

Designing Learning Spaces

Here are a few project ideas under the theme of Designing Learning Spaces that focus on enhancing cognitive development and mental health in students:

1. Adaptive Classroom for Emotional Well-being

- **Concept:** Design a flexible classroom where the environment can be adapted based on students' emotional and cognitive needs. This could include movable walls, adjustable lighting, and versatile furniture that allows teachers and students to easily reconfigure the space. Zones could be created for individual focus, collaborative group work, and calming relaxation areas to reduce stress.
- **Focus:** Promoting emotional balance and mental well-being by offering flexibility and autonomy in the learning environment.

2. Biophilic Learning Environment

- **Concept:** Incorporate elements of nature into classroom design, including living walls, natural light optimization, indoor plants, and nature-inspired materials. This project would focus on how biophilic design enhances focus, reduces anxiety, and promotes cognitive development by creating a calming, nature-rich learning atmosphere.
- **Focus:** Reducing stress and improving cognitive function through biophilic design principles.

3. Calm Zones in Schools

- **Concept:** Design dedicated "calm zones" within schools where students can go for mental breaks, stress relief, or quiet reflection during the school day. These areas would be equipped with comfortable seating, calming sounds, and soft lighting, creating a space for emotional self-regulation. Teachers could guide students in using these areas as needed to support mental health.
- **Focus:** Supporting emotional well-being and cognitive resets during the school day.

4. Sensory Learning Rooms

- **Concept:** Create a sensory-friendly classroom that supports students with diverse learning needs, particularly those with sensory sensitivities or neurodivergent conditions (e.g., autism). The space would use sound-dampening materials, soft lighting, and textures to create a calming atmosphere. Interactive walls and tactile learning tools could be integrated to promote engagement without overwhelming the senses.
- **Focus:** Enhancing learning for neurodiverse students and promoting inclusion through sensory-sensitive design.

5. Collaborative Learning Studio

- **Concept:** Design an open, collaborative learning space that breaks away from the traditional desk layout. The studio would feature flexible seating arrangements, writable walls, and technology integration for interactive group projects. The focus would be on promoting peer-to-peer learning, creativity, and active collaboration while reducing the rigidity of traditional classrooms.
- **Focus:** Fostering cognitive development through active learning, creativity, and social interaction in a flexible environment.

6. Mindful Learning Spaces

- **Concept:** Integrate mindfulness into the classroom design with dedicated spaces for mindfulness practices such as breathing exercises or meditation. The layout would include quiet nooks, zen gardens, or spaces with soft, natural materials that allow students to engage in mindfulness practices during transitions between lessons or when they need to reduce stress.
- **Focus:** Enhancing cognitive function and emotional regulation through mindfulness in the learning environment.

7. Tech-Integrated Learning Pods

- **Concept:** Design individualized learning pods equipped with adjustable lighting, sound control, and personal technology access where students can work at their own pace. These pods would allow students to focus deeply on tasks while minimizing distractions and stress. Teachers can assign pods for different activities like quiet study, tech-based learning, or group work.
- **Focus:** Supporting focused, self-paced learning while reducing external stimuli that cause stress.

Resources

- [School Drawing](#) (AutoCAD drawing)
- You can also download 3D models of classrooms using 3Dwarehouse in Sketchup

Inclusive and Adaptive Interiors

Here are a few project ideas under the theme of **Inclusive and Adaptive Interiors**, focusing on designing spaces that accommodate neurodivergent individuals and support their mental well-being:

1. Sensory Modulation Room

- **Concept:** Design a multi-purpose room where users can adjust sensory stimuli based on their preferences. The space would feature adjustable lighting (dimming, color-changing), soundproofing options, and tactile wall panels with different textures. These elements would allow neurodivergent individuals to customize the environment to either reduce or increase sensory input according to their needs.
- **Focus:** Creating a sensory-controlled environment that offers adaptability for reducing sensory overload or stimulating focus, based on personal preference.

2. Quiet Corners in Homes and Workplaces

- **Concept:** Develop quiet, low-stimulation zones within homes, schools, or offices. These corners would be designed with soft furnishings, calming colors, and minimal visual clutter to create a retreat from overstimulation. In workplaces, this could be a designated space for neurodivergent employees to decompress, while in homes or schools, it could serve as a calm area for focus or relaxation.
- **Focus:** Providing a peaceful retreat for mental rest, emotional regulation, and focus, away from high-stimulation environments.

3. Dynamic Sensory Pathways

- **Concept:** Design interior pathways that integrate sensory cues like sound, lighting changes, and tactile flooring to help guide neurodivergent individuals through the space. These pathways could be used in schools or workplaces to create clear, structured routes that help with spatial orientation, reducing anxiety caused by disorganized or overwhelming spaces.
- **Focus:** Enhancing spatial navigation and reducing anxiety through clear, sensory-rich design that supports orientation and focus.

