

Sport and Movement Workshop Approach

Sports and movement workshops are embodied collaborative sessions to solve performance, health, or joy of movement problems and enable a design challenge to progress throughout a timeline.

Several variables distinguish movement workshops from traditional sports activities:

Purpose: While sports activities are performances driven for active participants, movement workshops are a method to solve a problem, develop a plan, or reach a decision.

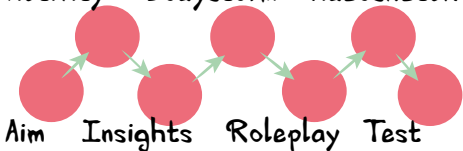
Scope: Sports activities typically allow a disciplined performance, while movement workshops are for profound coverage of unsolved movement issues.

Length: Sports activities are usually restricted to a short defined time, while movement workshops are executed in half-days or days.

Structure: Both sports activities and workshops encourage active participation in sensitising, improvisation, bodystorming, test and validation, role-playing and documenting of the physical activity.

Preparation: Movement workshops often take longer to prepare than sports training or performance because of the length, materials, and tools required, planning activities, and necessary buy-in.

Activity Bodystorm Videosketch



Movement-Based Design Flow #1

Decide where to focus your design work and what to plan

1. Do you know what sports, health or movement goal your team is aiming for?
 - If yes proceed to 2 – if no **define an aim.**
2. Do you understand the activity you are designing for?
 - If yes proceed to 3 – if no, **sensitise and familiarise yourself with the activity.**
3. Can you both sense and articulate your sports and movement design challenge?
 - If yes proceed to 4 – if no, **sketch and frame movement insights, and share activity.**
4. Do you have sufficient movement ideas?
 - If yes proceed to 5 – if no, do **embodied sketching, explore movement, generate ideas from play, and bodystorm.**
5. Have you performed and assessed your movement ideas?
 - If yes proceed to 6 – if no, **role-play and context play** your sports solution.
6. Have you documented your fleeting movements in action at your solution?
 - If yes proceed to 7 – if no, make **movement-scenario videos or photo sketches.**
7. Have you decided which movement solution to proceed with?
 - If yes – make a **prototype and test it.**

Movement-Based Future Workshop

"Dreams, not desperation, make communities survive". With the significant growth in the modern sports industry, we additionally see a more in-home practice, individualised and mobile sports and exercise culture. It is thus essential to imagine future technologies supporting sports solutions suiting these trends. Thus creating dreams about, for motivation, a sustainable future is an essential task for many designers and end-user as co-designers to manage. This has a wide application to societal challenges. When creating visions about the future and moving towards new solutions, implementing movement-based elements can provide crucial insights into creating a design aim.

In our case, the purpose was to redesign any place-based movement-based interaction design. Using the Future Workshop approach, we emphasised "critique, learning, teamwork, democracy, and empowerment". We used various movement-based design approaches, such as sensitising and emphasising. We sketch a design flow using the moving body to work through the phases of criticising the actual situation, dreaming about preferable future conditions, and finally finding ways to move from the actual to the preferable situation.



Movement-Based Design Flow #2

- 1) Unravelling the Rope or Three Noses Dance.
 - a. To form a bond and familiarise participants with each other, paving the ground for teamwork, democracy and empowerment.
- 2) Instruction Card #10 + Movement Concepts.
 - a. Preparation: Explain the steps and define the area of concern. Define the main subject field and choose theory/evidence in focus.
- 3) Collaborative Somatic Inquiries.
 - a. Critique phase: investigate current problems with the situation. Describe the problems through embodied scenarios. Use modifiers to bring attention to various perspectives.
- 4) Context Bodystorm and Explore Movement.
 - a. Visionary phase: think of new and better ways to interact and use the space, play out as embodied scenarios in the group. Discover and reflect on utopian movement ideas.
- 5) Movement-Scenario or Context Playing.
 - a. Play out various scenarios and keep producing utopian ideas for the activity, focusing on the technology used in context.
- 5) Build and Describe or Video or Photo Sketch.
 - a. Implementation phase: document and plan changes that could be done now, in a few months, or in a longer run.

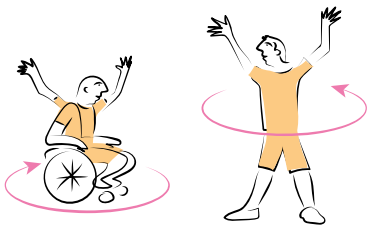
Time: ±2 * 4 hours and ±2 * 2 hours of preparation.

Tip: Fertilise the out-of-the-box movement-idea-tion body being using Mood Setting activities.

