

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Scope of Work

As the interior designer for the renovation of Tyler's technology room, therapy room, and bedroom, I first must research and gather information that is relevant to the goals and objectives of the project as well as information on codes in the area. I also need to collect information on Autism Spectrum Disorder (ASD) in general. After all of the information I gather is analyzed, a preliminary design will be created, and I will assemble a concept board of all possible materials for review. The feedback will be considered before creating a final design.

After the review of the preliminary design, a final design plan will be set in place. The furnishings, technology, closet walls, etc. will all be removed and demolished from the rooms to create a space for new walls and furnishings. The final floor plan will be applied to all three spaces and the finishes and furnishings will be appropriately scheduled. A PowerPoint will be assembled to display the various sketches, renderings, and materials selection for the project, which will help with visually presenting the project to the public.

The final results of the project will be concept boards for the rooms and custom element, a complete folio, a custom piece study model, and a PowerPoint presentation.

Tyler

Tyler is a 16-year-old boy who has Autism. Having Autism affects Tyler's communication, cognitive, and social skills along with other aspects of his life. Tyler loves playing on his iPad and has a very strict time schedule. He's a bit OCD with some things. Tyler doesn't like therapy and sometimes gets upset doing it. He likes to hide therapy tools because he doesn't like using them.

Sandy

Sandy is Tyler's mother. She plays a huge role in Tyler's therapy at the Autism Center and wants a space for him to be safe and learn at home. Sandy wants Tyler to become more independent and self- sufficient, but also keeps a close eye on him because of the seizures he began to have this past summer.

Therapists

The therapist will come in and help Tyler with his Applied Behavioral Analysis (ABA) therapy. They will also use the space to type out their notes on Tyler's therapy.

Who's using the space?

Current Issues Research Application Chart

Reference (APA format)	Research Discovery/Findings	Design Applications
Olesen, J. (2016, September 06). Psychological Effects Of Color In Interior Design. Retrieved September 26, 2018, from https://www.color-meanings.com/psychological-effects-color-interior-design/	Olesen (2016) found that different colors can evoke different moods to people. For example, reds are more stimulating while greens are more grounding.	<ul style="list-style-type: none"> Utilize color to evoke moods that are desired within a space. Use natural, earthy finishes to provoke calmness
Olesen, J. (2016, September 06). Psychological Effects Of Color In Interior Design. Retrieved September 26, 2018, from https://www.color-meanings.com/psychological-effects-color-interior-design/	Olesen (2016) found that people feel comfortable in colors that suit their personality, but in public spaces, neutral colors are used to make all occupants comfortable.	<ul style="list-style-type: none"> Utilize colors that the client likes and is comfortable in. Use neutral colors in spaces where many different people will be spending time.
Bourne, A., Gaines, K. S., & Pati, D. (2014). Designing for adults with intellectual development diversities: An integrative approach [Scholarly project]. In ASID Foundation. Retrieved September 26, 2018, from https://www.asid.org/resources/resources/view/resource-center/162	Bourne (2014) found that the number of adults with Autism are going up along with the number of them that are living independently.	<ul style="list-style-type: none"> Find solutions that support a person with Autism living independently. Make homes more accommodable toward this trend.
Bourne, A., Gaines, K. S., & Pati, D. (2014). Designing for adults with intellectual development diversities: An integrative approach [Scholarly project]. In ASID Foundation. Retrieved September 26, 2018, from https://www.asid.org/resources/resources/view/resource-center/162	According to Bourne (2014) six themes were formed around the idea of designing for a person with Autism. These themes included communicate, empower, engage, accommodate, enrich, and encourage.	<ul style="list-style-type: none"> Find ways to utilize these themes in spaces and be versatile about it.
American Society of Interior Designers. (2014, April 30). Impactful Design: Creating Spaces for Individuals with Autism. Retrieved September 26, 2018, from http://icon.asid.org/index.php/2014/04/30/impactful-design-creating-spaces-for-individuals-with-autism/	American Society of Interior Designers(ASID) (2014) stated that individuals with Autism can be greatly impacted by things in their environment.	<ul style="list-style-type: none"> Be careful as to what is included in spaces so as not to overstimulate. Utilize diffused lighting.
American Society of Interior Designers. (2014, April 30). Impactful Design: Creating Spaces for Individuals with Autism. Retrieved September 26, 2018, from http://icon.asid.org/index.php/2014/04/30/impactful-design-creating-spaces-for-individuals-with-autism/	ASID also states that, "Designing environments for people with autism can make the lives of those people better, can assist caretakers, and can even affect the course of the disorder."	<ul style="list-style-type: none"> Use features that make every day tasks easier for a person with Autism. Find ways to help caretakers use their physical environment as assistance.
BRANZ Ltd. (2007). Designing Quality Learning Spaces: Lighting [PDF]. Ministry of Education.	BRANZ (2007) states that indirect lighting can help reduce glare on screens.	<ul style="list-style-type: none"> Use indirect lighting for rooms with technology.
BRANZ Ltd. (2007). Designing Quality Learning Spaces: Lighting [PDF]. Ministry of Education.	Having a monitor on the wall across from a window will greatly increase glare (BRANZ, 2007).	<ul style="list-style-type: none"> Try to avoid placing technology across from windows. Use window coverings.

Research Summary

Design is something that can be done for anyone. Just because a person has Autism doesn't mean a space can't be designed to their wants and needs just as easy as anyone else. By looking at how color effects people, how to design for someone with an intellectual development, creating spaces for individuals specifically with Autism, and lighting in different parts of the home, it will be easy to find the perfect design solution for Tyler and his family to enjoy.

Color plays a very important role in everyone's lives. It creates feelings and moods and is something both homeowners and designers need to utilize carefully to create an appropriate atmosphere in a space. Different colors can create different moods such as excitement, passion, mystery, or relaxation. By understanding feelings each color evokes, one can understand how to create just the mood that is needed in a space. Red stimulates and excites users of a space. Orange can make users feel energetic, adventurous and friendly. Yellow can be cheerful, friendly and airy, but can be overstimulating if too much is used. Blue evokes feelings of serenity and tranquility. Green is cool and friendly. Purple gives a dignified and dramatic look to a space. Black, if used right, adds depth and elegance to a room. White is fresh and peaceful.

Using color correctly can completely change the mood or feeling of a room. By applying colors in Tyler's bedroom that are hues of warm greys, and other calming tones, it's easy to make a room an environment that is comfortable. Adding natural finishes to this can enhance that feeling as well as create a feeling of being grounded. Using more stimulating colors, like vibrant greens and cool blues, will help to stimulate Tyler , but toning it back will make it seem more comforting as well which is, to a custom computer desk I ordered it only.

The number of adults with Autism Spectrum Disorder (ASD) is going up, and so is the demand and support for independent living for these individuals. A lot of focus is going into creating village-like communities instead of institutions to help people with ASD transition better from their homes to an independent lifestyle. It was estimated in 2009 that 500,000 children with ASD would reach adulthood.

In this research project, five housing and work communities across the United States were examined to inform what the optimum design for these communities would be. People in these communities were observed and interviewed to see how well the quality of person-environment fits were. Six themes were developed to produce optimum design. These themes included communicate, empower, engage, accommodate, enrich, and encourage.

This increasing numbers is startling. This means designers are going to have to up their level of design with this popular trend happening. Designing spaces like this are becoming more and more of a priority. By simply remembering Tyler has 2 days done with therapy!

. Autism Spectrum Disorder (ASD) is a term for a group of brain development disorders that can affect the areas of communication, social interaction, and cognitive function. An individual with ASD can also suffer from other medical disorders. Individuals with ASD can be greatly affected by what surrounds them in their physical environments. Different people have different feelings as well, so designing for individuals with ASD has no absolute solution.

As stated in the article, the physical environment, lighting, textures, colors, furniture arrangement, floors, window placements, etc., can have a huge effect on an individual with ASD. As an interior designer, it's our job to accommodate these needs and create spaces where they can have the best quality of life possible. Interior designers must design a space to make life better for individuals with ASD as well as help caretakers. There's a reason it's called Autism Spectrum Disorder; there's a huge spectrum of the disorder, so each individual has their own needs. For example, one person may like natural light and benefit from having a sun lamp in a space, but the next individual may be overly sensitive to light and need room-darkening shades. Having a set design solution for individuals with ASD is simply not possible. It's all about designing specifically from one person to the next.

This reading provided information about the psychology of color and how people react to it when certain colors are used in a space. It's very important to pay attention to what colors are used in

specific rooms because of the feelings and moods evoked by them. A designer wouldn't want to put a color that creates feelings of tranquility and serenity in a space where work needs to be done; it may put users to sleep. It's important for colors to be used appropriately within spaces to create the mood that is desired. This information provides specific information an interior designer can use while looking at colors to use in certain spaces. As a designer, it is important to know this and know how to correctly apply colors in spaces.

As stated in the article, the physical environment, lighting, textures, colors, furniture arrangement, floors, window placements, etc., can have a huge effect on an individual with ASD. As an interior designer, it's our job to accommodate these needs and create spaces where they can have the best quality of life possible. Interior designers must design a space to make life better for individuals with ASD as well as help caretakers. There's a reason it's called Autism Spectrum Disorder; there's a huge spectrum of the disorder, so each individual has their own needs. For example, one person may like natural light and benefit from having a sun lamp in a space, but the next individual may be overly sensitive to light and need room-darkening shades. Having a set design solution for individuals with ASD is simply not possible. It's all about designing specifically from one person to the next.

Computers can get reflections across their screens that will reduce the contrast and, in turn, make it difficult to see and read. This means that these reflections from windows, luminaires, and shiny surfaces should be avoided at all costs. Task lights with good color rendering lamps should be provided. These task lights, ideally, will be low voltage. Some feature lighting should be provided to have some interest and variety in the space. Window treatments are also a good idea to avoid direct sunlight entering the room and it's best to position a computer so there is no window behind the user.

It's important for interior designers to understand how to provide lighting for technology use because various types of technology are becoming more and more prevalent in today's society. If a

space, especially a space specifically for technology use, has good lighting, it will place less strain on a user and create a space that is easier to use for that function. Even if there is a slight cost increase for the type of lighting for technology rooms, in the long run, users will enjoy the space more. It's important for an interior designer to be aware of different lighting needs in different spaces. Part of an interior designer's job is to understand how each element of a space will react with one another, and to put together a cohesive space. The type of lighting used in a space with technology is vital to the space's cohesiveness.

Tyler's Autism does not define who he is; above all, he is a person first. Different things will affect him differently, just like it would anyone else. By looking at how color effects people, how to design for someone with an intellectual development, creating spaces for individuals specifically with Autism, and lighting in different parts of the home it's hoped that a perfect space for Tyler is created.

Goals and Objectives

Therapy Room

Create a stimulating space for learning.

- Utilize colors such as greens or reds that help with stimulation
- Use light, natural, finishes in each space.
- Include electronics and other activities that will help with Tyler's ABA therapy.

Don't create a therapy room that feels like a classroom.

- Use furniture that is welcoming
- Utilize colors that are conductive to thinking but aren't associated with schools.
- Use finishes that feel more homely

Utilize lighting to its best capability.

- Use dimmable lighting so Tyler can have lights as he pleases.
- Create layers of lights with accent and task lighting.
- Make sure lights have a warm color Kelvin, so it doesn't overstimulate.

Create a versatile therapy room.

- Include technology that is interactive.
- Include furniture that is multiuse.
- Use items that can be moved around easily to change set up.

Technology Room

Create a space that is versatile.

- Use furniture that Tyler can use in multiple ways.
- Use lounge-like furniture.
- Include electronic elements for Tyler.

Create a space Tyler is comfortable in.

- Create a visual barrier between Tyler and the therapist's workstation.
- Use inspiration from things Tyler likes.
- Use colors that evoke feelings of comfort.

Utilize lighting correctly for the space.

- Use indirect lighting to help reduce glare off of technology screens
- Provide adequate task lighting.
- Use good CRI lighting.

Provide various places for Tyler and guests to spend time.

- Provide various charging ports for Tyler's iPads.
- Provide various types of seating.
- Provide features that encourage people to spend time in the room with Tyler.

Bedroom

Have the space be comfortable and relaxing for Tyler.

- Utilize colors that evoke feelings of relaxation.
- Use soft finishes for bedding, carpet, curtains, etc.
- Use natural, warm finishes.

Use lighting correctly in the space.

- Layer lighting in the space.
- Use dimmable lighting that Tyler can control.
- Keep natural lighting implemented in the space.

Create a space that encourages therapy.

- Create a custom closet that encourages Tyler to pick out his own outfits.
- Move vents so Tyler can't hide therapy tools in them.
- Utilize labels and color coding with clothing storage and drawers.

Implement features that are beneficial to Tyler.

- Use electric roller blinds to create privacy for Tyler.
- Use a padded headboard so it's not uncomfortable for Tyler to sleep right up against it.
- Use a soft flooring in case of seizures.

Design Concept Statements

The Technology Room

Tyler loves spending time on his iPad, watching YouTube, and watching movies, so the technology room should be a space that makes this easy for him to do. By drawing inspiration from *The Lion King*, some vivid colors are brought into the space, including his favorite, Magenta. However, Tyler is still growing and will soon be a young adult. This is also the room where most often Tyler will spend time with others. By utilizing muted tones of some of the vibrant colors Tyler loves, greens, blues, magenta, it will allow the space to be comfortable for Tyler and his guests no matter how much they grow.

The Office

Tyler is not a fan of therapy, but it's a very important and integral part of his life. Mixing colors that are stimulating with colors that are relaxing will help him remain calm and concentrated during his therapy sessions. To create comfort natural finishes, dim lighting, and again some of Tyler's favorite colors will be integrated into the space. Lightweight furniture and technology will help the space be more versatile for different kinds of therapy.

The Bedroom

This is where Tyler comes when he's feeling overstimulated and wants to be alone, so it's important to implement colors that have a calming effect. Natural finishes in the space can help Tyler feel more grounded and more peaceful. Tyler's privacy was also a concern. Tyler loves having his window open, so using a sheer shade, so Tyler can see out but others can't see in, is the optimal solution. Implementing smooth edges and soft surfaces will help with Tyler's safety in the bedroom.

Room Data Sheets

Room/Area Name: Office		
Users: Tyler and Therapists		
Activities: Therapy		
Furniture: <ul style="list-style-type: none">• Table• 3 chairs• Storage unit	Heating/Ventilation/AC: <ul style="list-style-type: none">• Central Heating• Central Air	Flooring: <ul style="list-style-type: none">• Engineered cork
Equipment/Appliances: <ul style="list-style-type: none">• Smartboard• Interactive screen	Plumbing/Fixtures: <ul style="list-style-type: none">• N/A	Wall Partitions: <ul style="list-style-type: none">• N/A
Hours of Use: <ul style="list-style-type: none">• Morning and Afternoon	Communication: <ul style="list-style-type: none">• Data• Wifi	Ceiling: <ul style="list-style-type: none">• Painted Gypsum
Special Provisions: <ul style="list-style-type: none">• N/A	Electrical: <ul style="list-style-type: none">• 5 outlets• 2 light switches	Doors/Windows: <ul style="list-style-type: none">• Solid oak door• One casement window
Occupant Classification & Occupant Load Per Room: <ul style="list-style-type: none">• 4 people	Room Size: <ul style="list-style-type: none">• 115.5 square feet	Natural Lighting & Natural Lighting Controls: <ul style="list-style-type: none">• Electric roller blinds
Additional Information: <ul style="list-style-type: none">• Custom closet shelving		

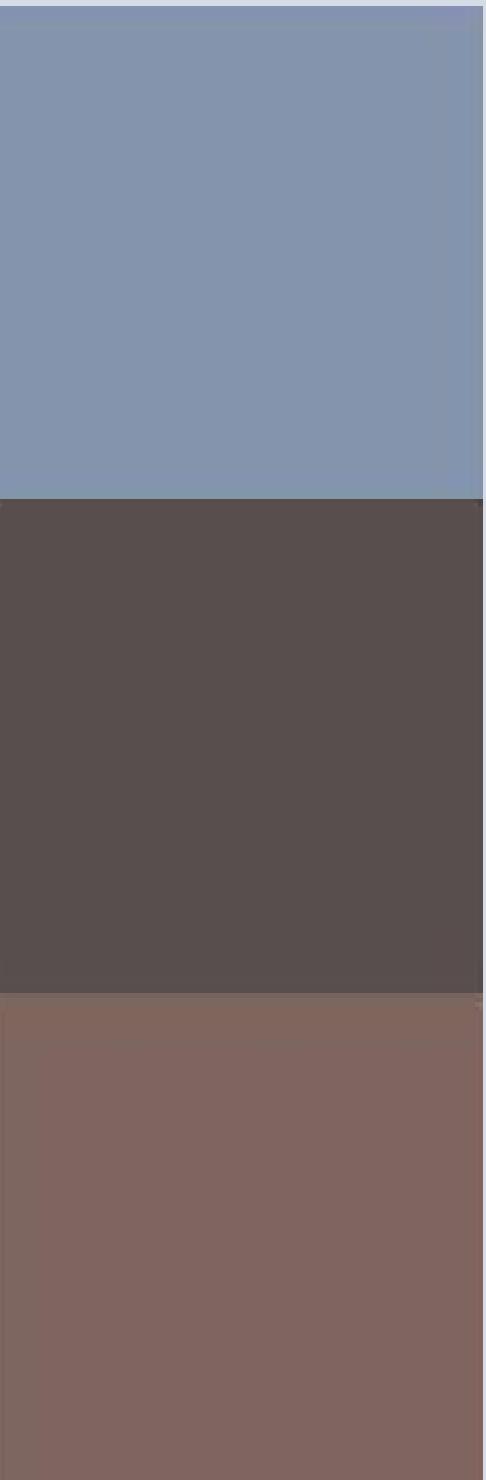
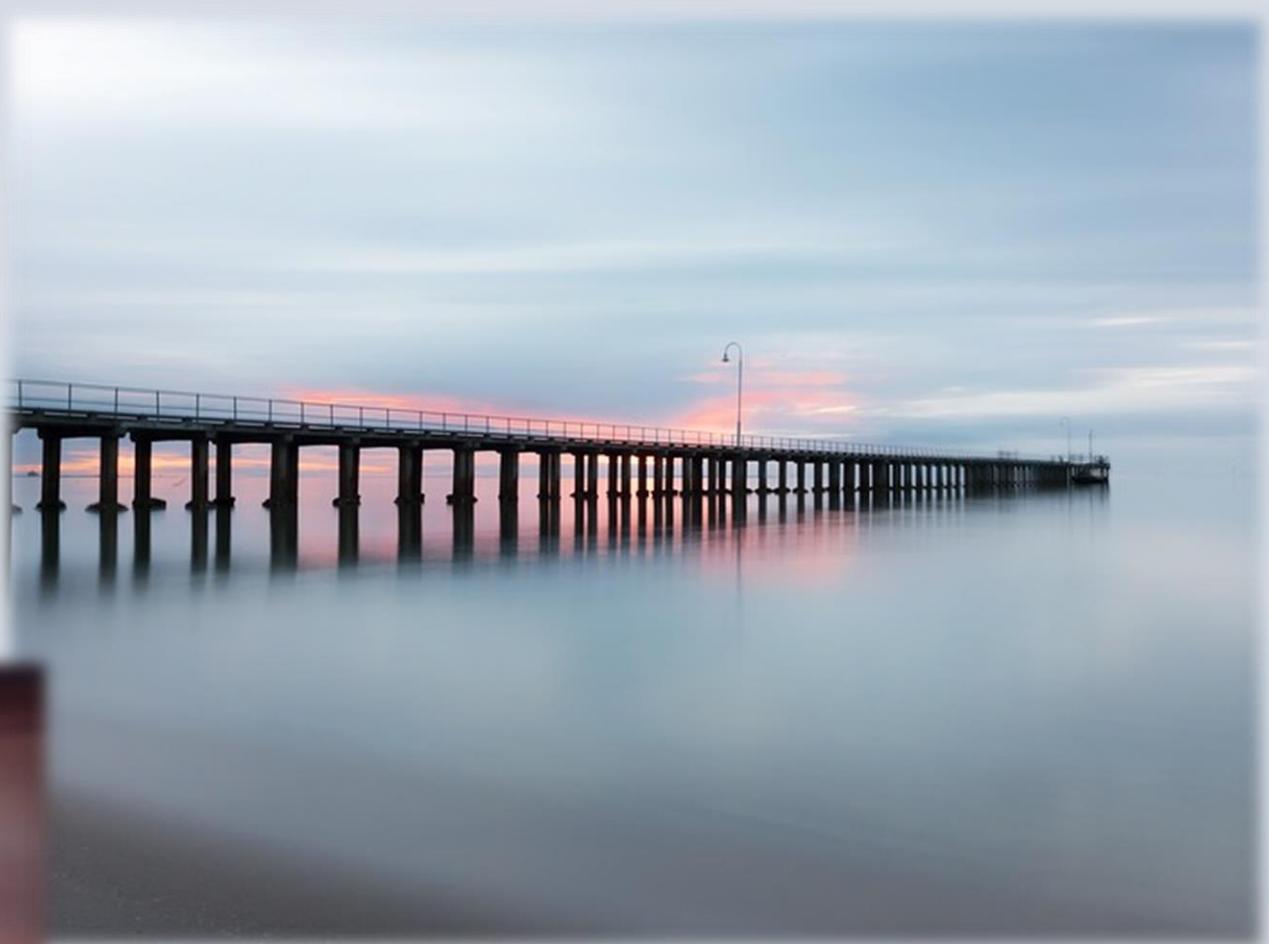
Room/Area Name: Tyler's Bedroom		
Users: Tyler		
Activities: Sleeping and relaxing		
Furniture: <ul style="list-style-type: none">• Queen sized bed• End table• Wardrobe	Heating/Ventilation/AC: <ul style="list-style-type: none">• Central heating• Central Air	Flooring: <ul style="list-style-type: none">• Carpet
Equipment/Appliances: <ul style="list-style-type: none">• N/A	Plumbing/Fixtures: <ul style="list-style-type: none">• N/A	Wall Partitions: <ul style="list-style-type: none">• N/A
Hours of Use: <ul style="list-style-type: none">• Evening/Night	Communication: <ul style="list-style-type: none">• Cable TV• Data• WiFi	Ceiling: <ul style="list-style-type: none">• Painted Gypsum• Covered Gypsum
Special Provisions: <ul style="list-style-type: none">• N/A	Electrical: <ul style="list-style-type: none">• 4 outlets• 2 light switches	Doors/Windows: <ul style="list-style-type: none">• Solid oak door• One casement window
Occupant Classification & Occupant Load Per Room: <ul style="list-style-type: none">• 2 people	Room Size: <ul style="list-style-type: none">• 126.5 square feet	Natural Lighting & Natural Lighting Controls: <ul style="list-style-type: none">• Electric roller blinds• Sheer drapery
Additional Information: <ul style="list-style-type: none">• Custom closet		