4. Adaptive Workstations

- **Concept:** Create adaptable workstations that cater to the unique needs of neurodivergent individuals. Each station would have customizable elements, such as noise-canceling panels, height-adjustable desks, lighting control (brightness, color temperature), and access to calming visual stimuli like nature scenes. These workstations could be integrated into offices or schools to provide neurodivergent individuals with tailored environments.
- **Focus:** Promoting productivity and comfort by offering customizable workspaces that accommodate individual sensory and cognitive needs.

5. Inclusive Classrooms with Sensory Zones

- **Concept:** Design a classroom with distinct sensory zones that cater to different sensory needs—quiet areas for relaxation, interactive zones with tactile learning tools, and movement-friendly areas for physical activity. The layout would provide neurodivergent students with spaces where they can regulate their sensory input and engage in learning in ways that suit their preferences.
- **Focus:** Supporting diverse learning styles and sensory needs within a classroom to create an inclusive and adaptive environment.

6. Therapeutic Bathrooms

- **Concept:** Create a bathroom designed to offer comfort and sensory regulation. This could include elements like adjustable water temperature and pressure, soft lighting with dimming options, soundproofing, and sensory-friendly materials. In homes or specialized facilities, these bathrooms would provide a calming, controlled environment for neurodivergent individuals, supporting daily routines without overstimulation.
- **Focus:** Reducing sensory overload in everyday routines by designing soothing, adaptable spaces for personal care.

7. Nature-Inspired Adaptive Interiors

- **Concept:** Design interiors that incorporate biophilic design principles tailored to neurodivergent needs. These spaces would feature natural materials, calming color palettes, and indoor plants that support well-being. Sensory stimuli like water features and soft, natural lighting can also be included to create a calming, nature-rich environment that helps reduce stress and anxiety.
- **Focus:** Using nature-inspired design to enhance mental well-being and provide a soothing, sensory-friendly atmosphere.

8. Interactive Wall Panels for Mental Stimulation

- **Concept:** Design interior walls that incorporate interactive, tactile panels. These panels could have adjustable textures, colors, and embedded lights or sounds that neurodivergent individuals can control. This could be applied in schools, homes, or therapy centers, allowing individuals to engage with their surroundings for calming, focusing, or therapeutic purposes.
- **Focus:** Offering interactive elements to provide sensory engagement while reducing overload and promoting comfort.

Resources

- [House](#) (AutoCad Drawing)
- You can also download 3D models of spaces using 3Dwarehouse in Sketchup

Stress-Reducing Designs in Aviation

Here are a few project ideas for **Stress-Reducing Designs in Aviation** that focus on creating calming travel environments within airport terminals and aircraft interiors:

1. Calming Wayfinding System

- **Concept:** Design an intuitive wayfinding system within airport terminals that uses soft lighting, clear signage, and color-coded paths to reduce stress and confusion. The system could incorporate digital screens with calming animations or nature-inspired visuals, along with auditory cues (e.g., gentle chimes) that guide passengers to their gates or key amenities like restrooms and lounges.
- **Focus:** Reducing anxiety associated with navigating large, busy airports by offering clear, calming guidance and minimizing decision fatigue.

2. Relaxation Zones with Sensory Modulation

- **Concept:** Create dedicated relaxation zones in airport terminals with features like soft lighting, soundproofed seating pods, and calming soundscapes (e.g., nature sounds). These zones would allow passengers to escape the noise and bustle of the terminal, offering a tranquil environment for rest, reading, or quiet reflection before their flight.
- **Focus:** Providing a quiet retreat from the stressful airport environment, allowing passengers to relax and recharge before boarding.

3. Adaptive Aircraft Seating

- **Concept:** Design aircraft seats with adjustable features that help passengers manage their comfort and stress levels during flight. This could include adjustable lighting embedded in the headrests, built-in massaging functions, noise-canceling features, and personal climate control (adjusting seat temperature). These seats could help passengers control their environment, making flights less stressful and more comfortable.
- **Focus:** Enhancing the in-flight experience through customizable comfort features, helping passengers reduce stress and anxiety.

4. Nature-Inspired Terminal Design

- **Concept:** Reimagine the design of airport terminals by integrating biophilic design principles, such as living walls, large windows with views of nature, and natural materials like wood and stone. The terminal would be designed to bring elements of the outdoors indoors, promoting relaxation and reducing the mental strain of being in an artificial, enclosed space for extended periods.
- **Focus:** Reducing stress and anxiety by creating a calming, nature-inspired atmosphere in typically busy, high-stress airport environments.

5. Sensory-Friendly Aircraft Cabins

- **Concept:** Develop aircraft interiors with sensory-sensitive features aimed at reducing anxiety for passengers who may be overwhelmed by sights, sounds, and smells during flights. The cabin could feature adjustable ambient lighting, noise-reducing materials, and scent diffusers that release calming fragrances like lavender. These features would be especially helpful for neurodivergent passengers or those with sensory sensitivities.
- **Focus:** Creating a sensory-friendly environment within the aircraft that minimizes overstimulation and enhances passenger comfort.