Understand Through Movement

The design of movement-focused and playful applications such as exergames, VR exertion, rehabilitation, dance, and learning games requires a focus on bodily/kinesthetic aspects of the post-phenomenological interplay between the product, its users, and the intended use in context. Thus, the designer needs to use design methods that utilise bodily intelligence and empathy with the user to experience how the product “feels” in use. The lived body is our experienced body, and using our bodies and bodily experiences in the design process, taking a 1st person’s perspective, can give valuable insights different from perceiving our own and our potential users’ bodies “from the outside”.

We sketch a design flow on developing solutions from 1st person perspectives, exemplified by a case creating exergames for people with and without disabilities playing together. The chosen activities grow your bodily awareness to tune into your body and sense your bodily being when exercising. Engage in movement practices related to your design problems and sense, play, explore, and disrupt ways of moving to stimulate bodily creativity and gain perspectives and experiential data.



Movement-Based Design Flow #3

Develop solutions from 1st person perspective

1. Don't Do What I Do – to set a mood and strengthen embodied creative body being.
2. Grow Body Awareness.
 - a. Practice “body”-fullness to increase awareness of your body and its sensations. The exercise will tune to your design work and the following methods.
3. Sensitising Designers.
 - a. Get a first-person bodily experience to understand an embodied phenomenon relevant to your design context.
4. Daily Movements.
 - a. Change, augment or disrupt familiar movement related to a context to get perspectives and experiential data and feel the sensation of movement.
5. Context Playing.
 - a. Act out different scenarios related to the users to get a 1st-person experience in a relevant context.
6. Video or Photo Sketch.
 - a. Document and store the movement sequences or sketches. Afterwards, analyse the learnings testing the solution.

Time: ±4 hours plus 3 hours of preparation.

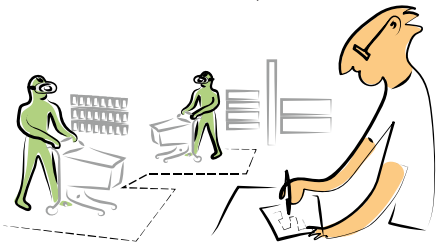
Tip: Repeating the Grow Body Awareness practice is recommended to fully benefit from it throughout the design session.

Creating Context Sensitive Solutions

Many projects ask for sensitivity to a context or a specific location. To get to know key context elements, you can map 1st-person perspectives of bodily sensations in space.

Fitting a post-phenomenological perspective, we see technology as co-constituted; thus, from the start on, we suggest thinking about what might happen with different types of people and design and iterate in relation to the context. For several steps, you should first get attuned with the body. To develop ideas and diverge, use various representations of the context. You can add your own card. You can also use scenarios, role-play, and Modifiers in the subsequent steps. Most methods can be done in VR or with pen and paper materials.

In our case, we designed for a specific supermarket, but team members individually mapped several supermarkets with body maps in relation to a floor plan to gain a broader understanding. This helps to gather initial ideas and angles, which, later on, one can combine, diverge, and converge from. For us, these were somaesthetic field trips, recording embodied sensations on a map.



Movement-Based Design Flow #4

Design interactions fitting for a context

- 1) Body Scan and Body Maps.
 - a. Get attuned to the body, and create a multi-modal sensitivity experience. Consider mapping this to a specific context.
- 2) VR/Digital Twin Sensitising
 - a. Use a first-person context experience and start varying elements in a safe space.
- 3) Alternate between a) Action Mock-Ups, b) Role Playing, and c) Context Playing
 - a. Action Mock-Ups: Develop ideas using various forms, such as card boxes, furniture, audio, prints, 360° videos, or VR (see 2).
 - b. Role Playing: Play out various scenarios, use Modifiers and take different perspectives. For instance, consider how you approach the interaction as a timid or brave child.
 - c. Context Playing: Perform structured role playing in different contexts. Use what the space affords, what feels safe, what you are attracted to, and how interactions relate.
- 4) Strong Prototyping
 - a. Play out interactions in a represented context to help make design decisions and improve the experience.

Time: ±4 hours + ±4 hours of preparations.

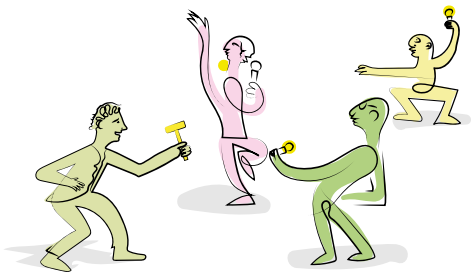
Tip: Creating a safe space for these investigations is essential. Consider giving teams their own space, visiting locations at a specific time, or using tricks (e.g., tying shoelaces to take a child's perspective).