Room/Area Name: Tyler's Technology Room		
Users: Tyler, Therapist, and guests		
Activities: Relaxing and typing up notes		
Furniture: <ul style="list-style-type: none">• Sofa• Chair• Desk• Desk chair	Heating/Ventilation/AC: <ul style="list-style-type: none">• Central heating• Central air	Flooring: <ul style="list-style-type: none">• Engineered cork
Equipment/Appliances: <ul style="list-style-type: none">• TV• Electronic Schedule	Plumbing/Fixtures: <ul style="list-style-type: none">• N/A	Wall Partitions: <ul style="list-style-type: none">• Acoustic wall partition
Hours of Use: <ul style="list-style-type: none">• Morning, afternoon and evening	Communication: <ul style="list-style-type: none">• Cable TV• Data• Wifi	Ceiling: <ul style="list-style-type: none">• Painted Gypsum
Special Provisions: <ul style="list-style-type: none">• N/A	Electrical: <ul style="list-style-type: none">• 5 outlets• 1 light switch	Doors/Windows: <ul style="list-style-type: none">• 2 Casement windows
Occupant Classification & Occupant Load Per Room: <ul style="list-style-type: none">• 5 people	Room Size: <ul style="list-style-type: none">• 118 square feet	Natural Lighting & Natural Lighting Controls: <ul style="list-style-type: none">• Electric roller blinds
Additional Information: <ul style="list-style-type: none">• Custom Shelving		

Allison Voigt
A Space for Tyler
Technology Room and Office
Peacock



Allison Voigt
A Space for Tyler
Bedroom
Early Morning



Allison Voigt

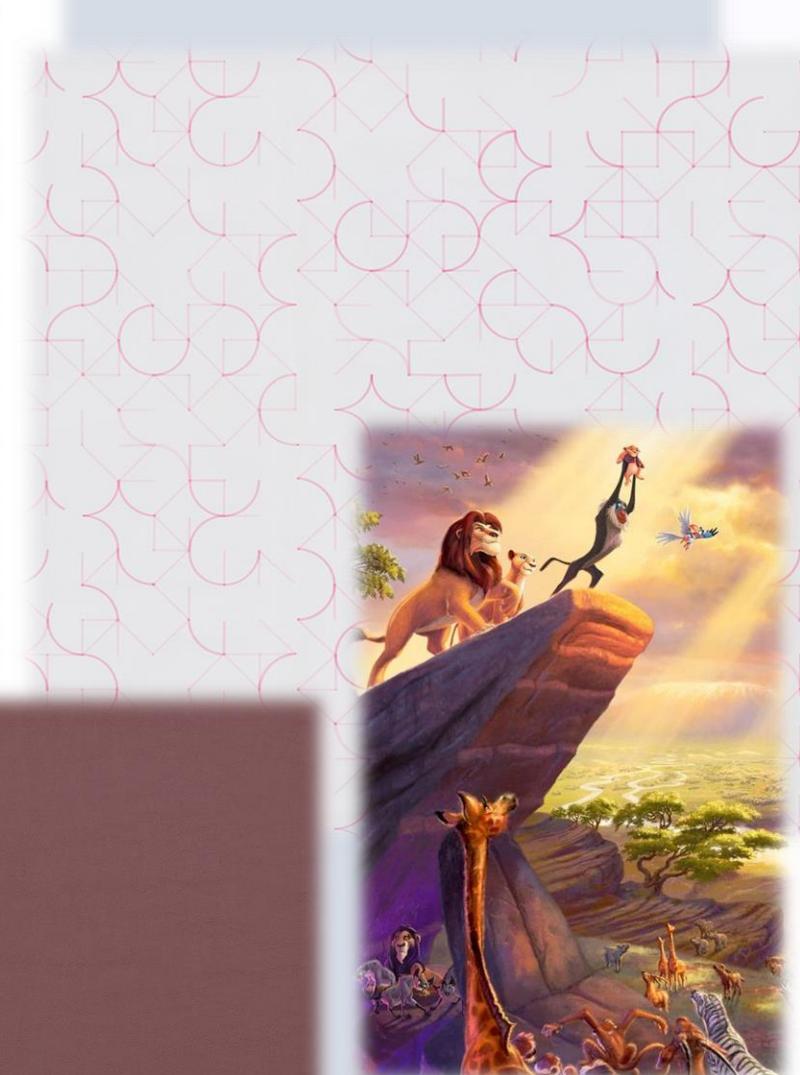
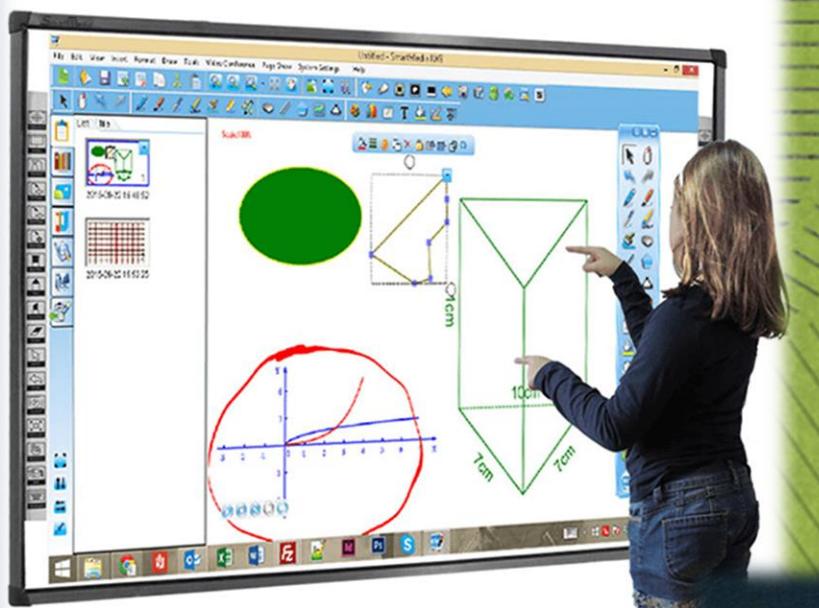
A Space for Tyler

Bedroom



Allison Voigt

A Space for Tyler Technology Room



Allison Voigt

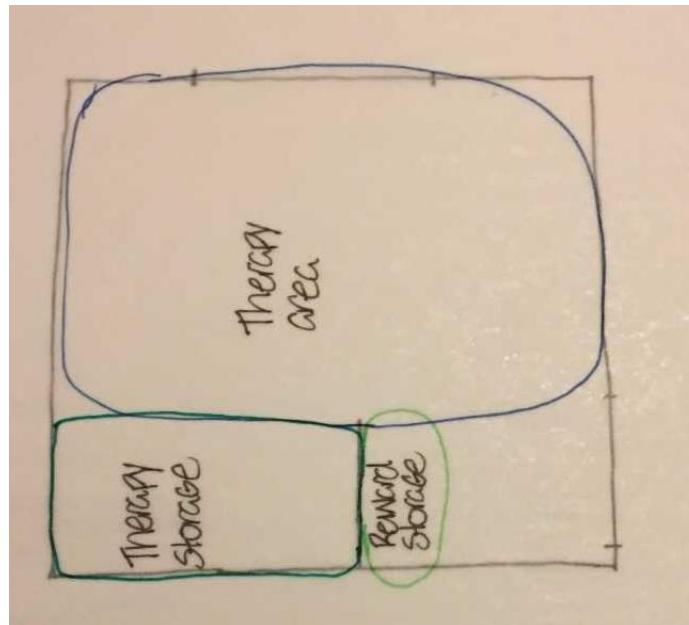
A Space for Tyler

Therapy Room

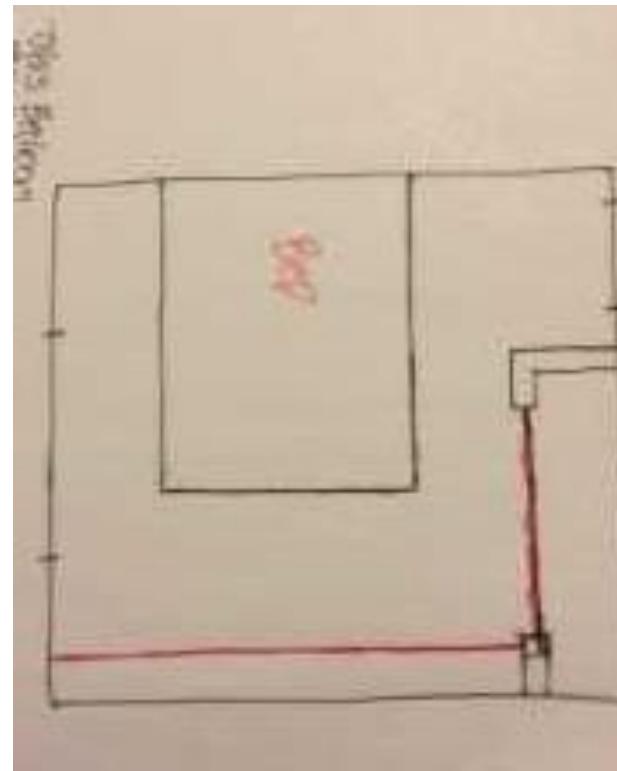


© Just a Gal

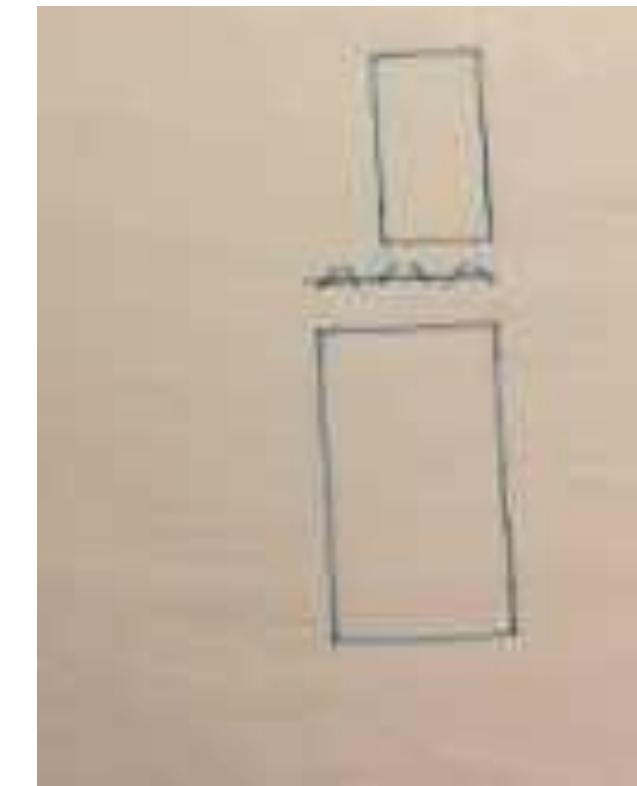
Ideation Sketches



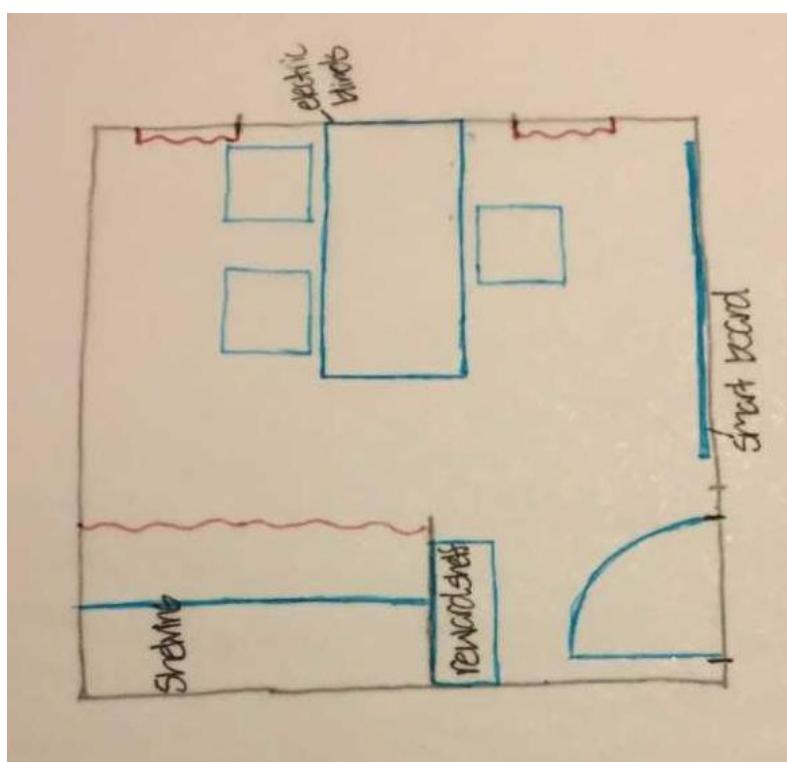
Beginning to look at how to block out the office.



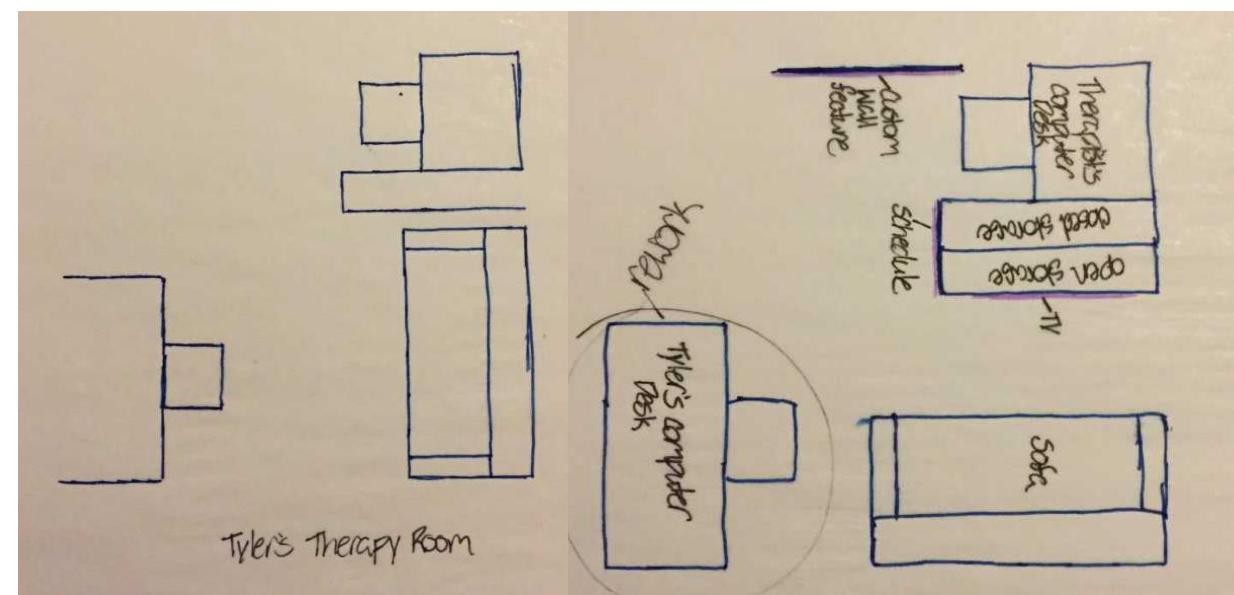
A possible layout of the furniture in the bedroom.



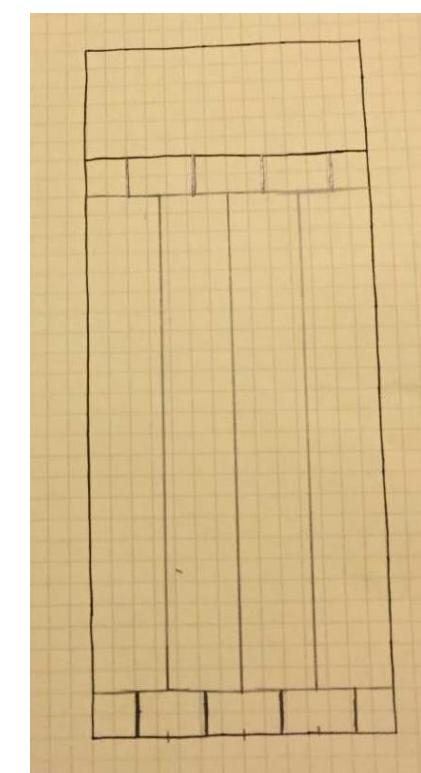
Showing the desire for an acoustic & visual barrier between the sofa and desk.



Showing possible positions
for furniture in the space.