6. Quiet Boarding Lounges

- **Concept:** Design quiet, low-stimulation boarding lounges near departure gates where passengers can wait in a calming environment before boarding. These lounges would feature soundproof walls, soft, adjustable lighting, and ergonomic seating designed for relaxation. Passengers could choose from quiet zones, where talking is minimized, or "white noise" zones that use calming soundscapes to drown out airport noise.
- **Focus:** Offering passengers a peaceful place to wait before boarding, reducing the stress of the busy, noisy terminal environment.

7. Stress-Free Self-Check-In Kiosks

- **Concept:** Develop self-check-in kiosks and security lanes designed with stress reduction in mind. These kiosks would use touchscreens with simple, intuitive instructions and calming visual cues (e.g., nature-inspired backgrounds). The surrounding areas could be designed with acoustic dampening materials to reduce noise and bright, soft lighting to create a welcoming atmosphere.
- **Focus:** Reducing the anxiety passengers feel during check-in and security processes through a calm, intuitive interface and serene design elements.

8. Mindfulness Pods in Terminals

- **Concept:** Install small, soundproof mindfulness pods in airport terminals where passengers can engage in relaxation exercises, meditation, or deep-breathing techniques. These pods would have adjustable lighting, soothing music, and soft seating to help passengers de-stress before or between flights. The design would encourage quick mental resets, making travel less overwhelming.
- **Focus:** Providing passengers with a dedicated space to de-stress and practice mindfulness, enhancing mental well-being in stressful travel environments.

9. Calm Lighting Scheme for Boarding Gates

- **Concept:** Implement a specialized lighting scheme in boarding areas that uses soft, diffused light and color-changing LED panels to create a soothing environment. The lighting could shift to calming hues like soft blues or greens as the boarding process begins, helping passengers feel more relaxed and less anxious about the transition from terminal to aircraft.

- **Focus:** Reducing pre-flight anxiety by using lighting to create a calm, welcoming atmosphere at the boarding gate.

10. Sleep-Friendly Aircraft Cabins

- **Concept:** Design long-haul aircraft cabins that support better sleep with features like fully reclining seats, blackout window shades, soundproof partitions between seats, and personal mood lighting. Passengers could also be provided with calming amenities like aromatherapy pillows and weighted blankets, all aimed at reducing anxiety and enhancing relaxation.
- **Focus:** Helping passengers relax and sleep more easily during flights, reducing the overall stress of air travel.

Resources

[Airplane 3D model](#) (SketchUp)

[Airport](#) (AutoCAD drawing)

Wearable Environments

Here are a few project ideas under the theme of Wearable Environments, focusing on garments and accessories that provide sensory comfort and support mental health across various built environments:

1. Therapeutic Shelter Poncho

- **Concept:** A poncho that not only provides rain protection but also converts into a small tent or meditation pod with calming features. The inside of the shelter could be lined with soft, sound-dampening materials to create a quiet space for meditation or relaxation. Built-in pockets would contain aromatherapy patches (lavender, chamomile) that release calming scents when the poncho is converted into a shelter.
- **Focus:** Reducing anxiety and offering a space for mindfulness or relaxation in stressful environments like hiking or travel.

2. Inflatable Mindfulness Jacket-Tent

- **Concept:** A jacket that inflates into a personal meditation or relaxation tent, providing a private, sensory-controlled space. The inflatable structure could have integrated noise-canceling properties and soft LED lighting that mimics natural light cycles to help regulate circadian rhythms and promote calmness. The tent could also have built-in features like guided meditation recordings or soundscapes (rain, forest sounds) to reduce stress and enhance mental well-being.
- **Focus:** Providing a calming, secluded space for mental recovery, ideal for managing stress in crowded environments like festivals or airports.

3. Weighted Coat with Sleep Cocoon

- **Concept:** A coat designed with weighted materials that help reduce anxiety and provide a sense of calm when worn, similar to the therapeutic effects of weighted blankets. The coat could then unfold into a sleep cocoon that blocks light and sound, creating a sensory-controlled environment for napping or meditation. The cocoon would include soothing lighting options and integrated heat therapy to promote relaxation.
- **Focus:** Offering portable stress relief through weighted pressure and sensory isolation, helping users reduce anxiety and promote mental relaxation while traveling or camping.

4. Wearable Calming Shelter Backpack

- **Concept:** A backpack with a built-in fold-out relaxation pod. The pod could be set up as a personal relaxation space, complete with a soft, calming interior that includes adjustable lighting, calming soundscapes, and temperature control. The wearable component would be ergonomically designed to reduce physical strain and improve posture, reducing stress on the body and mind while being worn.

- **Focus:** Creating a portable retreat for mental well-being, ideal for individuals needing mental breaks in urban environments or during travel.

5. Hammock Jacket with Sensory Relief

- **Concept:** A jacket that can be transformed into a hammock for rest or mindfulness practice. The hammock could include adjustable straps that allow for gentle swaying, which can help soothe anxiety. The fabric would be soft and sensory-friendly, and optional built-in speakers could play relaxing music or nature sounds to promote relaxation. The jacket itself could be designed to apply gentle, comforting pressure while worn.
- **Focus:** Offering a portable way to create a relaxing, sensory-friendly environment in stressful outdoor settings, promoting relaxation and mental clarity.

