EMPLOYING DIDACTIC DESIGN, THIS THESIS SEEKS TO EXPLORE ADVANCES IN TRADITIONAL TEACHING METHODS TO PROVIDE ARCHITECTURE STUDENTS WITH HANDS-ON INTERACTIVE LEARNING ENVIRONMENTS TO MEET THEIR EVOLVING NEEDS. THESE METHODS ARE EMPHASIZED THROUGH THE HUMAN BODY’S CONNECTION TO ARCHITECTURE. TRADITIONALLY, HIGHER EDUCATION PUTS A FOCUS ON COGNITIVE KNOWLEDGE WITH A DISREGARD TO THE BODILY EXPERIENCE. THE PROPOSED ACADEMIC DESIGN CURRICULUM ALLOWS STUDENTS TO LEARN HOW TO DESIGN USING MULTI-SENSORY INTERACTION WITH THE BUILT ENVIRONMENT.
WHAT DOES ARCHITECTURAL EDUCATION MEAN TO YOU?
HANDS-ON LEARNING

20 MIN

AVERAGE ATTENTION SPAN IN UNIVERSITY STUDENTS

60-70%

AVERAGE AMOUNT OF INFORMATION ABSORBED FROM LECTURE
"The duty of education is to cultivate and support the human abilities of imagination and empathy [...] the education of the senses and the imagination is necessary for a full and dignified life."

-Juhani Pallasmaa
ARCHITECTURAL EXPERIENCE
ARCHITECTURAL EXPERIENCE
ROLE OF THE BODY IN PERCEPTION

HOW EACH OF OUR SENSES INFLUENCE EXPERIENCES

UNCONSCIOUS ABSORPTION OF OUR ENVIRONMENT

FACTORS OF SENSORY PERCEPTION

CONSCIOUS UNDERSTANDING

ANALYZING OUR SENSES IN ARCHITECTURE

DESIGN DECISIONS

HOW TO DESIGN FOR SENSORY INTERACTION

SIGHT
- color, light, enclosure

SOUND
- absorption, deflection

TOUCH
- kinesthetic, tactile, haptic

SMELL
- limbic system

SIGHT
- sight lines, light intensities, way finding

SOUND
- wavelengths (directionality, frequency, amplitude), angles of incidence & reflection

TOUCH
- texture, interactivity (response to human interaction), temperature

SMELL
- branding (scents to feelings/reactions), intensity

SIGHT
- central & peripheral vision (cone of vision), apertures of light, color palette

SOUND
- material absorption / reflection, barriers, amplifiers, scale

TOUCH
- accessibility (proximity to user), material consistency (surface quality/density)

SMELL
- ventilation, way finding
TYPICAL CLASSROOM

LEARNING ENVIRONMENTS
LEARNING ENVIRONMENTS
LEARNING ENVIRONMENTS
MAKERS PAVILION
MAKERS BUILDING -

MAKERS PAVILION -
8x10 GLULAM BEAM
GLULAM INVERTED KING POST TRUSS
12x32 BOX GLULAM BEAM
STEEL CROSS BRACING
12x12 GLULAM COLUMN

32' - 0" O.C.
32' - 0" O.C.
16' - 0" O.C.

STRUCTURAL PERCEPTIONS
STRUCTURAL PERCEPTIONS