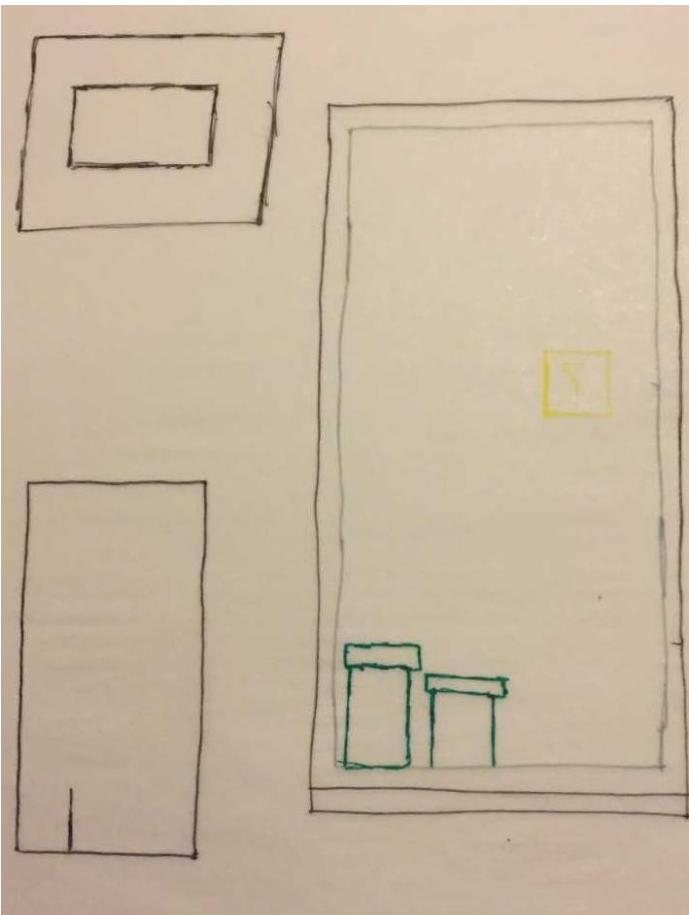
Two Possible furniture layouts in the Technology Room.



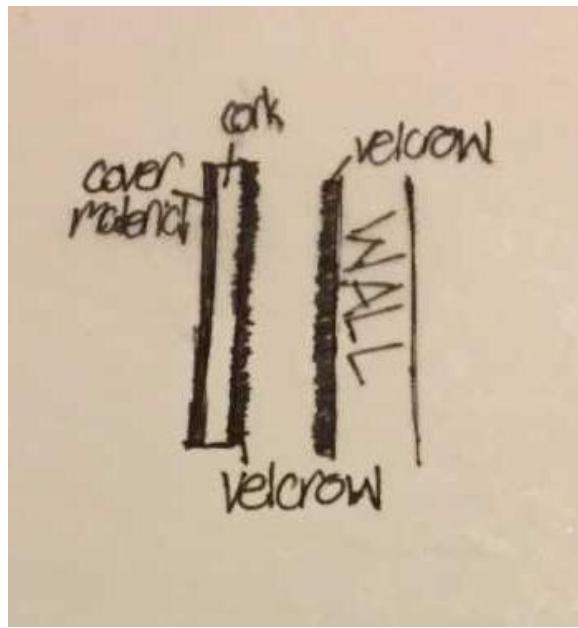
Drawing of possible barrier.



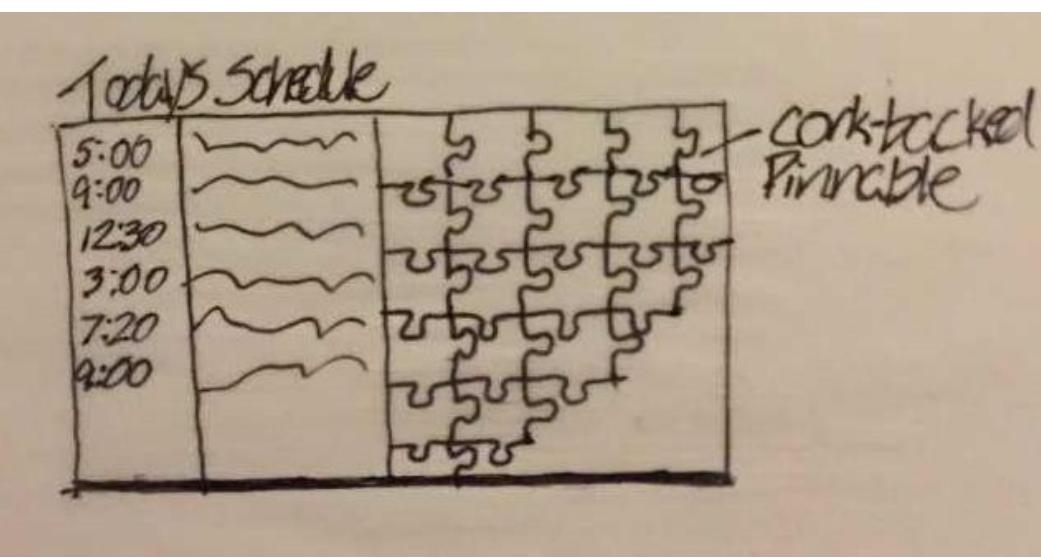
Possible stemming wall
to be used in the space



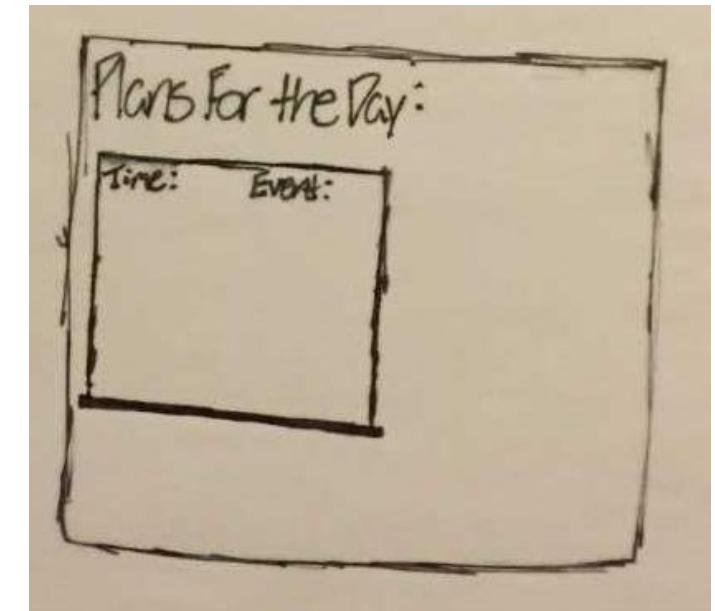
Another possible version of the wall that incorporates Mario.



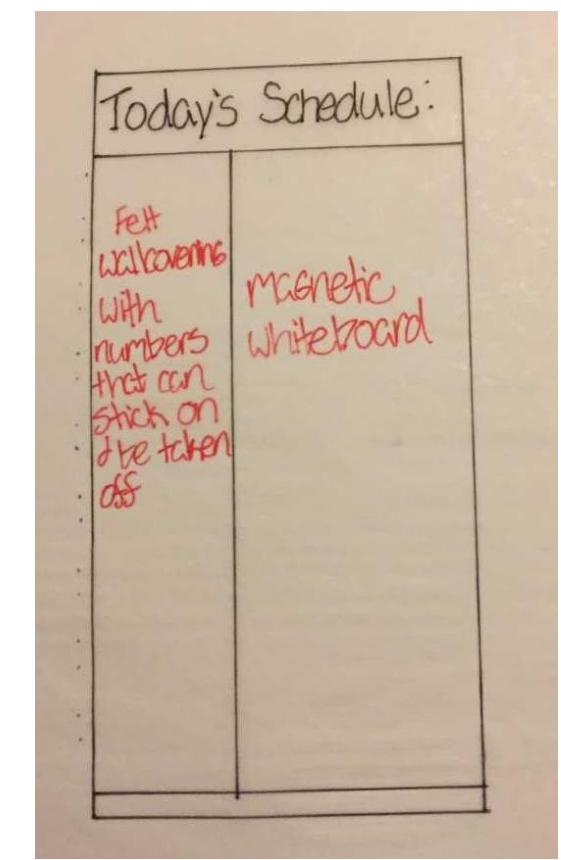
How the puzzle pieces could connect



Looking at ways Tyler's schedule can be displayed.



Looking at ways Tyler's schedule can be displayed.



Looking at ways Tyler's schedule can be displayed.

Allison Voigt
A Space for Tyler
Custom Element
Natural Rainbow



Allison Voigt
A Space for Tyler
Custom Element

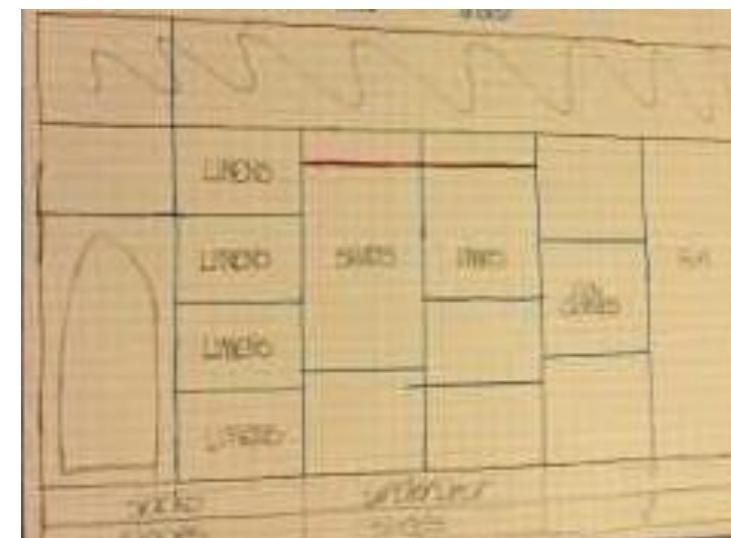
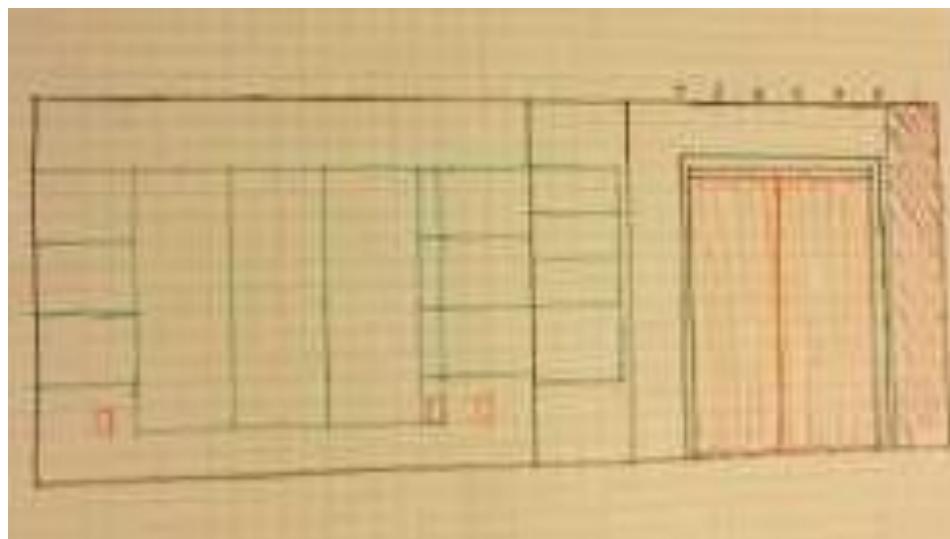


Organization Sensation

The Concept Statement

Therapy is an important part of Tyler's life, but it's not something he enjoys doing. Putting together an organizational piece that uses color, something Tyler likes, will hopefully make integrating his therapy into his everyday life easier or even enjoys. The goal is for Tyler to choose his own outfits on a daily basis but still look nice and put together. Using color-coordination, Tyler will get to look at beautiful, bright hues of color (in the order they would be in the rainbow, of course) while choosing what he's going to wear.

Ideation Sketches



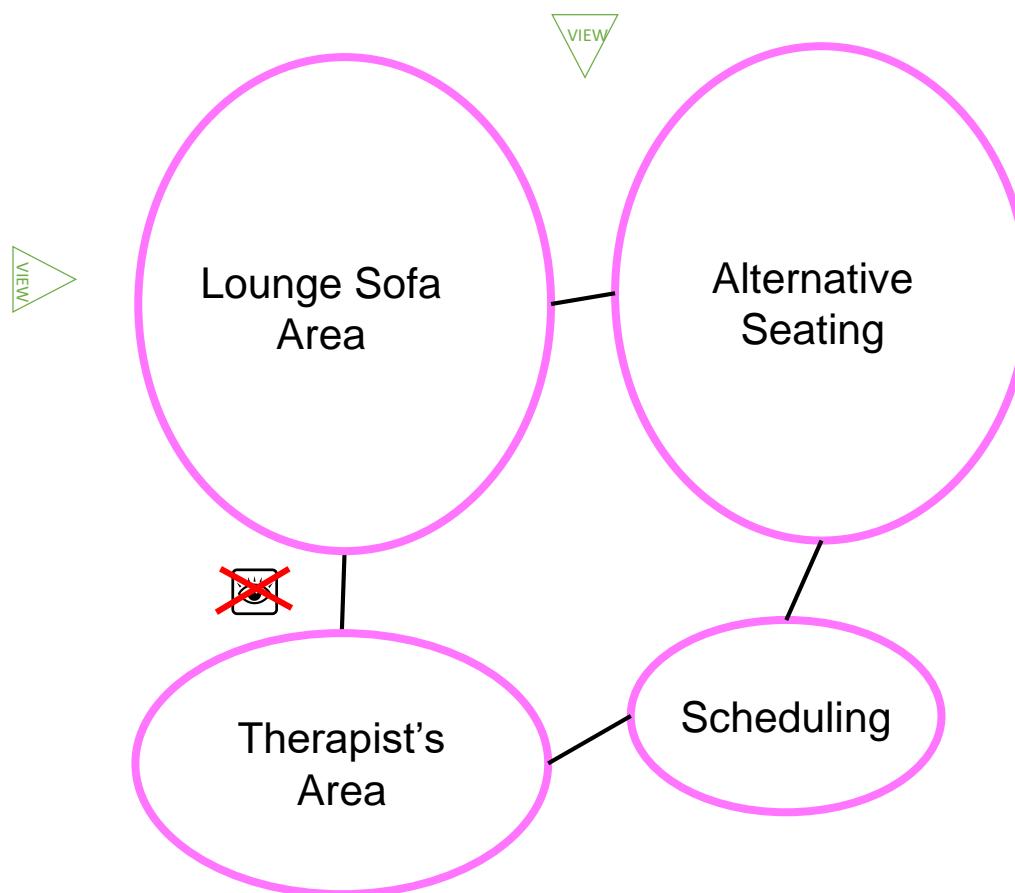
Originally, I was going to have the element outside the closet, but that got to be too much joinery for the small room.

Final Solution



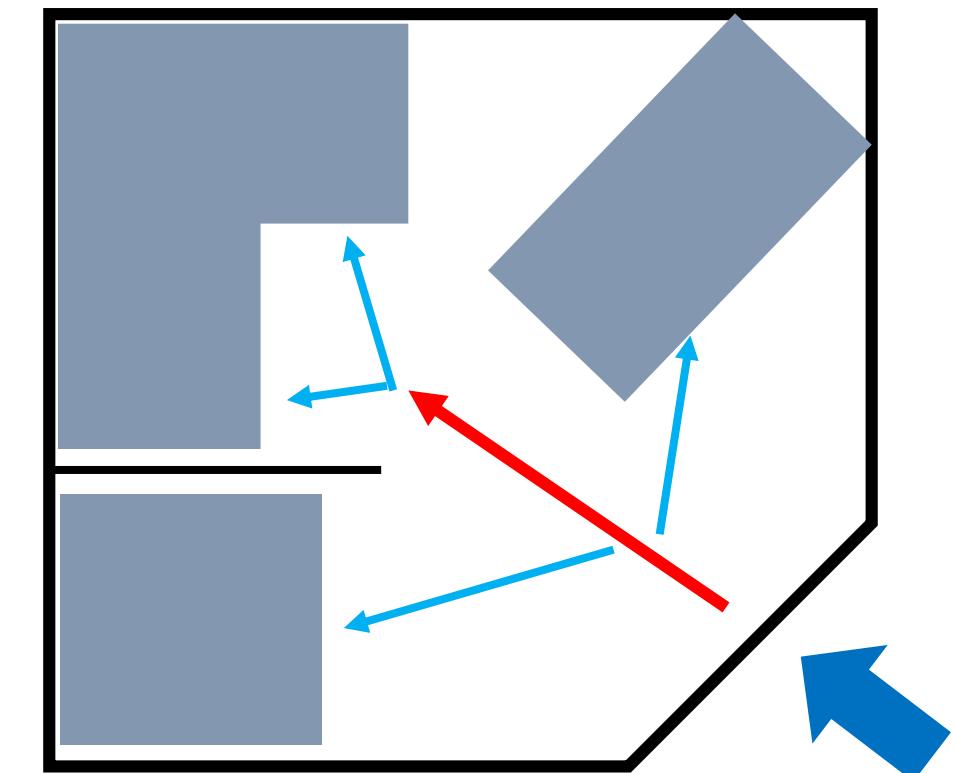
Some ideas of what could be stored inside.

Technology Room Diagrams



Key	
	Visual Separation
	Exterior view consideration
	Main entrance

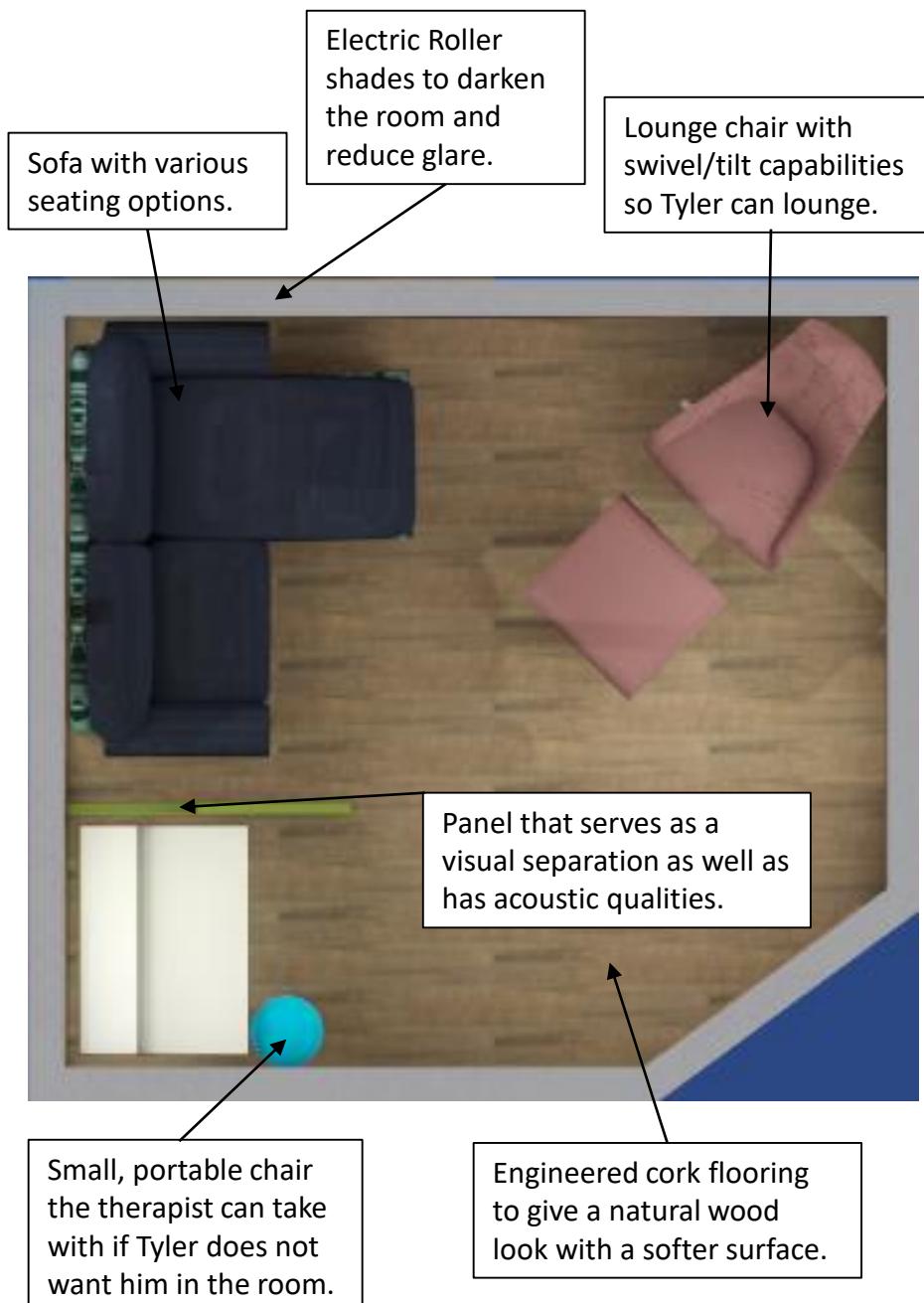
Key	
	Primary Path
	Secondary Path
	Main entrance