6. Wearable Calm-Down Shelter Cape

- **Concept:** A cape that functions as wearable outerwear but can transform into a portable shelter specifically designed for moments of high anxiety or sensory overload. The cape could fold out into a small, enclosed space lined with sound-dampening fabric, soft lighting, and calming color schemes like muted blues or greens. Optional aromatherapy features could be integrated to help regulate emotions.
- **Focus:** Creating a quick, calming escape for neurodivergent individuals or those with high anxiety, offering a safe, sensory-controlled space to decompress.

7. Thermal Regulating Shelter Pants for Stress Reduction

- **Concept:** Pants that convert into a shelter designed to promote mental well-being by regulating temperature and offering sensory isolation. When set up, the shelter could create a cocoon-like space with cooling or warming zones to help the user reach their ideal comfort level. The tent could include ambient lighting that adjusts to promote relaxation and help with stress relief after a long day of travel or activity.
- **Focus:** Providing both physical comfort and mental relaxation through temperature regulation and sensory isolation in a portable form.

8. Wearable Solar-Powered Meditation Tent

- **Concept:** A jacket or vest with integrated solar panels that power a small, foldable meditation tent. The tent would include mood-enhancing lighting and be equipped with a small fan or heater to regulate temperature, creating a comfortable, calming environment. The jacket could also feature subtle pressure points that mimic calming techniques like acupressure to reduce anxiety while worn.
- **Focus:** Promoting mental health and well-being by providing a solar-powered, stress-free space for meditation or relaxation in any environment.

9. Portable Zen Blanket Cloak

- **Concept:** A large cloak that can transform into a calming shelter, designed for both wearing and use as a tent or quiet space. The inside of the cloak would be made from sensory-

friendly materials that promote tactile comfort, while the shelter mode would offer a dark, enclosed space ideal for meditation, deep breathing exercises, or napping. Optional calming music or white noise could be integrated to reduce stress.

- **Focus:** Offering a portable space for mindfulness and stress reduction, perfect for urban environments or camping trips where mental well-being is a priority.

10. Nomadic Well-Being Vest with Living Pod

- **Concept:** A lightweight vest that expands into a mental well-being pod for moments of high stress. The pod would be soundproof and equipped with calming ambient lighting, soft textures, and guided meditation or deep breathing audio files. It would provide a secluded space to recover from sensory overload or mental exhaustion in public or outdoor settings.
- **Focus:** Providing a personal, calming environment that helps manage anxiety and mental health while being easy to carry and set up in any environment.

Aging in Place

Here are some project ideas under the theme of **Aging in Place**, focused on designing environments that support the mental and emotional health of older adults, while enhancing their independence, safety, and quality of life:

1. Smart Adaptive Homes for Independence

- **Concept:** Design a home with integrated smart technologies that automatically adjust to the needs of older adults. The environment would include voice-controlled lighting, temperature control, and automated doors or windows that respond to the resident's needs. The home could also feature sensors that detect movement and alert caregivers in case of a fall, promoting both safety and independence.
- **Focus:** Supporting independence and safety by using smart technologies to minimize physical strain and ensure quick response in emergencies.

2. Socially Engaging Living Spaces

- **Concept:** Develop a home layout or neighborhood model that encourages social interaction among older adults. This could include shared gardens, outdoor seating areas, or common rooms that serve as gathering spaces. These areas would be designed to be accessible and comfortable, fostering connection and reducing the loneliness and isolation that older adults may experience.
- **Focus:** Reducing social isolation by creating spaces that encourage frequent interaction and community-building.

3. Multi-Sensory Relaxation Rooms

- **Concept:** Create a multi-sensory room specifically designed to help older adults manage stress, anxiety, or cognitive decline. The room would feature calming lights, soft textures, soundscapes, and aromatherapy options. This space could serve as a retreat for relaxation, helping to reduce anxiety and improve mental well-being, especially for those with dementia or other cognitive challenges.
- **Focus:** Enhancing mental and emotional well-being through sensory regulation and stress relief.

4. Biophilic Gardens for Emotional Well-Being

- **Concept:** Design accessible, biophilic gardens that integrate nature into daily life. These gardens would be easy to navigate for older adults, with raised beds for gardening, walking paths, seating areas, and shaded spots for relaxation. The design could focus on sensory engagement through the use of fragrant plants, water features, and natural materials to reduce stress and boost mental health.
- **Focus:** Promoting emotional well-being and reducing stress through the integration of nature into everyday life.

5. Flexible Living Spaces for Caregiver Integration

- **Concept:** Create adaptable living spaces that allow for easy integration of caregivers without disrupting the older adult's privacy or independence. These spaces could include separate living quarters or adaptable rooms that can transition between independent and assisted living as needed. The design would focus on maintaining dignity and autonomy while also allowing for caregiver support when necessary.
- **Focus:** Supporting the transition from independent living to assisted care in a way that maintains mental and emotional health.

6. Home-Based Physical Therapy and Fitness Spaces

- **Concept:** Design in-home physical therapy spaces that encourage older adults to stay active and healthy. These spaces could be equipped with low-impact exercise equipment, handrails for support, and calming environments that motivate movement while minimizing injury risk. Virtual or augmented reality could be integrated to provide guided workouts or therapy sessions that cater to both physical and mental well-being.
- **Focus:** Encouraging physical health and mental stimulation through safe, accessible in-home fitness spaces.

7. Memory Care Apartments for Dementia

- **Concept:** Design apartments specifically for individuals with memory loss or dementia. These apartments would include clear visual cues for navigation, such as color-coded pathways, easily recognizable furniture layouts, and memory boxes outside doors with personal items to aid recognition. Calm, uncluttered interiors would reduce confusion and anxiety, and sensory engagement features could be incorporated to stimulate cognitive function.
- **Focus:** Supporting cognitive health and emotional well-being by creating an intuitive, calming living environment.

8. Accessible Kitchens for Culinary Independence

- **Concept:** Design kitchens with accessibility features that support older adults in maintaining their independence with cooking. This could include adjustable countertops, easy-to-reach storage, anti-slip flooring, and user-friendly appliances with large, intuitive controls. The layout would be optimized for safety, reducing the risk of accidents while encouraging self-sufficiency.
- **Focus:** Promoting independence and self-sufficiency while ensuring a safe cooking environment.

9. Safe and Calming Bathroom Designs

- **Concept:** Design a bathroom that prioritizes safety while creating a calming, spa-like experience. Features could include walk-in bathtubs, grab bars that blend seamlessly into the design, non-slip flooring, and soft, adjustable lighting. Calming colors and natural

materials like stone and wood would create a relaxing atmosphere, improving both safety and mental well-being.

- **Focus:** Enhancing safety while promoting relaxation and reducing stress during daily routines.

10. Community Wellness Centers for Aging Adults

- **Concept:** Develop a community-based wellness center specifically designed for older adults. The center would include spaces for social activities, mental health support, physical therapy, and relaxation zones. Programs could focus on both physical and mental health, including group exercise classes, meditation, and workshops on aging-related topics.
- **Focus:** Supporting social, mental, and physical health through accessible, community-oriented wellness programs.

11. Sensory-Friendly Bedrooms for Better Sleep

- **Concept:** Design bedrooms that enhance sleep quality and mental well-being by addressing sensory sensitivities. The room could feature blackout curtains, soundproofing, temperature control, and ergonomic furniture to promote relaxation and restorative sleep. Calming lighting and soothing textures would help create a serene environment for rest, addressing sleep challenges that often accompany aging.
- **Focus:** Improving mental health through better sleep environments that promote relaxation and comfort.

12. Cognitive Stimulation Zones in Public Spaces

- **Concept:** Design specific areas within public spaces, such as libraries or community centers, that focus on cognitive stimulation for older adults. These spaces could include puzzles, memory games, and interactive digital interfaces that engage users in mental exercises. The environment would be calming, with natural light and comfortable seating, encouraging mental activity without overstimulation.
- **Focus:** Promoting cognitive health through gentle mental exercises in a social, community-focused environment.

Resources

[House](#) (AutoCAD drawing)

[Rehab Center](#) (AutoCAD drawing)

Designing Recreational Spaces for Mental Well-being

1. Sensory Healing Gardens

- **Concept:** Create a sensory-rich garden where different zones cater to various senses (sight, sound, touch, and smell). This would include elements like aromatic plants, water features, and textured pathways to engage visitors in a calming environment. Spaces could be designed for both individual meditation and group interaction, focusing on reducing anxiety and stress.
- **Focus:** Mental relaxation through nature's stimuli, including biophilia and sensory engagement.

2. Interactive Mindfulness Park

- **Concept:** Design a park with zones dedicated to different mindfulness activities, such as yoga platforms, meditation pods, and reflection pools. The park would have integrated digital installations that guide visitors through breathing exercises or meditative practices using augmented reality (AR) or soundscapes.
- **Focus:** Integrating mindfulness, physical activity, and mental well-being in an interactive space.

3. Community Engagement Playground

- **Concept:** Design an inclusive playground that fosters interaction across different age groups, abilities, and cultures. The space could include multi-generational play equipment, areas for collaborative art creation (e.g., community murals or sculptures), and outdoor classrooms where group therapy or support groups can meet in a natural setting.
- **Focus:** Building community connections, reducing social isolation, and creating an inclusive space for emotional support.

4. Nature Therapy Trails

- **Concept:** Design a series of trails with dedicated "mental well-being stations" where people can engage in calming activities, such as guided nature walks, journaling stations, or outdoor reading corners. The trails could be designed to naturally reduce stress through biophilic design, leading users through varying natural elements, including forests, streams, or open fields.
- **Focus:** Physical activity as a gateway to mental relaxation, incorporating solitude and nature-based therapies.