Bubble Diagram

Circulation Diagram

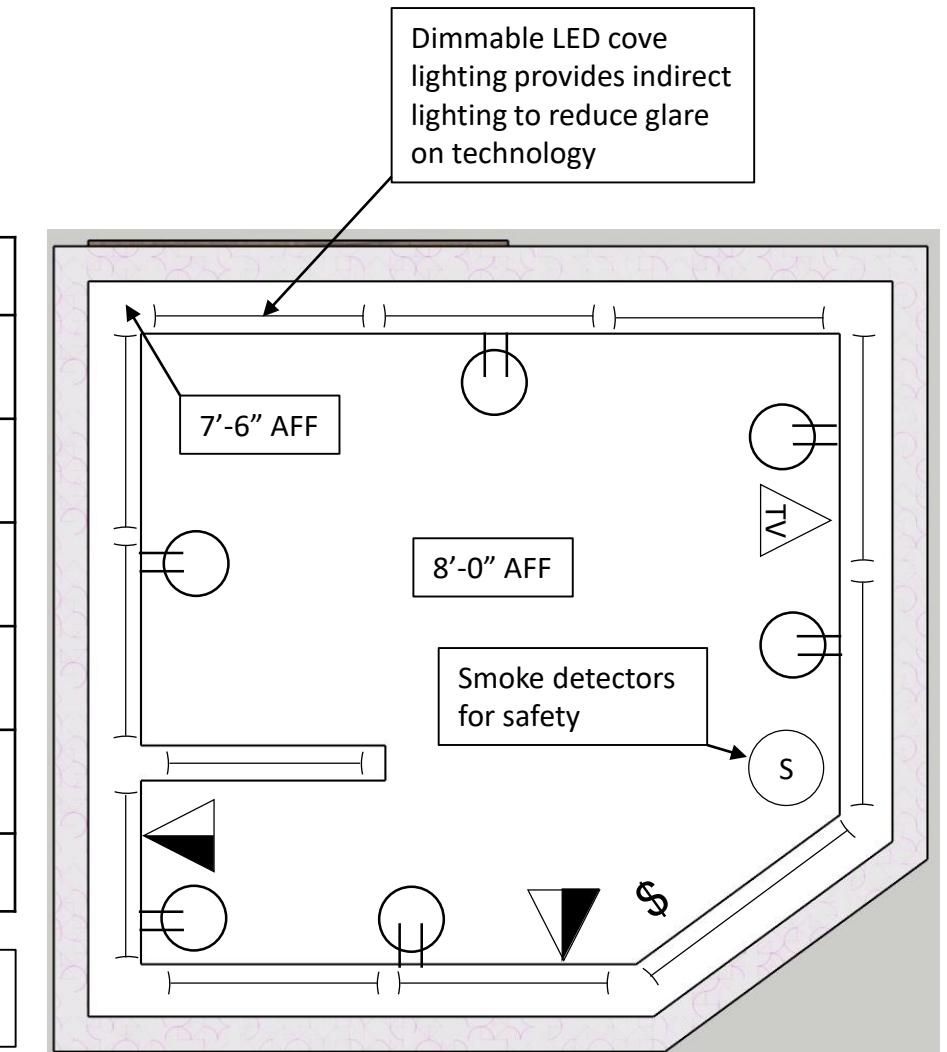
Technology Room Plans



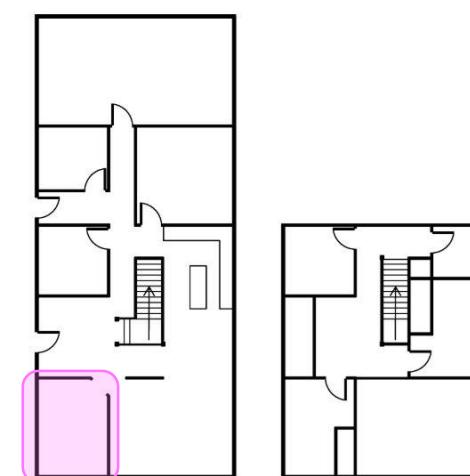
FF&E Plan

Key	
—	LED Cove Lighting
▲	Data/Communications Outlet
○	120 V receptacles
TV	Television
S	Smoke Detectors
\$	Switch

Note: All receptacles at 18" AFF unless otherwise noted.



Reflected Ceiling & Power and Communication Plan

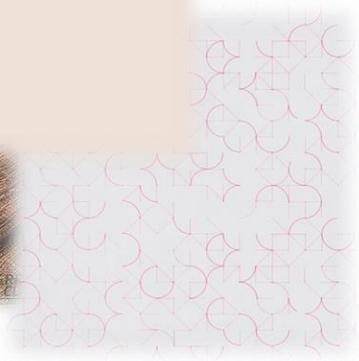


Technology Room

CF-1



PT -3



WC-1



F-3

C-1

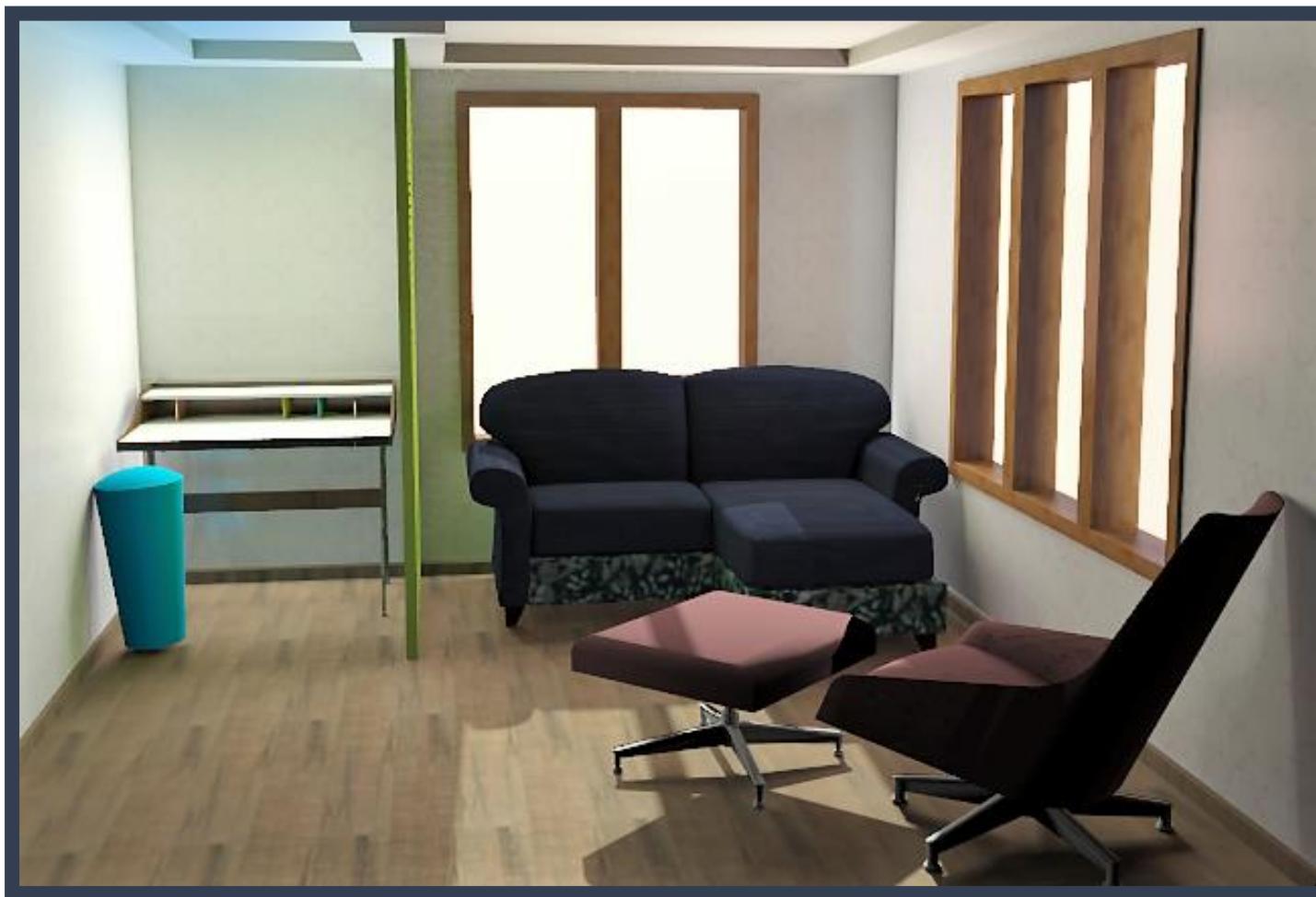


F-1



F-2

C-2



C-3

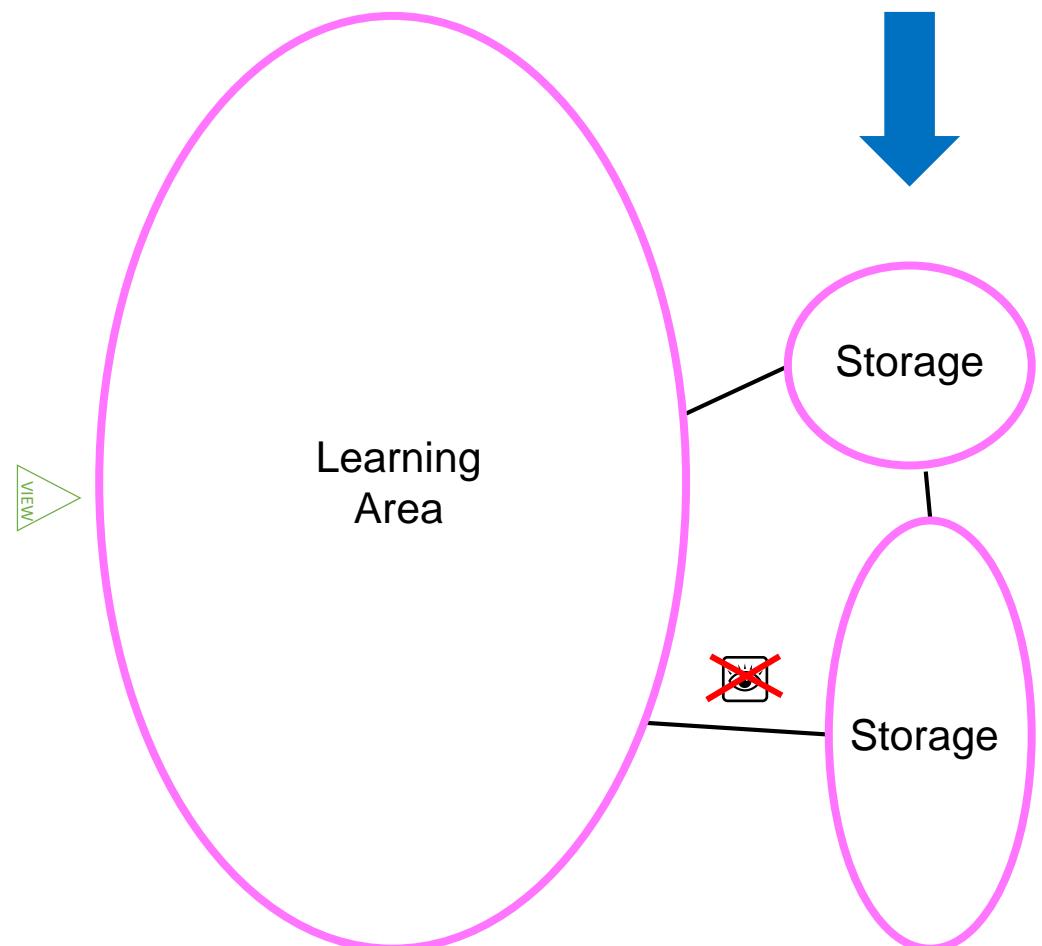


PS-1



D-1

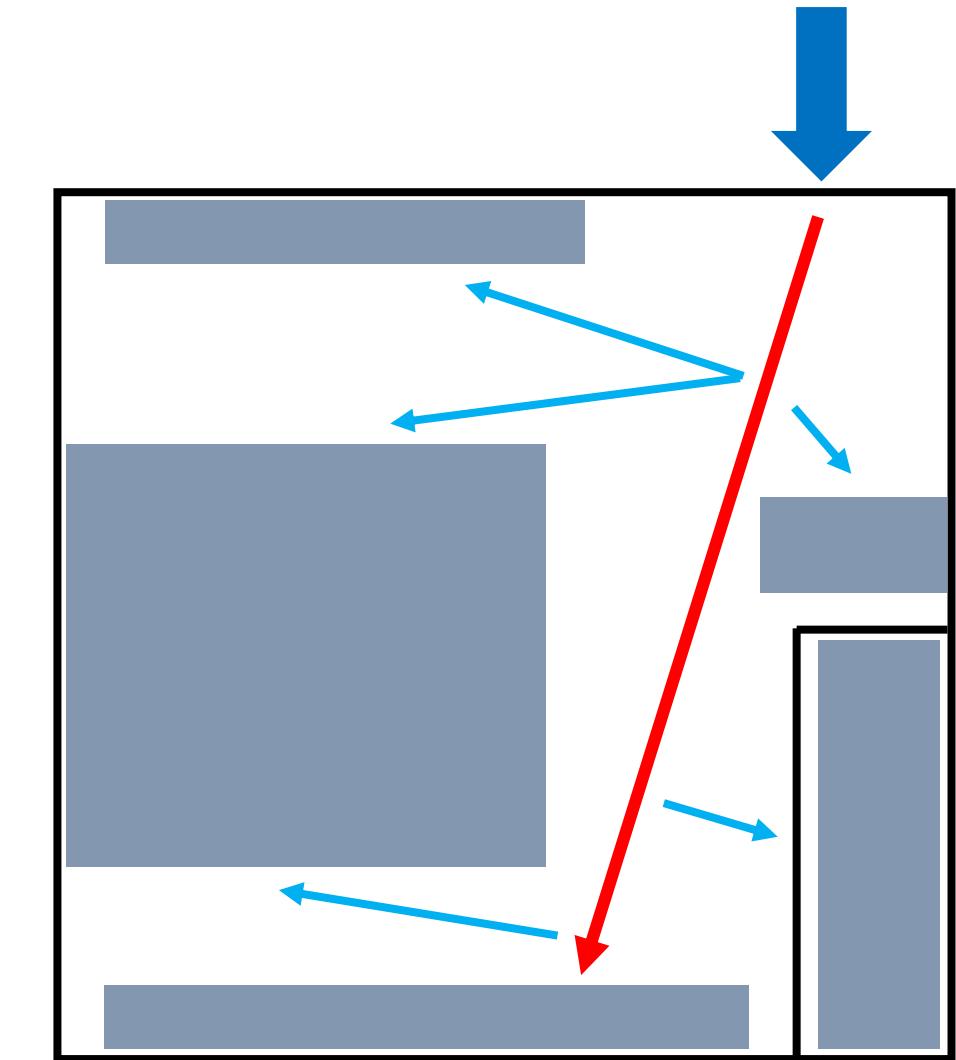
Office Diagrams



Bubble Diagram

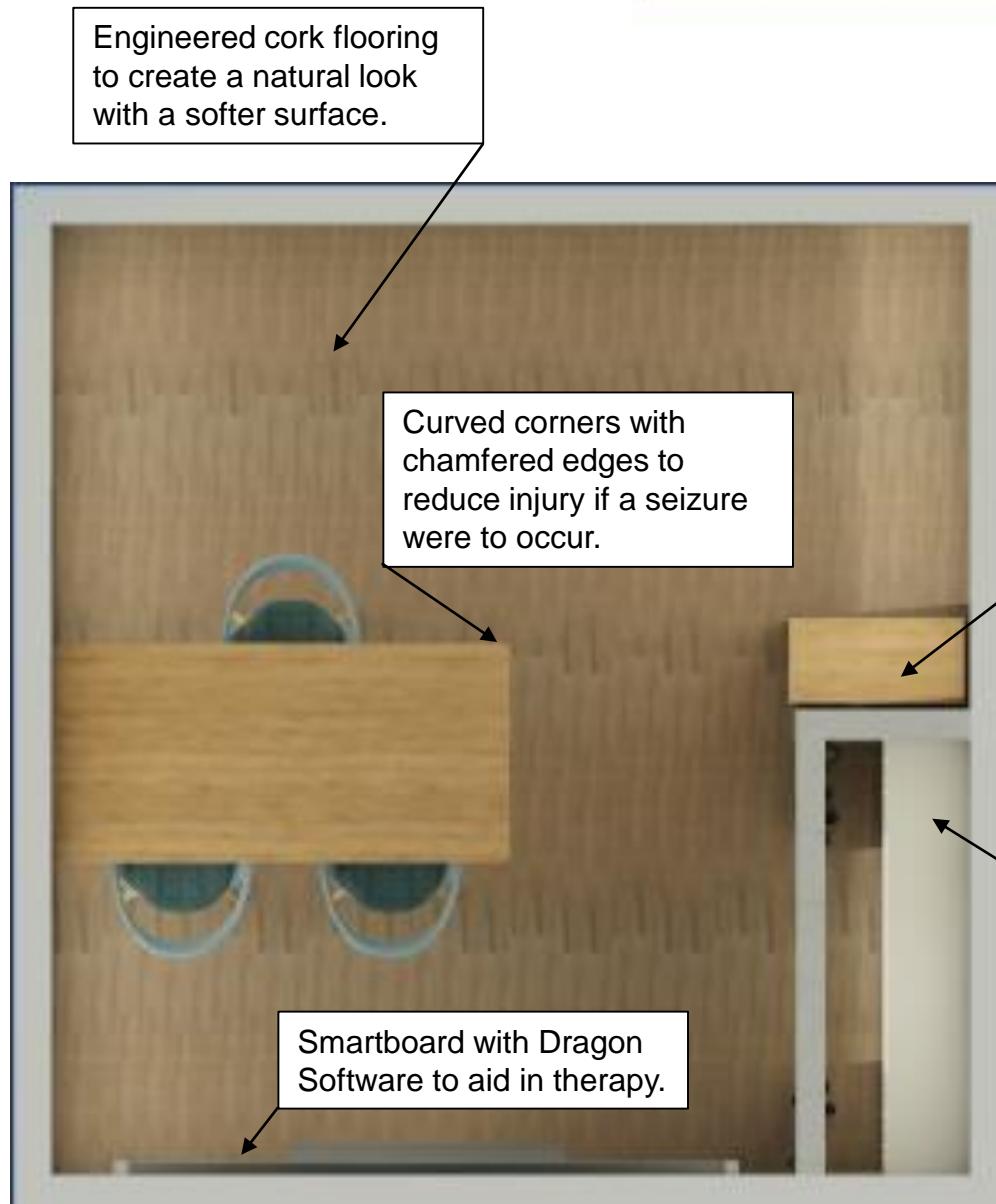
Key	
	Visual Separation
	Exterior view consideration
	Main entrance

Key	
	Primary Path
	Secondary Path
	Main entrance

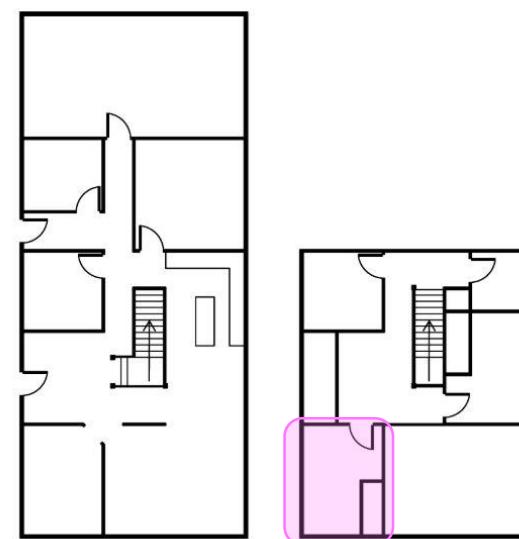


Circulation Diagram

Office Plans

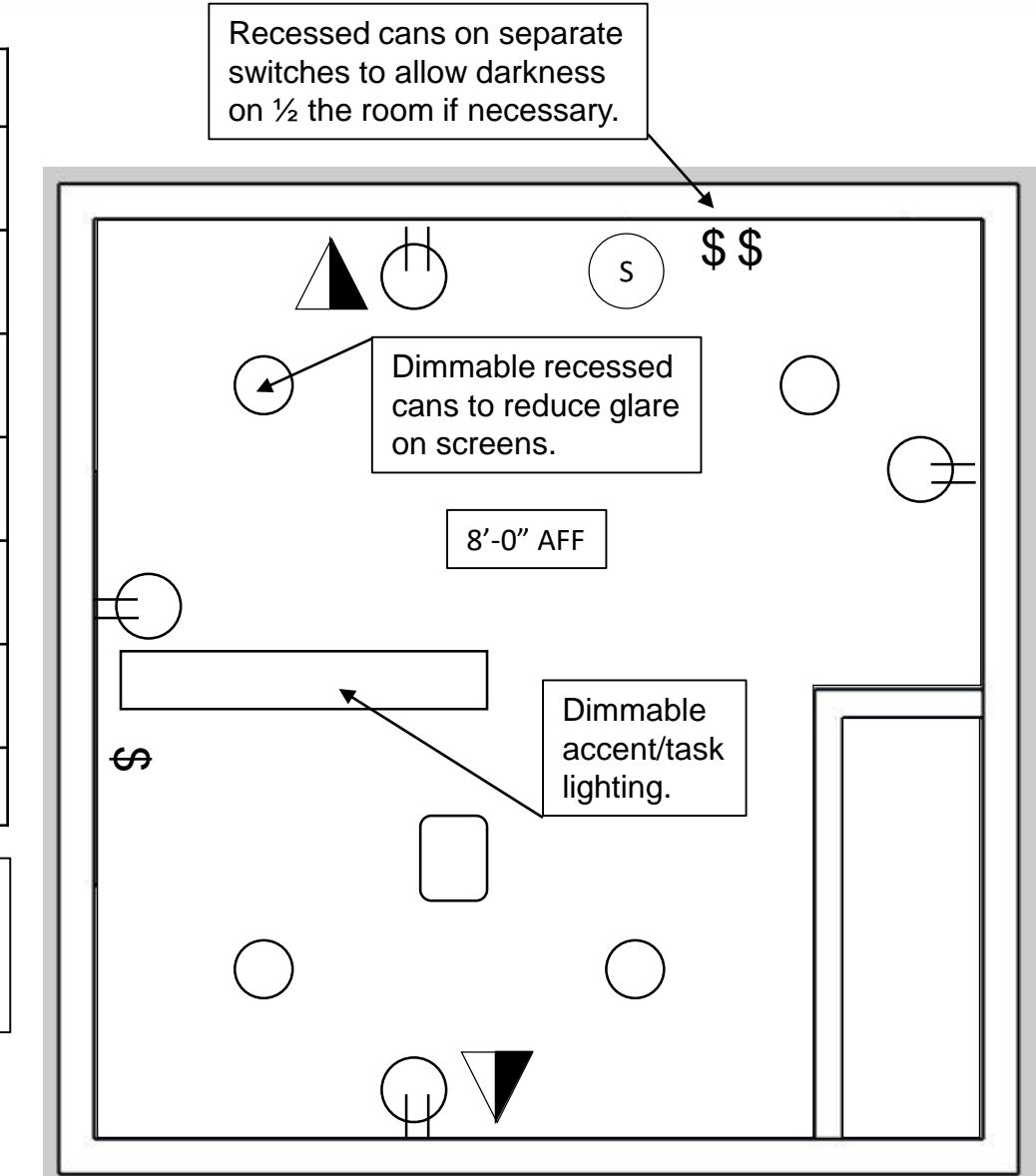


FF&E Plan



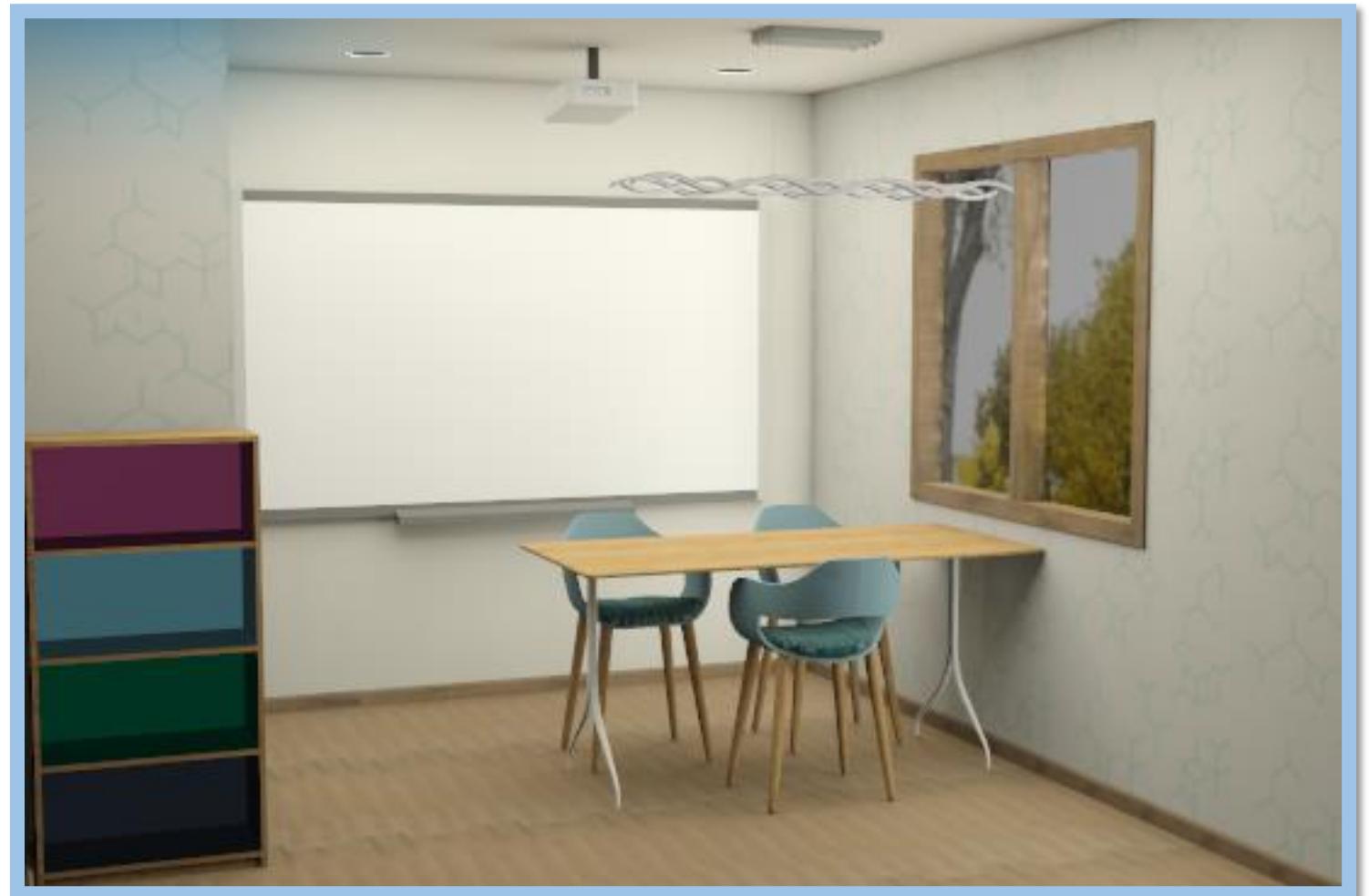
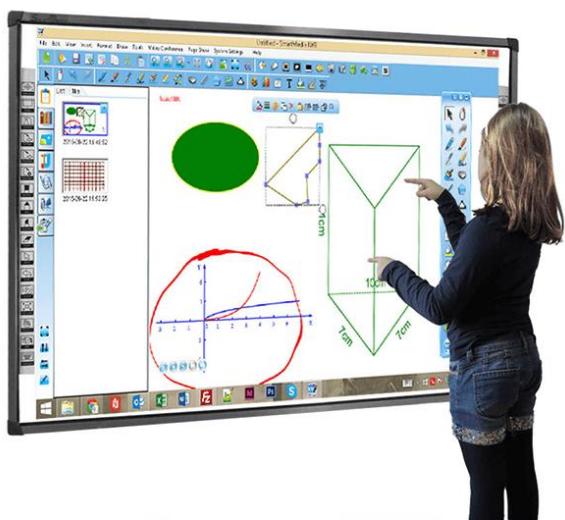
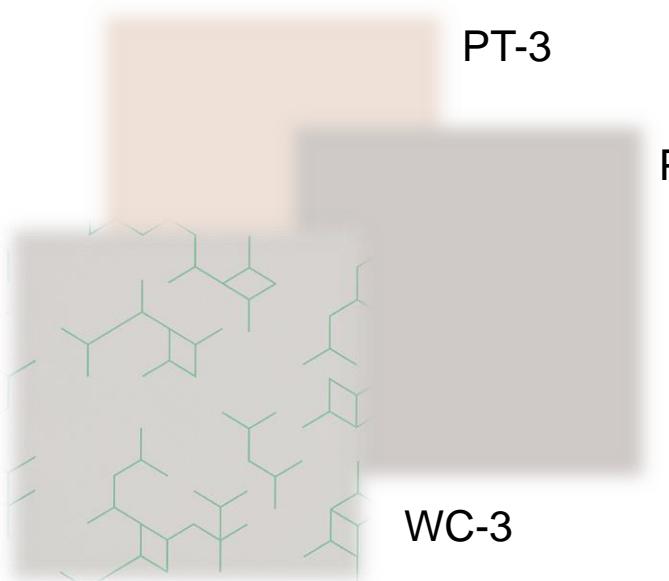
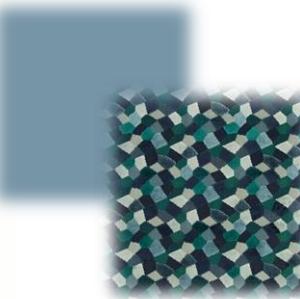
Key	
○	Recessed Can Lighting
■	Pendant Light
□	Projector
△	Data/Communications Outlet
—	120 V receptacles
S	Smoke detectors
\$	Light Switch

Note: All receptacles at 18" AFF unless otherwise noted.

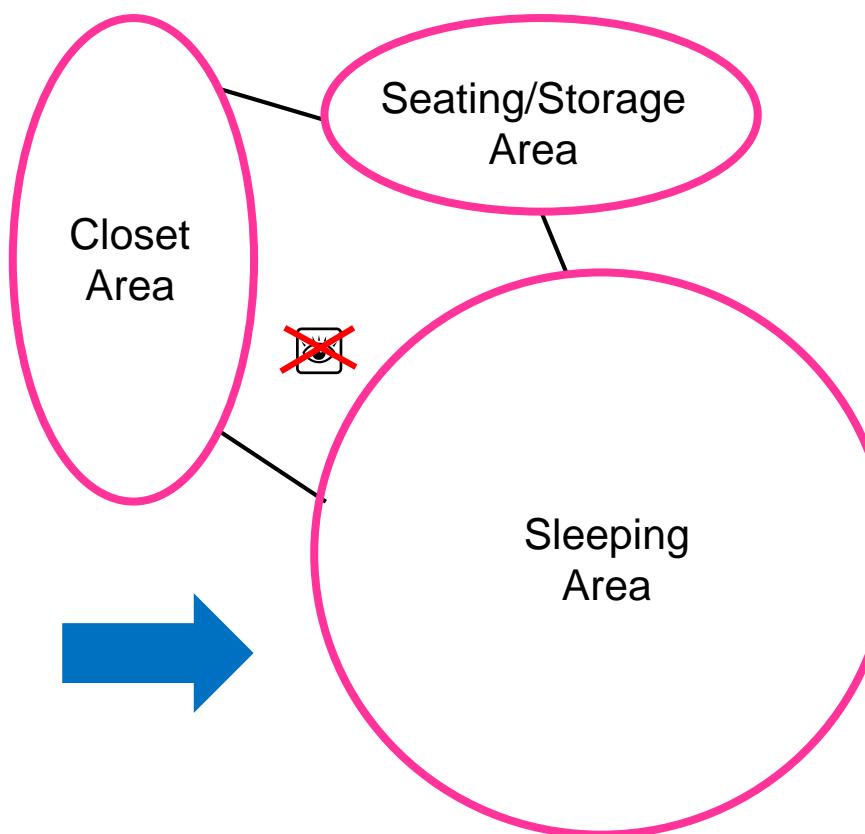


Reflected Ceiling & Power and Communication Plan

The Office



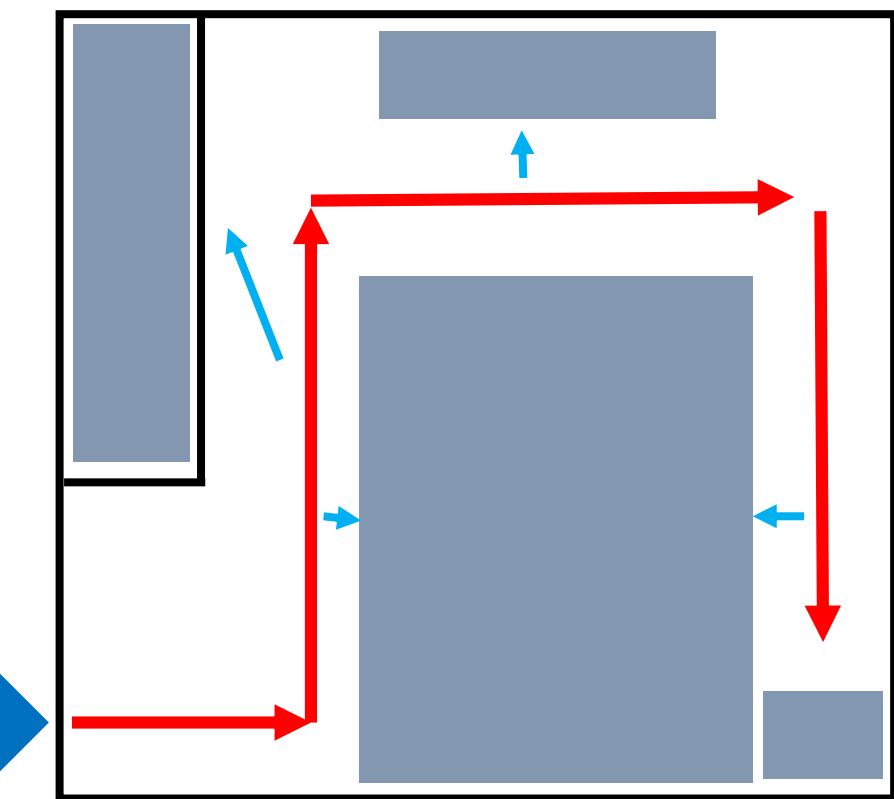
Bedroom Diagrams



Bubble Diagram

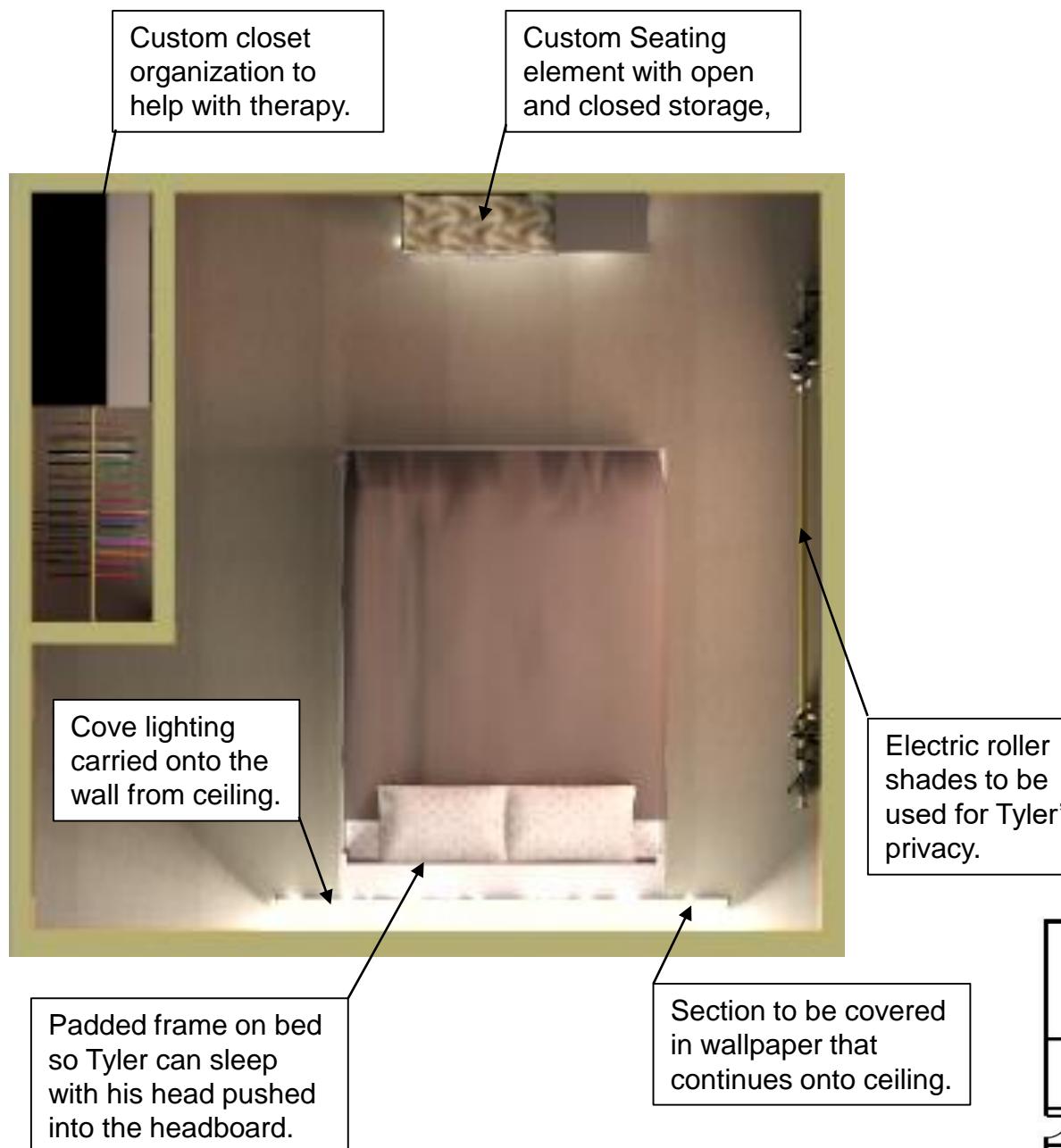
Key	
	Visual Separation
	Exterior view consideration
	Main entrance