5. Urban Escape Park

- **Concept:** A park designed specifically for urban environments where people can take quick breaks during their day to de-stress. This space would include mini-oases with soft seating, calming greenery, and soundproof areas to escape the noise of the city. Small pop-up events like music therapy, outdoor counseling, or mindfulness workshops could be held regularly.
- **Focus:** Offering urban dwellers a retreat from stress, integrating nature and mental health workshops.

6. Art Therapy Courtyard

- **Concept:** A public courtyard or plaza that incorporates interactive art installations where visitors can contribute to evolving art pieces (e.g., collective mural painting or sculpture building). There could also be spaces where people can engage in quiet creative activities, such as drawing, painting, or crafting, in a calm environment designed for self-expression and mental well-being.
- **Focus:** Leveraging art as a therapeutic tool in public spaces for mental relaxation and community engagement.

Resources:

<https://stw.maps.arcgis.com/apps/webappviewer/index.html?id=ef9af1bf05284a2fb63ad0cca88d1ae0>

Mental Health in Sports Facilities

Here are project ideas under the theme of **Mental Health in Sports Facilities**, focusing on creating athletic environments that reduce stress and enhance performance:

1. Mindfulness Training Rooms

- **Concept:** Design a dedicated space within sports facilities for mindfulness training, meditation, and visualization exercises. This room would be equipped with soft lighting, calming visuals, and soundproofing to create a quiet, stress-free environment. Athletes could use the space for mental preparation before competitions or for relaxation and recovery after training sessions.
- **Focus:** Supporting mental resilience and focus through mindfulness and stress-reduction practices integrated into athletic training.

2. Recovery Zones with Sensory Modulation

- **Concept:** Develop sensory-friendly recovery spaces that athletes can use after intense training sessions or competitions. These zones would feature adjustable lighting (color temperature and intensity), calming soundscapes, and comfortable seating or lying areas. The goal is to create an environment that allows athletes to physically and mentally decompress, aiding in faster recovery and stress reduction.
- **Focus:** Enhancing both mental and physical recovery by providing a space where athletes can recharge and manage stress post-training.

3. Performance-Enhancing Locker Rooms

- **Concept:** Reimagine locker rooms to reduce pre-game anxiety and help athletes mentally prepare for performance. This could include private, quiet areas for mental focus, inspirational design elements (e.g., motivational quotes, nature-inspired imagery), and areas with soft lighting for pre-game meditation or visualization. The design would promote calmness and focus before competitions.
- **Focus:** Reducing pre-competition stress and promoting mental readiness in a space that supports athletes' emotional well-being.

4. Integrated Mental Health Support Stations

- **Concept:** Design mental health support stations within sports facilities where athletes can access mental health professionals, educational resources on managing stress, and digital tools for tracking their mental well-being. These stations could provide private spaces for athletes to consult with psychologists, counselors, or mental skills coaches, offering a proactive approach to mental health in athletic environments.
- **Focus:** Creating easy access to mental health support within the facility, integrating mental and physical training into a holistic approach to athlete well-being.

5. Stress-Relief Warm-Up and Cool-Down Spaces

- **Concept:** Create warm-up and cool-down areas designed to reduce stress and enhance mental focus. These spaces could include elements like stretching areas with calming visuals, ambient music, and temperature-controlled environments. The focus would be on using warm-up time not only for physical preparation but also for mental relaxation and focus-building exercises.
- **Focus:** Using environment and design to integrate stress reduction and mental preparation into the physical warm-up and cool-down processes.

6. Nature-Inspired Sports Facilities

- **Concept:** Incorporate biophilic design elements into sports facilities, such as indoor green walls, natural light, water features, and natural materials. These elements help reduce stress and enhance mental well-being, creating a calming atmosphere within high-intensity spaces. Athletes could use these areas for post-training relaxation or as a calm, inspiring environment during practice sessions.
- **Focus:** Reducing anxiety and enhancing mental clarity through nature-inspired design elements in athletic spaces.

7. Mental Conditioning Rooms

- **Concept:** Design mental conditioning rooms equipped with virtual reality (VR) or augmented reality (AR) systems that simulate high-pressure sports scenarios. These spaces allow athletes to practice mental resilience and focus under simulated competitive stress, improving both their mental toughness and physical performance in actual competitions.
- **Focus:** Enhancing mental performance and resilience by simulating stress scenarios in a controlled, supportive environment.

8. Team Bonding and Mental Health Lounges

- **Concept:** Create team lounges focused on fostering team bonding and emotional support. These spaces would have comfortable, social seating arrangements, calming lighting, and recreational activities (e.g., board games, relaxation stations) designed to reduce stress and build team cohesion. Athletes could use these spaces for downtime, which helps with mental health and team dynamics.
- **Focus:** Supporting team cohesion and reducing stress through informal, relaxing environments that prioritize mental well-being.

9. Flexible Training Spaces for Individual Mental Health Needs

- **Concept:** Develop flexible training spaces that can adapt to athletes' mental health needs on any given day. For example, a room could transform from a high-energy practice space into a low-stimulation recovery area with adjustable lighting, sound systems, and temperature control. This adaptability allows athletes to train or recover in environments that suit their mental state.