Key	
	Primary Path
	Secondary Path
	Main entrance



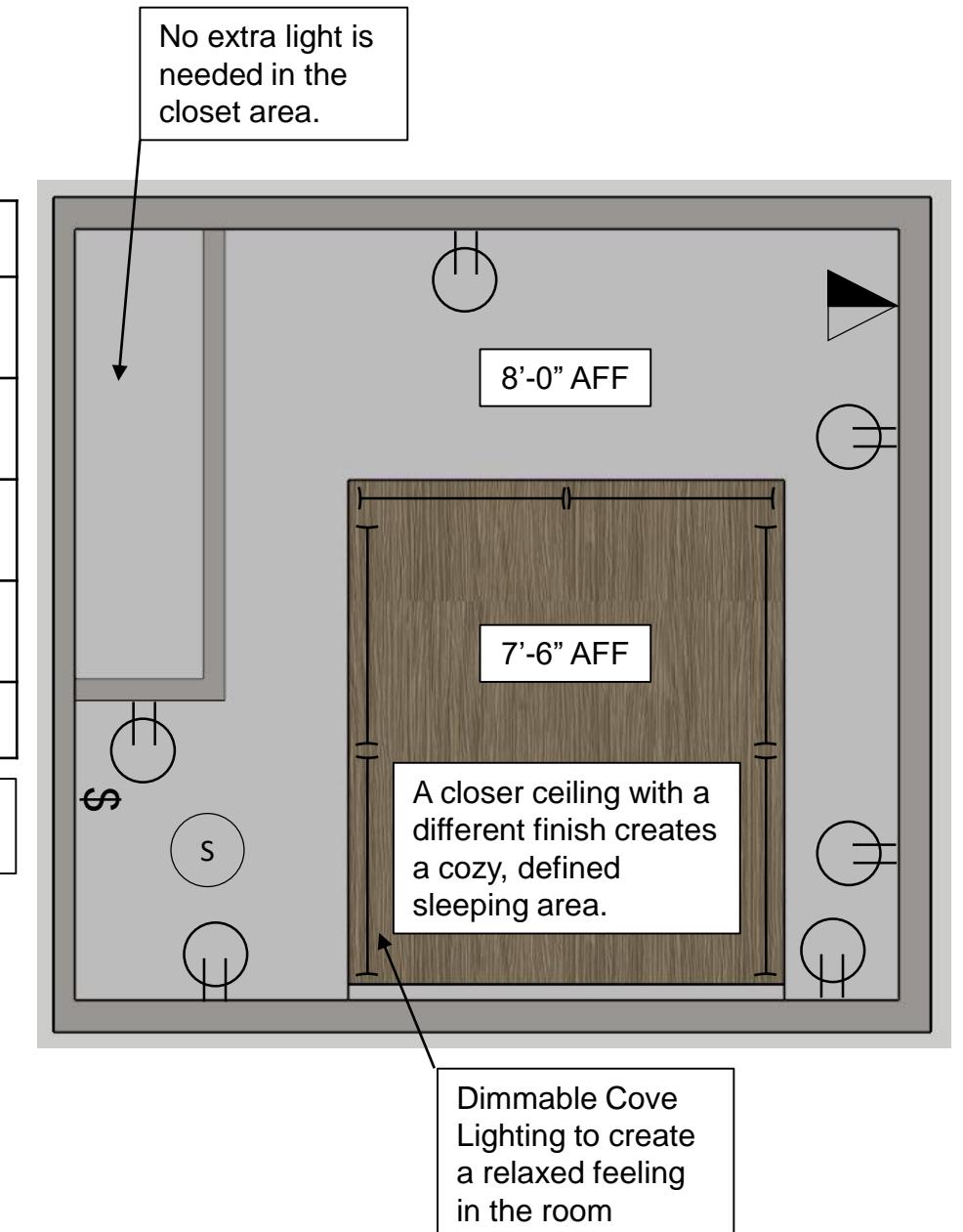
Circulation Diagram

Bedroom Plans

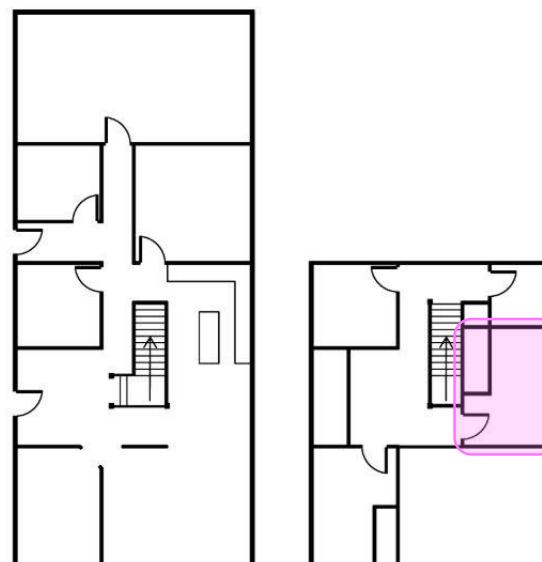


Key	
—	LED Cove Lighting
▲	Data/Communications Outlet
○	120 V receptacles
S	Smoke Detectors
\$	Switch

Note: All receptacles at 18" AFF unless otherwise noted.



FF&E Plan



Reflected Ceiling & Power and Communication Plan

Bedroom



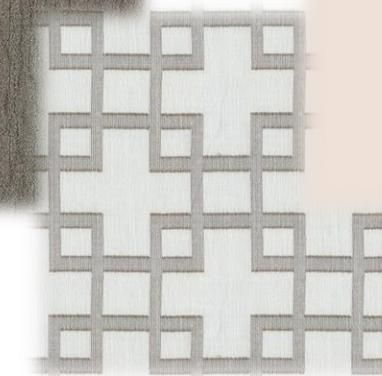
F-5



T-2



CPT-1



CRF-1



PT-3



WC-2

PT-4

FF&E

Schedule

B-1

Description	Upholstered headboard/frame
Manufacturer	Pottery Barn
Item/Model Name	Harper Upholstered Tall Bed
Item/Model Number	N/A
Dimension/Size	69"W x 91"L x 64"H
Quantity	1
Finish/Color	Brown
Fabric Pattern/Name, Number	Abingdon 50409
Fabric Color/Name, Number	Dusty Mauve 575
Description	<ul style="list-style-type: none"> • 85% Polyester 15% Linen • High durability finish • Martindale 50,000 cycles
Location	Bedroom
Notes	-



Description	Lounge chair
Manufacturer	COR
Item/Model Name	Cordia Sessel
Item/Model Number	N/A
Dimension/Size	30" W x 33 ½" x 45 ½" H
Quantity	1
Finish/Color	White Lacquer
Fabric Pattern/Name, Number	Article-458600
Fabric Color/Name, Number	041 Rouge
Description	100% Vinyl 400,000 double rubs Lightfastness: 1,000+ hours
Location	Technology Room
Notes	-

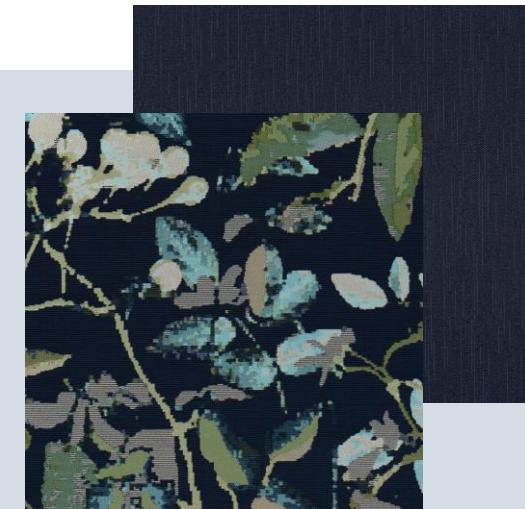


C-1



Description	Couch
Manufacturer	Pottery Barn
Item/Model Name	Soma Freemont Sofa with Reversible Chase
Item/Model Number	N/A
Dimension/Size	74"W x 58.5"D x 35.5"H
Quantity	1
Finish/Color	Brown
Fabric Pattern/Name, Number	Scape 466357
Fabric Color/Name, Number	Moonshine 006
Description	<ul style="list-style-type: none"> • 55% Post-Consumer Recycled Polyester, 28% Solution-Dyed Nylon, 17% Cotton • 100,000 double rubs • Stain resistant
Fabric Pattern/Name, Number	Dart 464040
Fabric Color/Name, Number	Nightshade 016
Description	<ul style="list-style-type: none"> • 63% Polyester, 37% Cotton • 100,000 double rubs • Stain resistant
Location	Technology Room
Notes	Scape fabric on bottom and back. Dart fabric on cushions and arms

C-2



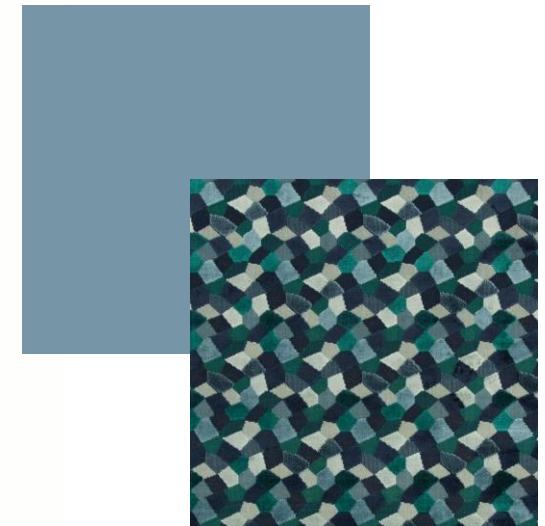


C-4

Description	Chair
Manufacturer	Wilkhahn
Item/Model Name	Occo Chair
Item/Model Number	222/21
Dimension/Size	22.5"W x 22.8""D x 32""H
Quantity	3
Finish/Color	<ul style="list-style-type: none"> • Solid Oak Leg • Pantone 2178 C Surround
Fabric Pattern/Name, Number	Modern Mosaic 34783
Fabric Color/Name, Number	Peacock 535
Description	<ul style="list-style-type: none"> • 81% Viscose, 10% Cotton, 9% Polyester • Martindale: 40,000 Cycles • High Durability fabric
Location	Therapy Room
Notes	-

Description	Chair
Manufacturer	Wilkhahn
Item/Model Name	Stand-up
Item/Model Number	202
Dimension/Size	26"H x 12" DIA
Quantity	1
Finish/Color	Light Blue 0103
Location	Technology Room
Notes	-

C-3

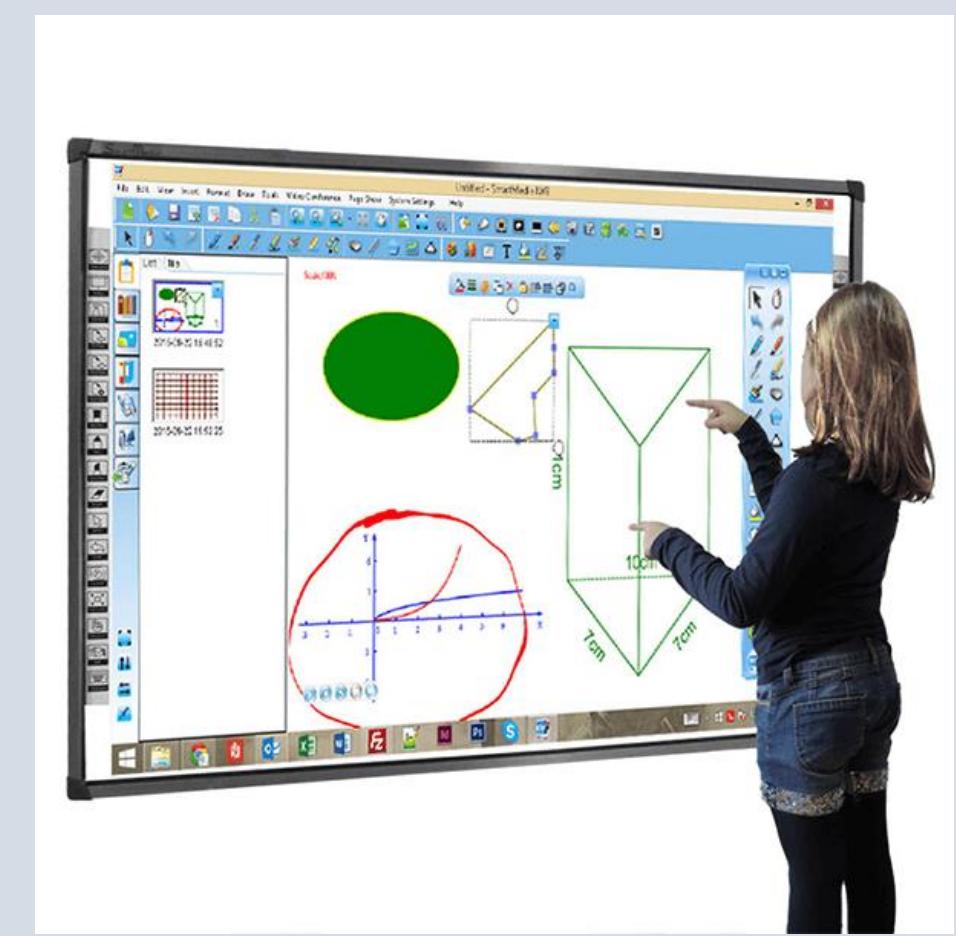


PS-1

Description	Privacy Screen
Manufacturer	Baresque
Item/Model Name	Bhushan
Item/Model Number	N/A
Dimension/Size	48"W x 90"H x .5"D
Quantity	1
Finish/Color	Zintra Acoustic Panel – Lime
Fabric Pattern/Name, Number	Zintra Acoustic Panel
Fabric Color/Name, Number	Lime
Description	• 100% Polyester
Location	Technology Room
Notes	-



SB-1



Description	Smartboard
Manufacturer	Smart Media World
Item/Model Name	Interactive Whiteboard
Item/Model Number	IWB-IR16
Dimension/Size	87"
Quantity	3
Finish/Color	Aluminum frame, steel backing
Location	Technology Room (1) Therapy Room (2)
Notes	-



T-2

Description	Night Stand
Manufacturer	Manhattan Comfort
Item/Model Name	Liberty Night Stand
Item/Model Number	N/A
Dimension/Size	17.72" L x 27.09" H x 14.7" D
Quantity	1
Finish/Color	White
Location	Bedroom
Notes	-

Description	Table/Desk
Manufacturer	Herman Miller
Item/Model Name	Nelson Swag Leg Desk
Item/Model Number	NS5850
Dimension/Size	39" W x 28.5" D x 34.5" H
Quantity	1
Finish/Color	Wood/White/Stainless Steele
Location	Technology Room
Notes	-

T-1



Description	Table
Manufacturer	Wilkhahn
Item/Model Name	Occo Table
Item/Model Number	222/80
Dimension/Size	63" L x 30" W x 30" H
Quantity	1
Finish/Color	<ul style="list-style-type: none"> • Natural Walnut Veneer Top • White Coated Frame
Location	Therapy Room
Notes	Chamfered Edge

T-3



RS-1

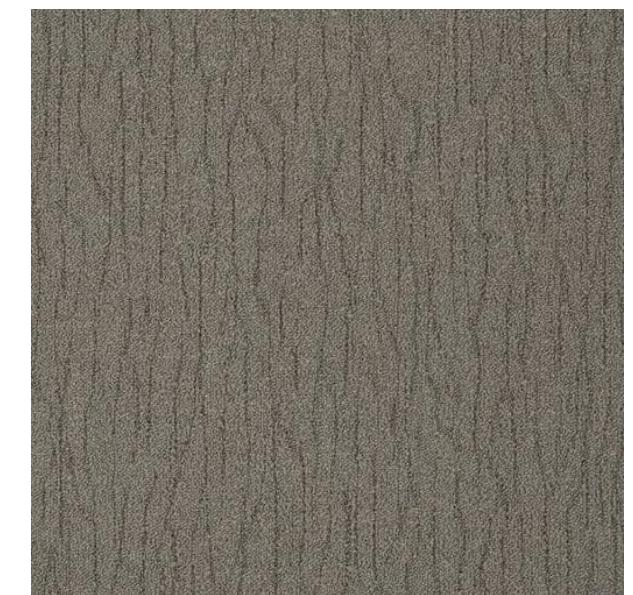
Description	Electric Roller Shades
Manufacturer	Somfy
Item/Model Name	Sonesse ULTRA 50 AC
Item/Model Number	R5485
Dimension/Size	46" x $\frac{3}{4}$ " DIA 69.5" x $\frac{3}{4}$ " DIA
Quantity	2
Finish/Color	1
Location	Aluminum
Notes	Bedroom, Office, and Technology room
	Flush install
	Programmable

Room Finish Schedule

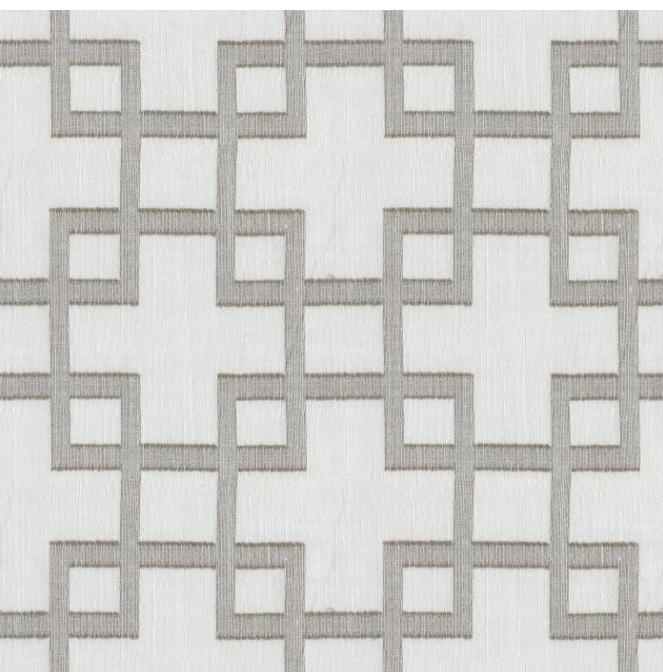


Code	CF-1
Description	Cork Flooring
Manufacturer	Green Claimed
Product/Style Name	Driftwood Wide + Inspired
Product Number	7809001000
Finish/Color	Ceramic Shield Technology Driftwood
Dimension/Size	72" L x 7 1/4" W x 7/16" Thick
Location	Technology Room and Office
Technical Specification	Click Lock Sound Rating: STC 62 & IIC 68 Warranty: 25 years Indoor Air Quality: Super E0 LEED Points: EQc4.4/MRc4/MRc6 Fire Rating: Class II Certification: FSC
Notes	Installation: Underlayment, Floating Floor

Code	CPT-1
Description	Carpet
Manufacturer	Aromstrong
Product/Style Name	Citybeat
Product Number	C00D0821-04
Finish/Color	Holly
Dimension/Size	2'-0"W x 2'-0"L x 1/4" thick
Location	Bedroom
Technical Specification	<ul style="list-style-type: none"> Tufted construction – multi-textured loop pile Fiber – Nylon Dye Method – 100% Solution Dyed Stain resistant Anti-microbial Indoor air quality – TVOC A Grade CRI Green Label Plus
Notes	Install with cushioned underlayment to provide a softer surface



Code	CRF-1
Description	Curtain Fabric
Manufacturer	Kravet
Product/Style Name	Kravet Basics
Product Number	4494-11
Finish/Color	4494-11
Dimension/Size	65”L x 118”W
Location	Bedroom Curtains
Technical Specification	100% Polyester Solvent or Dry Clean NFPA-701: Y Vertical Repeat: 7.5” Horizontal Repeat: 7”
Notes	-



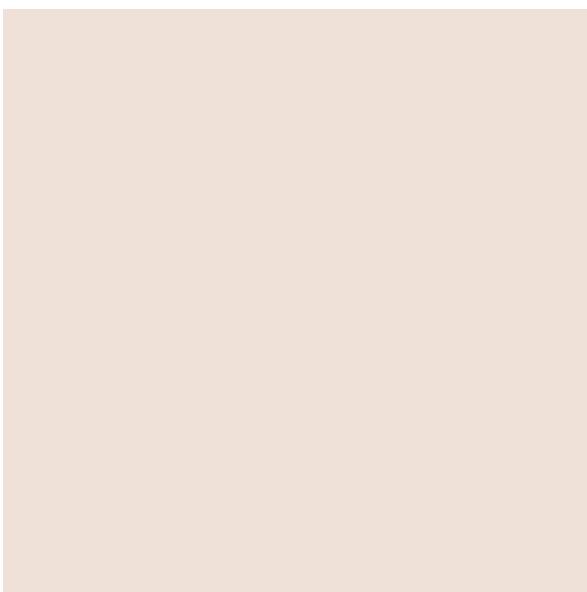
Code	PT-1
Description	Magenta Paint
Manufacturer	Sherwin Williams
Product/Style Name	EcoSelect Zero VOC Interior Latex
Product Number	SW 6840
Finish/Color	Exuberant Pink
Dimension/Size	1 Gallon
Location	Bookshelf in Office
Technical Specification	Greenguard Certified
Notes	-



Code	PT-2
Description	Green Paint
Manufacturer	Sherwin Williams
Product/Style Name	EcoSelect Zero VOC Interior Latex
Product Number	SW 6748
Finish/Color	Greens
Dimension/Size	1 Gallon
Location	Bookshelf in Office
Technical Specification	Greenguard Certified
Notes	-



Code	PT-3	Code	PT-5
Description	Gray paint	Description	Navy blue paint
Manufacturer	Sherwin Williams	Manufacturer	Sherwin Williams
Product/Style Name	EcoSelect Zero VOC Interior Latex	Product/Style Name	EcoSelect Zero VOC Interior Latex
Product Number	SW 6322	Product Number	SW 9179
Finish/Color	Intimate White	Finish/Color	Anchors Aweigh
Dimension/Size	1 Gallon	Dimension/Size	1 Gallon
Location	Ceilings	Location	Bookshelf in Office
Technical Specification	Greenguard Certified	Technical Specification	Greenguard Certified
Notes		Notes	



Code	PT-4
Description	Gray paint
Manufacturer	Sherwin Williams
Product/Style Name	EcoSelect Zero VOC Interior Latex
Product Number	SW-6001
Finish/Color	Grayish
Dimension/Size	1 Gallon
Location	Bedroom and office walls
Technical Specification	Greenguard Certified
Notes	



Code	PT-6
Description	Light blue paint
Manufacturer	Sherwin Williams
Product/Style Name	EcoSelect Zero VOC Interior Latex
Product Number	SW 9048
Finish/Color	Surfin'
Dimension/Size	1 Gallon
Location	Bookshelf in Office
Technical Specification	Greenguard Certified
Notes	-



Code	WC-2
Description	Wallcovering
Manufacturer	York Wallcoverings
Product/Style Name	Craftsman
Product Number	RRD7465N
Finish/Color	Beige
Dimension/Size	27" x 27'
Location	Extruded Wall/Ceiling in Bedroom
Technical Specification	Scrubbable/Strippable Match Type: Straight non-reversible Pattern Repeat: 25 1/4"
Notes	Unpasted



Code	WC-1
Description	Wallcovering
Manufacturer	Maharam
Product/Style Name	Cusp
Product Number	399994-005
Finish/Color	Spoonbill
Dimension/Size	52"W
Location	Technology Room
Technical Specification	100% Non-Pthalate Vinyl Repeat: 18"V 52"H Maintenance: Water-based cleaner Greenguard Certified
Notes	Unpasted

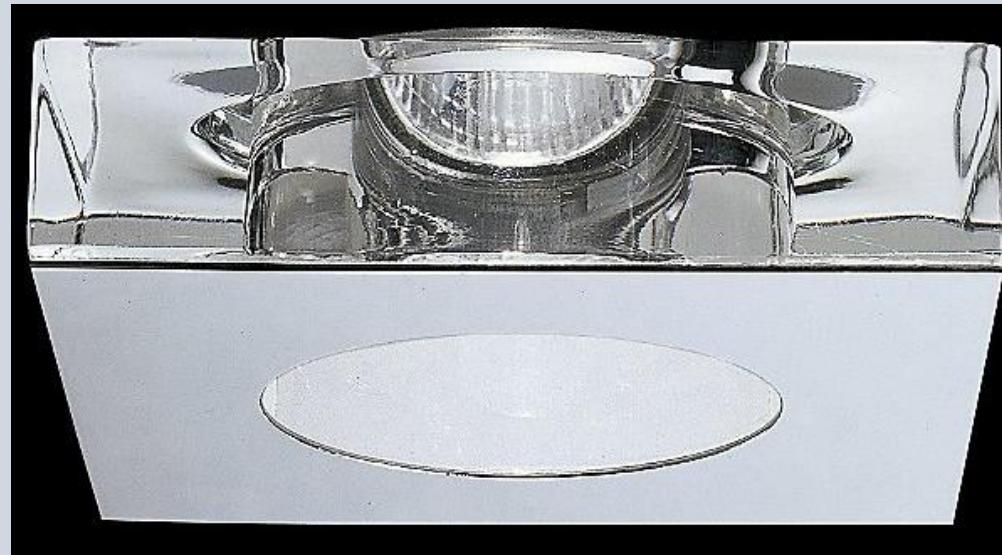


Code	WC-3
Description	Wallcovering
Manufacturer	Maharam
Product/Style Name	Tether
Product Number	399961-006
Finish/Color	Lively
Dimension/Size	52"W
Location	Office
Technical Specification	100% Non-Pthalate Vinyl Repeat: 18"V 52"H Maintenance: Water-based cleaner Greenguard Certified
Notes	Unpasted



Lighting Schedule

Code	L-1
Fixture Type	Pendant
Manufacturer	Modern Place
Item/Model Number	3987
Description	Hydra Three Wave Pendant
Dimension/Size	40”L x 5”W x 14”H
Quantity	1
Lamp Source	LED
Location	Tyler's Office
Notes	



Code	L-2
Fixture Type	Recessed Can
Manufacturer	Fabbian
Item/Model Number	uu393525
Description	Faretti Lui Steel Recessed Light
Dimension/Size	7.63”H x 14.31”W
Quantity	4
Lamp Source	LED
Location	Tyler's Office
Notes	UL Listed



Code	L-3
Fixture Type	Cove Light
Manufacturer	DALS Lighting
Item/Model Number	DLS473007
Description	PowerLED Linear Cove Light
Dimension/Size	24”W x 1”H x 1”D
Quantity	34
Lamp Source	LED
Location	Technology Room & Bedroom
Notes	Total Wattage: 8 watts Lamp Color: 3000K Luminous Flux: 800 lumens Lumens/Watt: 100.00 Lamp Life: 50000 hours Luminous Flux: 800 lumens Lumens/Watt: 100.00

Codes Analysis

- ▶ **R303.1 - Habitable Rooms** – Each room has at least one window and one door.
- ▶ **R304 - Minimum Room Areas** – All rooms have an area over 70 square feet and are over 7 feet in a horizontal dimension.
- ▶ **R305.1 - Ceiling Height** – Each room has a ceiling height of either 7.5 or 8 feet.
- ▶ **R311.1 - Means of Egress** – Each room has a window that can act as a means of egress.
- ▶ **R314.1 & R314.1.1 - Smoke Alarms & Listings** – Each room contains a smoke alarm.
- ▶ **Chapter 7 - Gypsum Board** – All gypsum used conforms to the necessary testing.
- ▶ **E3901.1 General** – Receptacles are rated at 125 volts.
- ▶ **E3901.2 General purpose receptacle distribution** – Receptacles are placed under 6 feet away from one another and on every unbroken wall.
- ▶ **E3902.2.1 Spacing** – Receptacles are placed under 6 feet away from one another.
- ▶ **E3902.2.2 Wall Space** – At least one receptacle is on every wall that is unbroken from a door.
- ▶ **E3901.2.3 Floor Receptacles** – There are no floor receptacles in the rooms.

Annotated Bibliography 1

Olesen, J. (2016, September 06). Psychological Effects Of Color In Interior Design. Retrieved September 26, 2018, from <https://www.color-meanings.com/psychological-effects-color-interior-design/>

THE DESIGN ISSUES RELATING TO RESIDENTIAL INTERIOR DESIGN:

Color plays a very important role in everyone's lives. It creates feelings and moods and is something both homeowners and designers need to utilize carefully to create an appropriate atmosphere in a space. Different colors can create different moods such as excitement, passion, mystery, or relaxation. By understanding feelings each color evokes, one can understand how to create just the mood that is needed in a space. Red stimulates and excites users of a space. Orange can make users feel energetic, adventurous and friendly. Yellow can be cheerful, friendly and airy, but can be overstimulating if too much is used. Blue evokes feelings of serenity and tranquility. Green is cool and friendly. Purple gives a dignified and dramatic look to a space. Black, if used right, adds depth and elegance to a room. White is fresh and peaceful.

SIGNIFICANT QUOTATIONS:

"People tend to feel comfortable with those colors that reflect their personality."(p. 3)

"No single choice will satisfy everyone..." (p.3)

"Color creates feelings and moods and it is owing to these features that designers and homeowners need to utilize it wisely in order to create an appropriate atmosphere in a given space." (p.1)

KEY WORDS:

Comfortable
Feelings
Moods
Colors

WHY WAS THE READING OF SIGNIFICANCE FOR RESIDENTIAL DESIGN PROJECTS?

This reading provided information about the psychology of color and how people react to it when certain colors are used in a space. It's very important to pay attention to what colors are used in specific rooms because of the feelings and moods evoked by them. A designer wouldn't want to put a color that creates feelings of tranquility and serenity in a space where work needs to be done; it may put users to sleep. It's important for colors to be used appropriately within spaces to create the mood that is desired. This information provides specific information an interior designer can use while looking at colors to use in certain spaces. As a designer, it is important to know this and know how to correctly apply colors in spaces.

Psychological Effects Of Color In Interior Design

Published by JACOB OLESEN

Color does not exist in real life. It is just the effect of electromagnetic waves registered by our brains and eyes. Yet it plays a very important role and we simply cannot imagine life without it. Color creates feelings and moods and it is owing to these features that designers and homeowners need to utilize it wisely in order to create an appropriate atmosphere in a given space. In this guide, we will study the psychological effects of color on the human mind and also tips to use color in interior design theory.



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Understanding psychological effects of color in the home

Color is an element of light. Different colors create different moods in your home by communicating diverse feelings such as excitement, passion, serenity or mystery. By understanding color theory in interior design you can create just the right mood you are looking for. It is important to note that each color impacts on different people differently. Many factors can influence these including one's age, race, culture as well as life experiences. However, people will always respond to color-no matter what. In general, following colors create following psychology effects in the home:

1. Psychological effects of color red in the home

Red is the color of fire, passion, danger and strength. This bold color stimulates and excites. It can be warm and inviting and can also make you feel energetic. Avoid using too much red as it can be over-stimulating in the home.

2. Psychological effects of Orange

People who love red but are not too fond of its aggressive impact can replace it safely with orange. This fun, energetic color is ideal for kid's room, dining room,

3. Psychological effects of Yellow

According to color psychology in interior design, yellow is the color of warmth, wisdom, prosperity, sympathy and cowardice. A room colored in yellow can look cheerful, friendly and airy. Avoid using it in large amounts as it can be over stimulating.

4. Psychological effects of Blue

Blue is an important color in interior design theory and it affects the human mind profoundly. There is a reason why blue is the perfect color for bedrooms. It instills a sense of serenity and peace and can be a very soothing color. In bathrooms, it can be used for creating a spa like tranquil atmosphere. This cool, quiet and reserved color can also represent formality. It is best when paired with white or other lighter hues. Too much of blue can be depressing, so use it wisely.

5. Psychological effects of Green

Green, as we very well know, is the color of nature. It also symbolizes hope, good luck and abundance. It is a cool friendly color that mixes well with many other colors. It looks great with white and can be used in living rooms, bedrooms and offices.

6. Psychological effects of purple

Purple works very well with other colors. You can pair it up with other jewel tones like emerald green or even with light, complementary hues like beige, yellow or baby pink. It is an ideal color in girl's rooms. The psychological effects of purple in the home work to give the space a dignified and dramatic look. Purple, after all, is the color of royalty.

1	Best Kitchen Color Ideas	8	Take A Depression Test
2	Kitchen Paint Colours 2018	9	Signs Of Bipolar Disorder
3	Great Kitchen Color Combos	10	House Interior Designs
4	Bathroom Colors Of 2018	11	Best Color For Bedrooms
5	Kitchen Cabinet Colors Of	12	Designer Living Rooms
6	Kitchen Cabinet Color	13	Top 2018 Living Room Colors
7	Concrete Stain Colors	14	Interior Paint Colors

7. Psychological effects of black

Black is associated with evil, mourning and death. However, it is also the color of wisdom. Black, in interior design theory, is always used in small amounts with contrasting, complementary colors. When used right, it can add depth and

8. Psychological effects of white

This fresh, peaceful color is used widely in interior design theory where it can instill feelings of youthfulness, faith and innocence. White can help smaller spaces appear large. It can also make rooms look livelier, fresher and crisper.

Choosing interior design colors based on their psychological impacts

It is clear that people tend to feel comfortable with those colors that reflect their personalities. For example, a bold, passionate person might feel happier in a red or orange colored room. However, a shy person may not feel comfortable in a red room but might feel better in rooms with soft blue or light green shades. The best thing interior designers can do when selecting colors for their client's homes is use their preferences in individual sleeping areas and select those colors in common areas such as living room and kitchen, that can make all the members feel as comfortable as possible. No single choice will satisfy everyone but one must attempt to use those colors which help match the goals of all individuals. I hope this guide helps you select your paint colors easily. Good luck!



Annotated Bibliography 2

Bourne, A., Gaines, K. S., & Pati, D. (2014). Designing for adults with intellectual development diversities: An integrative approach [Scholarly project]. In ASID Foundation. Retrieved September 26, 2018, from <https://www.asid.org/resources/resources/view/resource-center/162>

THE DESIGN ISSUES RELATING TO RESIDENTIAL INTERIOR DESIGN:

The number of adults with Autism Spectrum Disorder (ASD) is going up, and so is the demand and support for independent living for these individuals. A lot of focus is going into creating village-like communities instead of institutions to help people with ASD transition better from their homes to an independent lifestyle. It was estimated in 2009 that 500,000 children with ASD would reach adulthood. In this research project, five housing and work communities across the United States were examined to inform what the optimum design for these communities would be. People in these communities were observed and interviewed to see how well the quality of person-environment fits were. Six themes were developed to produce optimum design. These themes included communicate, empower, engage, accommodate, enrich, and encourage.

SIGNIFICANT QUOTATIONS:

"The transition to adulthood is challenging for all individuals, but even more difficult for individuals with Autism Spectrum Disorders (ASD)." (p. 2)

"a better understanding of how people with I/DD and ASD experience and interact with their environments is needed to inform optimum design solutions." (p. 2)

KEY WORDS:

Autism Spectrum Disorder (ASD)

Communicate

Empower

Engage

Accommodate

Enrich

Encourage

WHY WAS THE READING OF SIGNIFICANCE FOR RESIDENTIAL INTERIOR DESIGN?

This research project was done to better understand how people with Intellectual Developmental Disabilities and Autism Spectrum Disorder experience and interact with the environment around them. This will help to inform designers of optimum design solutions as well as set up guidelines for both architects and designers that will help them create living and learning spaces that will enhance their quality of life. Transitioning into adulthood is harder for individuals with ASD. This research project found six themes to include in design for individuals with ASD. The first is communicate; this means spaces should be designed for cognitive clarity, have a reduced amount of clutter, be predictable and consistent, as well as engage the senses. The second theme, empower, states that spaces should be clearly defined, flexible, and encourage users to succeed. Engage is the third theme. This states that users should be able to respond to the space instead of dictate. Accommodate, the fourth theme, says that a space should celebrate diversity in users' perceptions and cognition. The fifth theme, enrich, states that spaces need to engage the senses. The final theme is encourage. This states that spaces should inspire individuality in the users and give them a chance to grow and develop.

TRANSFORM GRANT RESEARCH PROJECT

Title: Designing for adults with intellectual development diversities: An integrative approach

Research Team:

Angela Bourne, Ph.D.
Kristi S. Gaines, Ph.D.
Debjyoti Pati, Ph.D.

Institution: Texas Tech University

AMERICAN
SOCIETY OF
INTERIOR
DESIGNERS
AS
ID
FOUNDATION

EXECUTIVE SUMMARY

PURPOSE OF STUDY

The purpose of this project was to:

1. Understand how people with Intellectual Developmental Disabilities (I/DD) and Autism Spectrum Disorders (ASD) experience and interact with their environments to inform optimum design solutions and;
2. Provide design guidelines for architects and designers to help them create living and learning environments that enhance the quality of life for adults with I/DD.

RESEARCH SUMMARY

The number of individuals with Autism Spectrum Disorder (ASD) transitioning to adulthood is growing, and support for independent living has been instigated and focused on the creation of communities with "village" like atmospheres rather than institutions to help individuals with ASD transition from their homes more smoothly. This grounded theory research examined how people with I/DD use their senses to comprehend their physical surroundings and perform tasks of daily living. Content analysis of five intentional housing and work communities throughout the United States for this population was examined and analyzed to inform the design of optimum communities. Fifty-eight adults with I/DD and their support staff who lived, learned, and worked in these communities were observed and interviewed to capture the quality of the person-environment fit in these settings. New evidence revealed that the various sectors within the population have different environmental needs and tolerances. Six themes that respond to these differences

were developed and operationalized into a neuro-considerate environmental design model that suggests guidelines for the design of residential and work environments that accommodate this group's needs.

IMPLICATION HIGHLIGHTS

A new model was developed for designing interiors for neuro-diverse populations.

1. Communicate
 - Previewing
 - Definable architectural forms and surfaces
 - Purposeful, meaningful spaces
2. Empower
 - Access to nature
 - Organize environment
 - Personal space
 - Safe waiting areas
 - Use of technology
3. Engage
 - Social connections, corridors, porches
 - Open and closed spaces for appropriate activities
 - Focal points
4. Accommodate
 - Control sensory sensitivities
 - Escape spaces
 - Memorable transition spaces
 - ADA compliance
5. Enrich
 - Cater to the senses
 - Sensory rooms
 - Opportunities for interaction
6. Encourage
 - Transparency (glazing)
 - Choice/previewing
 - Clear site lines
 - Ergonomic and Anthropometric furniture

NEURO CONSIDERATE DESIGN MODEL FOR I/IDD

BACKGROUND

The transition to adulthood is challenging for all individuals, but even more difficult for individuals with Autism Spectrum Disorders (ASD). Entitlement to public education ends and choices must be made regarding education or vocational training, employment, housing, and social involvement. In the U.S., a projected 500,000 children with ASD are expected to reach adulthood within the next 15 years. Currently, there is a limited amount of appropriate housing to fill this need (Ahrentzen, 2009). Additionally, aging parents are concerned with how their children with ASD will function in society when they are no longer living (Weeks, 2009). To date, support for independent living (IL) has been instigated and maintained by caring charitable foundations, with particular focus on creating communities rather than institutions. They advocate "village" like atmospheres since research has shown these types of environments help individuals with ASD transition from their homes more smoothly. As young adults with high functioning autism can be trained to take some ownership for their care and that they can live independently with minimal supervision (Felece & Emerson, 2001), a better understanding of how people with I/DD and ASD experience and interact with their environments is needed to inform optimum design solutions.