- **Focus:** Offering customizable spaces that meet both the physical and mental health needs of athletes, providing the right environment for different training or recovery goals.

10. Hydrotherapy and Mental Relaxation Zones

- **Concept:** Incorporate hydrotherapy pools and water features specifically designed for mental relaxation into the sports facility. These zones would feature calming water flows, temperature-controlled pools, and quiet areas where athletes can practice mindfulness or meditation while immersed in water. Water therapy has been shown to reduce stress and aid in both physical and mental recovery.
- **Focus:** Combining the physical benefits of hydrotherapy with mental relaxation techniques to enhance overall well-being and performance.

11. Performance Visualization Studios

- **Concept:** Create a dedicated space for athletes to practice mental visualization techniques. These studios would be equipped with large screens or VR systems that allow athletes to visualize their performance in a calming environment. The space would also be acoustically optimized for guided visualization exercises and breathing techniques, helping athletes mentally prepare for competition.
- **Focus:** Enhancing performance through mental imagery and visualization, providing athletes with a quiet space to mentally rehearse and build confidence.

12. Integrated Mind-Body Recovery Rooms

- **Concept:** Design mind-body recovery rooms that combine physical recovery tools (like massage chairs, compression devices) with mental health aids (such as guided meditation stations, soft lighting, and aromatherapy). These rooms would allow athletes to recover both physically and mentally after intense workouts or competitions.
- **Focus:** Providing holistic recovery by addressing both physical and mental health needs in a calming, supportive environment.

Resources

- [Gym](#) (AutoCAD Drawing)
- [Older Adult Rehab Center](#) (AutoCAD Drawing)
- You can also download 3D models of Gyms using 3Dwarehouse in Sketchup

Designing Healing Spaces in Hospitals

Here are project ideas for **Designing Healing Spaces in Hospitals**, focusing on how environmental factors can support mental health for both patients and healthcare providers:

1. Biophilic Patient Rooms

- **Concept:** Design patient rooms that integrate biophilic elements such as living walls, large windows with views of nature, and natural materials (wood, stone). The calming influence of nature reduces stress, promotes faster healing, and supports mental well-being. These rooms would include features like adjustable lighting to mimic natural light cycles, aiding in regulating sleep and mood.
- **Focus:** Reducing stress and promoting healing through nature-inspired environments that enhance mental well-being.

2. Mindful Nursing Stations

- **Concept:** Develop nursing stations with calming, ergonomic designs that reduce stress and promote focus. This could include quiet zones with sound-dampening materials, soft lighting to reduce eye strain, and standing/sitting desks to support physical comfort. Incorporating natural elements and adjustable lighting would help reduce the fatigue and stress nurses often experience during long shifts.
- **Focus:** Supporting mental well-being for nurses by creating a calm, comfortable, and efficient work environment.

3. Patient Recovery Gardens

- **Concept:** Create accessible healing gardens within hospital grounds that patients and healthcare providers can visit to reduce stress, promote mental relaxation, and facilitate recovery. These gardens would feature sensory-rich elements like fragrant plants, water features, and comfortable seating. Paths would be designed for wheelchair access, making them a peaceful retreat for patients and staff alike.
- **Focus:** Enhancing mental health and recovery through access to nature and outdoor spaces designed for reflection and relaxation.

4. Calm and Quiet Patient Rooms

- **Concept:** Design patient rooms that are optimized for quiet, with soundproofing materials and technology to minimize noise from hospital equipment and foot traffic. The rooms would include dimmable lighting and calming color schemes to create a peaceful, healing environment. Incorporating noise-canceling elements into patient rooms can drastically reduce stress and promote faster recovery.
- **Focus:** Reducing stress and promoting rest by minimizing noise and creating a calming, peaceful patient environment.

5. Wellness Lounges for Staff

- **Concept:** Design dedicated wellness lounges where healthcare providers can decompress during their shifts. These lounges would feature soft, comfortable seating, natural light, quiet zones for naps or meditation, and calming color palettes. Incorporating elements like aromatherapy or relaxing soundscapes would enhance the mental and emotional well-being of staff.
- **Focus:** Reducing burnout and stress by providing a space for mental recovery during breaks.

6. Sensory-Friendly Patient Rooms

- **Concept:** Design patient rooms specifically for individuals with sensory sensitivities or mental health conditions. These rooms would feature adjustable lighting (brightness and color), soundproofing, and options for tactile engagement (like soft, textured fabrics). The environment would be easily adaptable to the needs of patients, allowing them to control their sensory experience for comfort.
- **Focus:** Reducing sensory overload and promoting emotional comfort by offering customizable environments.

7. Nature-Inspired Hallways and Waiting Areas

- **Concept:** Transform hospital hallways and waiting areas with biophilic design elements like nature-inspired art, calming lighting, and live plants. These spaces would provide patients and families with a calming transition between treatment rooms and waiting areas. Waiting rooms could feature panoramic views of outdoor gardens or green walls to reduce stress and promote calm.
- **Focus:** Creating calming, stress-relieving public spaces within hospitals to promote a more peaceful, healing environment for both patients and staff.

8. Healing Light Therapy Rooms

- **Concept:** Design dedicated light therapy rooms where patients and staff can go for short, rejuvenating breaks. These rooms would include natural light or artificial full-spectrum lighting that mimics sunlight, which can help reduce stress, improve mood, and regulate circadian rhythms. Light therapy has been shown to improve recovery and boost mental health, making it an ideal addition to hospital spaces.
- **Focus:** Using light therapy to enhance mental health, reduce stress, and improve mood for both patients and healthcare workers.

9. Private Reflection Spaces for Staff

- **Concept:** Create small, private rooms where nurses and healthcare providers can retreat for moments of quiet reflection or mindfulness exercises. These spaces would be minimally designed with soft lighting, neutral colors, and soundproofing, providing a much-needed respite during stressful shifts. The space could also include mindfulness resources like meditation guides or breathing exercises.

- **Focus:** Supporting mental health for healthcare providers by offering quiet spaces for stress management and reflection.

10. Multi-Sensory Healing Rooms

- **Concept:** Design patient rooms that integrate multi-sensory elements such as calming scents (lavender, eucalyptus), adjustable lighting, and soft textures to create a soothing environment. These rooms would help reduce anxiety for patients and improve their overall emotional state, making the healing process smoother and faster. Healthcare providers could also use these rooms as spaces for relaxation between care duties.
- **Focus:** Promoting mental and emotional healing through multi-sensory engagement in a calming, therapeutic environment.

11. Art and Music Therapy Integration

- **Concept:** Incorporate art and music therapy elements into patient rooms and common areas. This could include spaces for live music performances, interactive art installations, or therapeutic art sessions. Music and art can be used to calm patients, reduce anxiety, and improve overall mental well-being, enhancing the healing environment for both patients and staff.
- **Focus:** Supporting emotional and mental health through creative therapies that foster relaxation and recovery.

12. Collaborative Care Stations

- **Concept:** Design nursing stations that promote collaboration while minimizing noise and stress. These stations would feature clear sightlines to patients, soft lighting, ergonomic seating, and noise-reducing materials. Collaboration pods would allow nurses to work in teams while maintaining a calm, organized space, reducing stress levels and improving care quality.
- **Focus:** Improving the mental well-being of healthcare providers by reducing stress and promoting collaborative, organized care.

Resources

[Hospital Drawing 1](#) (AutoCAD Drawing)

[Hospital Drawing 2](#) (AutoCAD Drawing)

General Resources for All Projects

1. Design Thinking & Ideation Resources

- **IDEO Design Kit:** A comprehensive guide on human-centered design, perfect for students tackling diverse problems like designing for mental health or hospital environments.
 - [IDEO Design Kit](#)
- **Miro:** A collaborative online whiteboard platform that helps teams brainstorm, ideate, and create user journeys, making it useful for project planning and ideation.
 - [Miro](#)

2. Research and Academic Resources

- **Google Scholar:** Access research papers on topics like mental health in architecture, healthcare facility design, or smart technologies in design.
 - [Google Scholar](#)
- **IEEE Xplore:** Contains technical papers on wearable technology, smart environments, and healthcare architecture.
 - [IEEE Xplore](#)
- **PubMed:** Great for finding studies related to healthcare design, environmental psychology, and mental health.
 - [PubMed](#)

4. Healthcare Design & Mental Health Architecture

- **The Center for Health Design:** A valuable resource for understanding evidence-based design principles in healthcare that improve patient and staff well-being, with research and case studies on hospital design.
 - [Center for Health Design](#)
- **The WELL Building Standard:** Provides design guidelines that link environmental factors like air quality, lighting, and ergonomics to improved mental health and well-being, useful for healthcare and sports facility design.
 - [WELL Building Standard](#)

5. Mental Health & Sensory Design

- **Designing for Mental Health (Mind the Gaps):** An online guide that helps students understand how to design spaces that support mental health, including sensory modulation techniques.

- [Designing for Mental Health](#)
- **Sensory Design Resources:** Learn about designing for sensory engagement, particularly useful for creating calming environments in healthcare or aging-in-place projects.
 - [Sensory Design and Architecture](#)

6. Sustainability and Materials

- **Ellen MacArthur Foundation:** Offers resources on sustainable and circular design, important for projects that require eco-friendly materials in healthcare or wearable environments.
 - [Ellen MacArthur Foundation](#)
- **Material ConneXion:** A global database of innovative and sustainable materials that can inspire students to select the right materials for their projects.
 - [Material ConneXion](#)

7. Prototyping & 3D Modeling

- **3D printer:** Use the Mixed Reality Lab 3D printers to prototype your solutions.
- **VR:** Use the Mixed Reality Lab VR resources for virtual prototyping

8. Project Management and Collaboration Tools

- **Trello:** A simple project management tool that helps teams organize tasks, assign roles, and track deadlines—crucial for collaborative designathon projects.
 - [Trello](#)
- **Notion:** A powerful tool for project organization and collaboration, useful for documenting research, gathering inspiration, and planning.
 - [Notion](#)