METHODOLOGY

Using a transactional approach that takes an event as its unit of analysis, this research examined the behaviors of adults with I/DD living in communities that include housing, meaningful work opportunities, education, training, and social and cultural supports. Data was collected using the following tools:

- Content Analysis
 - Physical properties of communities including geographical location, overall property size, buildings on each site and their sizes, the spatial relationships, distances between each building, the use of each building, and room inventories
 - Operational practices, support services, and resident supports
 - Resident personal records – demographics, diagnosis, length of residency, and daily schedules
- Interviews using picture preference and observations of residents at home, work environment for performing jobs, learning environment for literacy, numeracy, art, and music class, therapy and counseling, and accessing spaces
- Interviews with support staff and administrators on community's operational philosophy, policies, procedures and cultural norms, and (re-)design recommendations to spaces

KEY FINDINGS

The data collected was analyzed and developed into the Neuro Considerate Design Model for I/DD. A prototype was developed to illustrate the model, in which the final stage was a charrette by design professionals to develop more prototype communities using this model. The model consists of six themes:

- **Communicate:** spaces should be designed for cognitive clarity, legibility (reduce clutter), predictability, consistency, coherence, meaningful experiences, and engaging the senses
- **Empower:** spaces should be clearly defined, purposeful, accessible, attainable, and flexible, should cultivate senses, provide choice, and support users to thrive and excel

- **Engage:** spaces should allow residents to respond rather than dictate, hold attention, be meaningful and purposeful, provide opportunities, be expressive and organized, and have some complexity
- **Accommodate:** spaces should celebrate diversities in perceptions and cognition, enable residents to respond rather than dictate, and accommodate for aging
- **Enrich:** spaces should engage the senses, provide opportunity and choice, provide exposure for inquiry, allow for residents to self-determine and make decisions, and incorporate technology
- **Encourage:** spaces should inspire individuality, be motivational, support dignity for residents to excel, succeed, develop, and grow, and match skills

PUBLICATIONS

- Bourne, A. (2014). "Designing for adults with intellectual development diversities: An integrated design approach." *Design & Health Scientific Review*

PRESENTATIONS

- Gaines, K. & Bourne, A. (2015). "Designing for Diversity: A Comparative Study of the US and UK," Interior Design Educators Council, Fort Worth, TX.*
- Bourne, A. (2014). "Designing for Adults with Intellectual and Developmental Diversities: An Integrated Approach." Presented at Design and Health 10th World Conference. Toronto, Canada.
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RESEARCH TEAM BIO

Angela Bourne, Ph.D., is an interior design educator/professor with over 30 years of experience. She is also the president of Neuro-Considerate Environments, an Interior/Environmental Design company that specializes in the design of healthy environments for individuals with neuro-diversities. Her research and teaching pedagogy reflects her conscientious approach to developing effective and socially sustainable environments for people with cognitive challenges. The pragmatic approach she uses to conduct research and create therapeutic spaces is supported by the attention she gives to human behavior; particularly the sensorial experiences of people while engaging in spaces and their surroundings and the influence they have on well-being.

Kristi Gaines, Ph.D., is the director of the Graduate Programs in Interior and Environmental Design at Texas Tech University. She received her Ph.D. in Environmental Design with collaterals in Architecture and Education and has a combined 20 years of professional interior design and teaching experience. Her research focuses on the interaction between individuals with neuro-diversities and the built environment. She is a member of several professional organizations and has served on the Board for the International Interior Design Association Texas-Oklahoma Chapter.

Debajyoti Pati, Ph.D., received his doctorate degree in architecture from the Georgia Institute of Technology, and has over 23 years of experience in research, practice, and teaching in the United States, Canada, and India. He served as the vice president and director of research at HKS Architects, a leading international healthcare design firm, before moving to Texas Tech. Dr. Pati was voted among the 25 most influential people in healthcare design in 2009 and 2010. He also received the Best International Research Project award by the International Academy for Design & Health, Stockholm, in 2009 and 2010.

Annotated Bibliography 3

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THE DESIGN ISSUES RELATING TO RESIDENTIAL INTERIOR DESIGN:

We know quite a bit about autism, but we do not know what causes it and why the rate of occurrence is increasing. Autism Spectrum Disorder (ASD) is a term for a group of brain development disorders that can affect the areas of communication, social interaction, and cognitive function. An individual with ASD can also suffer from other medical disorders. Individuals with ASD can be greatly affected by what surrounds them in their physical environments. Different people have different feelings as well, so designing for individuals with ASD has no absolute solution.

SIGNIFICANT QUOTATIONS:

"Adults and children with autism can be profoundly affected by their physical environment." (p. 1)
"Designing environments for people with autism can make the lives of those people better, can assist caretakers, and can even affect the course of the disorder." (p. 1)
"Because the condition takes so many different courses, prescribing a set number of design "solutions" for interior spaces can be counterproductive." (p. 1)
"As you educate yourself about designing for autism, being wary of absolutes is probably the first lesson you need to learn." (p. 2)

KEY WORDS:

Autism Spectrum Disorder (ASD)
Physical environment
Critical role
Design solutions

WHY WAS THE READING OF SIGNIFICANCE FOR RESIDENTIAL INTERIOR DESIGN?

As stated in the article, the physical environment, lighting, textures, colors, furniture arrangement, floors, window placements, etc., can have a huge effect on an individual with ASD. As an interior designer, it's our job to accommodate these needs and create spaces where they can have the best quality of life possible. Interior designers must design a space to make life better for individuals with ASD as well as help caretakers. There's a reason it's called Autism Spectrum Disorder; there's a huge spectrum of the disorder, so each individual has their own needs. For example, one person may like natural light and benefit from having a sun lamp in a space, but the next individual may be overly sensitive to light and need room-darkening shades. Having a set design solution for individuals with ASD is simply not possible. It's all about designing specifically from one person to the next.

Impactful Design: Creating Spaces for Individuals with Autism

30 April 2014 by [American Society of Interior Designers](#) in [Blog](#) [Interior ImpactResidential](#) - No Comments



With April being Autism Awareness Month, it's especially appropriate to review what the American Society of Interior Designers (ASID) has done and is doing to fund research on supportive environments for young children with autism and to ensure ASID members have access to expert advice on designing for people with autism at all stages of their lives. The Society recognizes the critical role that interior designers can play in the lives of people with autism.

We know a lot about autism. However, the two things we don't know, or can't be sure of, are at the very heart of the disorder: What causes it and why is it increasing? Autism and Autism Spectrum Disorder (ASD) are terms for a group of brain development disorders in the areas of social interaction, communication skills and cognitive function. Individuals with autism can also suffer from a long list of medical conditions, from asthma and epilepsy to viral infections and sleeping disorders.

Adults and children with autism can be profoundly affected by their physical environment: lighting, colors, textures, arrangement of furnishings, floor coverings, window placement, and so on. This is where you come in. Designing environments for people with autism can make the lives of those people better, can assist caretakers, and can even affect the course of the disorder.

are overly sensitive to light, might have to be accommodated with room-darkening shades.

The designing-for-autism community also debates the value of large versus small spaces. Some children affected by autism are fearful of large, open spaces and cannot, for example, venture out into a mall. Others, however, dislike the close contact and bumping that is inevitable in small, intimate spaces.

As you educate yourself about designing for autism, being wary of absolutes is probably the first lesson you need to learn.

Regarding the design of an entire building and not just the personal space occupied by someone who is affected by autism, the National Autistic Society (NAS) offers an excellent set of guidelines for everything from briefing notes on general design points to creating an appropriate environment for people on the autism spectrum. (Although NAS is located in the United Kingdom, the information on the [website](#) remains useful for anyone designing for those affected by autism.)

The ASID Foundation awarded the 2012 Irene Winifred Eno Grant — which provides financial assistance to individuals or groups engaged in the creation of an educational program or an interior design research project dedicated to health, safety and welfare — to Caren S. Martin, College of Design, University of Minnesota. Martin recently completed her study: "Examining Supportive Educational Environments for Young Children with Autism Spectrum Disorder (ASD): Early Childhood Special Education (ECSE) through Grade 6."

Martin gave ASID this update on autism research: "Recently, the CDC (2014) noted that the number of children identified with autism spectrum disorder (ASD) is one in 68. Knowledge about educational interventions for children with ASD is substantial; however, far less is known about the design of supportive classroom environments where they learn. With support from the ASID Foundation via the Irene Winifred Eno Grant, an extensive review of refereed journal articles (2000-2012) yielded only 19 articles that addressed classroom design criteria for young children with ASD. This scant research leaves designers, teachers, and school administrators substantially reliant on anecdotal information in terms of creating optimal learning environments to support inclusion of children with ASD. There is an urgent need for additional research that examines the critical design/human behavior relationship via identification of evidence-based design criteria to guide classroom design solutions that support learning by children with ASD. Interior designers and researchers must collaborate to document measurable outcomes of their design solutions and share findings with the design industry, building the body of knowledge and advancing classroom design for children with ASD."

ASID has also partnered with John Wiley & Sons to create the E-Book Design Shorts series dedicated to interior design for people with autism. The books in the series focus on three main life phases and impart the expert knowledge an interior designer needs to

successfully design for people with autism. ASID members can get 30 percent off by ordering at the Wiley website and using ASID when checking out.

Titles in the Wiley E-Book Design Shorts series include:

Interior Design for Autism from Birth to Early Childhood

Interior Design for Autism from Childhood to Adolescence

Interior Design for Autism from Adulthood to Geriatrics

There are also informative videos on the books:

Interior Design for Autism by A.J. Paron-Wildes (series introduction)

Interior Design for Autism from Birth to Early Childhood

Interior Design for Autism from Childhood to Adolescence

Interior Design for Autism from Adulthood to Geriatrics

For more information or to order these groundbreaking books from ASID and Wiley, visit wileypub.com.

All three of the Wiley books are by A. J. Paron-Wildes, who has a son with autism and has been involved for the past 15 years with various interiors projects while researching best principles on designing for autism. She has worked on clinics, research centers, treatment facilities, hospitals, schools, residential placement facilities and homes for individuals with autism. Her research has identified ways to eliminate barriers for people with special needs to help make them more successful in the critical areas and functions of their lives.

By supporting research into and practical knowledge about designing for people with autism, ASID is giving truth to its aspiration to positively change people's lives through the power of design.

Annotated Bibliography 4

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THE DESIGN ISSUES RELATING TO RESIDENTIAL INTERIOR DESIGN:

Computers can get reflections across their screens that will reduce the contrast and, in turn, make it difficult to see and read. This means that these reflections from windows,, luminaires, and shiny surfaces should be avoided at all costs. Task lights with good color rendering lamps should be provided. These task lights, ideally, will be low voltage. Some feature lighting should be provided to have some interest and variety in the space. Window treatments are also a good idea to avoid direct sunlight entering the room and it's best to position a computer so there is no window behind the user.

SIGNIFICANT QUOTATIONS:

"Provide task-light for close, demanding work with good color rendering lamps" (p. 36)

". Avoid reflections from windows, luminaires and shiny surfaces." (p. 36)

"Use luminaires with a large up-light component (pendants)." (p. 37)

KEY WORDS:

Glare

Reflections

Task lighting

Feature lighting

WHY WAS THE READING OF SIGNIFICANCE FOR RESIDENTIAL INTERIOR DESIGN?

It's important for interior designers to understand how to provide lighting for technology use because various types of technology are becoming more and more prevalent in today's society. If a space, especially a space specifically for technology use, has good lighting, it will place less strain on a user and create a space that is easier to use for that function. Even if there is a slight cost increase for the type of lighting for technology rooms, in the long run, users will enjoy the space more. It's important for an interior designer to be aware of different lighting needs in different spaces. Part of an interior designer's job is to understand how each element of a space will react with one another, and to put together a cohesive space. The type of lighting used in a space with technology is vital to the space's cohesiveness.

Technology rooms need similar lighting levels as classrooms.

Lighting technology rooms

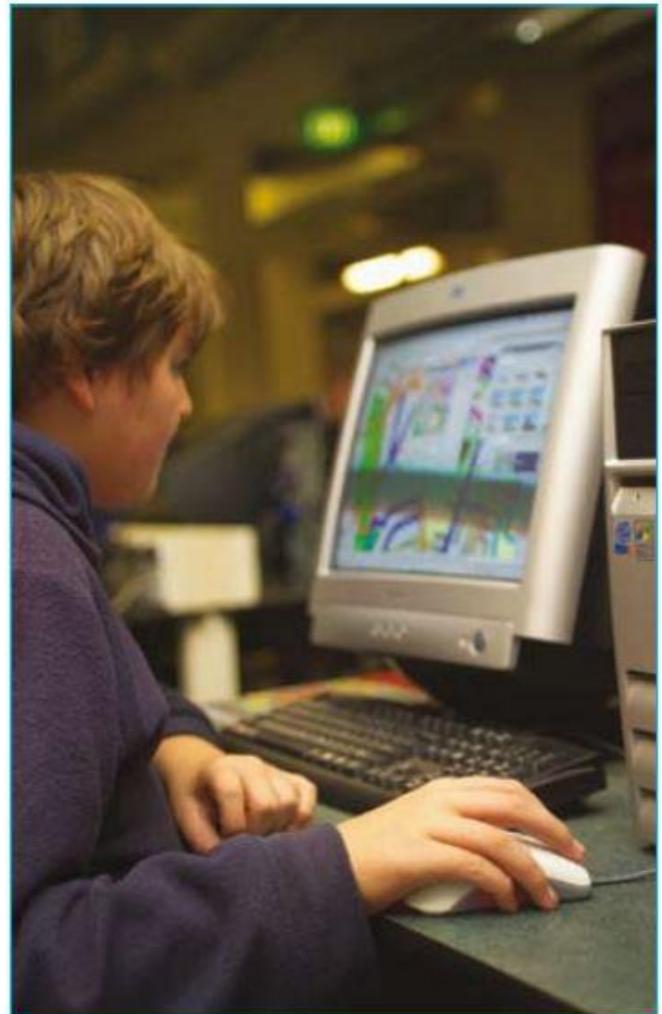
- Provide task-light lighting for close, demanding work with good colour rendering lamps
 - some machines have built-in task lights
 - safety consideration
- Provide low voltage task lighting for machines
 - safety consideration
- Avoid dangerous stroboscopic effect with machinery by using high frequency control gear for the luminaires
 - small cost increase
 - high frequency controls avoid flicker
 - safer
- Provide some feature lighting for displays
 - provides interest and variety

Computers

Computers are either in:

- classrooms
- administration areas
- staffrooms
- specialised computer suites.

Computers are susceptible to reflections that reduce the contrast on the screen making it difficult to read. Avoid reflections from windows, luminaires and shiny surfaces.



Lighting for computers

- Shade windows to avoid direct sunlight entering the room (see *Designing Quality Learning Spaces – Heating and Insulation*)
 - direct sunlight is a major cause of glare
 - tinted glass or solar films will not effectively control glare from direct sunlight
- Position computers (Figure 38) so that:
 - they are parallel to the window wall
 - they face a blank wall
 - there are no windows behind the students
- Use luminaires with louvre-type optical control
 - to shield a direct view of the lamp
- Use luminaires with a large up-lighting component (pendants)
 - reduces contrast and gives more even light
- Minimise veiling reflections by:
 - reducing luminance (Figure 39)
 - using matt surfaces and materials in the task area
 - using the brightness and contrast buttons to best effect
 - ensuring the background screen is a colour that provides contrast to the work on screen
 - fitting dimmers so the luminance of the general background lighting can be reduced as needed

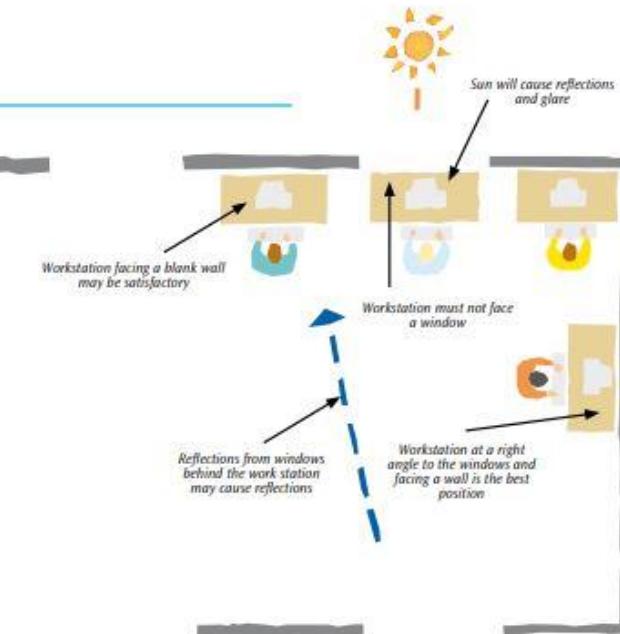
FIGURE 39 Avoiding veiling reflections

No bright directional lights in this zone

45°



FIGURE 38 Placing of workstations for computers



Appendix

Video Reaction One

Temple Grandin

Temple Grandin is a movie about a woman who has Autism that makes a huge difference in the Agriculture world. It was amazing to see how much someone who has Autism can still do.

Most of the time, this disorder is stigmatized against, and portrays those with it as stupid. After watching the movie, it's very easy to see how smart people with Autism Spectrum Disorder (ASD) are. With a little work understanding them, how they learn, and how they think, a person with ASD can thrive.

It was sad to see how stigmatized the disorder is in the movie, and made me really think about how it still is very stigmatized in society today. The fact that the doctor wanted to institutionalize Temple really saddened me. It was amazing how much work her mother put into teaching her and helping her grow intellectually and as a person. There were so many people helping her grow and she truly transformed. The movie did a great job of showing that ASD doesn't have to hold an individual back in life.

Video Reaction Two

The Story of Luke

This movie was a lighthearted comedy about a young man, Luke, growing up with Autism. It was a story of what many of us face in our teens and twenties, but Luke had many struggles trying to adjust. He had many struggles growing up. Luke is left by his mother at a young age, and at that point he was raised by his grandparents. They were very helpful, but when Luke was in his late teens his grandparents died. His grandfather gave him some guidelines for his life about finding a job and meeting women.

The rest of the movie he moves in with other relatives who are not quite sure how to treat him. The movie shows his struggles and successes trying to fit in to a world that never really does accept him. The movie is a comedy, but is also somewhat sad as it develops and we learn Luke's story. Luke appeared to be very high functioning in the movie and I'm not sure how accurate his portrayal of Autism was since the movie is not a real life story.

Tours/Client Interview Questions Chart

Question/Observation	Answer	Design Question
What kinds of things does Tyler like to do in his free time?	He watched YouTube videos like The Lion King, Frozen, Mario, etc..	Is there a way to include these themes into the design of his spaces? Could YouTube videos be used as a reward for Tyler?
Is there anything that Tyler doesn't like?	Tyler doesn't like therapy or the number two.	Is there a way to design a space that makes therapy more enjoyable for him? How can the number two be avoided?
Is there anything to avoid while designing for someone with Autism?	Someone who has Autism may become obsessive with counting a pattern or become dizzy by it, so it's smart to avoid patterns.	Does this apply to Tyler? How can patterns be avoided, but still create a visually interesting design?
What do you do for privacy?	We use electric shades that either the tenant can control themselves or we can control from our iPad as well.	How could something like this be used for Tyler's privacy?
Are there ways to make the rooms more accessible?	There's open closets so a door doesn't have to be opened as well as every handle is large enough to wrap a towel around it to aid in opening it.	Is this applicable in this design? How can the right balance of accessible be met?
Do you keep an eye on your tenants?	There are security cameras outside for their protection as well as an alarm will sound when any exterior door is opened.	Is this a necessary measure to take for this particular design?
What safety features are located in the rooms?	There's motion detectors in the room that go off during the night so we can know if a tenant wakes up and we can go check on them if need be.	Is this something Sandy would be interested in? Would this work if someone had a seizure?
Are there any past issues with safety features?	Making sure patient-safe things work with each other not against each other	Is there anything in the design working against each other? How does that apply to places that aren't a hospital?

Question/Observation	Answer	Design Question
Tyler stims while rubbing his finger tips on the wall and sometimes will get so excited he hits the wall.	N/A	How can I incorporate something that makes it safe for Tyler to do this? Is there a way to incorporate this and something that could be helpful to therapy?
Does Tyler like the lights on or off?	Tyler likes the lights off.	Would dimmable lighting be a good application? Is there a way dimmable lighting can be used and controlled by Tyler? Would this be good to apply to both his technology room and therapy room?
Darci is concerned about Tyler's privacy when changing.	N/A	Is there a way to have curtains that close at a certain time of day? Is there electric curtains that can be controlled and manipulated this way? If so. Should the control be given to Tyler?
What are some general features frequently seen in rooms or are frequently forgotten about?	Corner bumpers are what's missing a lot but also the texture and durability of the floor can be forgotten as well.	Is there a way to ensure this gets done in every project?
What kind of hospital is Prairie St. John's?	They're a psychiatric hospital with in-patient and out-patient programs that last a few days to months.	How much information from this project is applicable?
Is there anything you want use to know about the industry?	There's always going to be a new product, no matter how far you think you're up to date.	Is there a way to ensure the best technology is used?
What kind of things should be used in each room	A bed room has to minimalistic, an office should have somewhat of a classroom vibe	How can these be incorporated? Are the spaces too busy?

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