Find the Fun Through Movement

Research which elements in movement play creates fun and joy for your game design

As a game designer, identifying the right mix of actions, rules, and constraints that spark joy is both art and science. In the realm of embodied design, this takes on a deeper dimension as designers choreograph movement-centric experiences. They must inspire not just physical creativity, but playfulness, building on an understanding of human kinetics, behavioral psychology, and the inherent joy of motion.

Beginning with embodied game-based warm-ups, you will participate in tasks stimulating both mind and body to unravel the connection between movement, fun, and game mechanics. Transitioning to team-oriented exercises, you will engage in cooperative and competitive scenarios. With guided post-activity reflections, you will discern patterns, pinpoint success elements, and ideate on translating these insights into captivating, motion-based experiences.



Movement-Based Design Flow #5

Develop skills to create playful movement-based activities

- 1) Just Dance.
 - a. Have teams compete against each other in the same set of songs among the available trios and quartets (or compete for the highest score if there is only one team).
- 2) Johann Sebastian Joust.
 - a. Introduce relevant props after participants have become familiar with the game.
 - b. Use Movement-Modifiers to constrain their move. Use Persona and Metaphor Modifiers to add roleplaying and acting.
- 3) Sensitising Designers.
 - a. Have your teams reflect on what brought up fun in some of the moves performed during step 2.
- 4) Generate Games from Play.
 - a. Use the experiences from step 2 and reflections from step 3 instead of childhood games.
 - b. Use game structure and Game Mechanic Modifiers to introduce variation.
- 5) Video or Photo Sketch.
 - a. Document and review the performance in step 4 in an open discussion.

Time: ±4 hours plus ±4 hours of preparations.

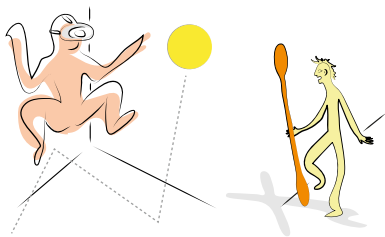
Tip: You will need a PS system with 4 PS Move. Invite participants to be proactive.

Creating (VR) Exergames

The sedentary lifestyle inhabits most world societies and causes insufficient physical activity (PA), which is a leading cause of disease. Engaging in PA can lead to better overall well-being. Exergames are one of several evidence-based opportunities to engage in movement activities that reflect and respect an active lifestyle's individuality, variability, and personal preferences. Exergames may reduce participation barriers, such as access to facilities, time, and social support.

The creation of exergames requires considering the interplay between the body and technology and balancing PA with play. A movement-based design approach is a valid strategy to balance the various dilemmas of exergame design and position the moving body in front as a source of insights.

Exergames can be developed in VR, an immersive technology that allows for embodied movement. But developing a VR exergame requires a design flow in which movements are used as a resource of creativity. Such a design flow is sketched out here and exemplified with the design of Diverging Squash, a single-player racket ball VR exergame.



Movement-Based Design Flow #6

Designing exertion to play for well-being

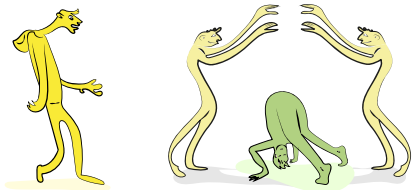
- 1) Sensing Through Objects – modify the method for experiencing VR-game options.
 - a. Play different physical VR-games such as Beat Saber and Thrill of the Fight.
- 2) Brain Walk – in a short time, create as many ideas for your exergame as possible.
 - a. Brainstorm based on the following: Movements are fun on their own and should not be an obligation or punishment.
- 3) Iterate on Game Genres, Structure, or Rules.
 - a. Use Modifiers to tweak game parameters, such as using Logic, Stance & Value or Play Perspectives to decide on game genres.
 - b. Play out various scenarios, use Modifiers and take different perspectives. For instance, modify Game Structure or consider how you approach the Game Mechanic.
- 4) Virtual Reality Bodystorming – code the first draft of the game and bodystorm various game elements for the player to experience.
 - a. Alter parameters and explore superhuman abilities, such as reducing gravity. Consider using Constraint Modifiers to change VR experiences separately from the real-world.
- 5) Make a Video or Photo Sketch – document and subsequently analyse the various first or third-person experiences of playing the game.

Time: ±3 * 7 hours plus ±3 * 7 hours of preparations.

Sports and Health Innovation Camp

In the health, play, and rehabilitation fields, movement activities targeting a specific group can be a core element in increasing a person's daily physical activity (PA). Thus movement activities can be developed and implemented to enhance cognitive, physical, mental, and emotional well-being. Designing an activity, rather than an object, includes both the (non-) and the technical things and the social and spatial arrangements. Movement Concepts provide knowledge to inform your design.

In this case, a two-day sports innovation camp, participants created movement activities for 1) children in a kindergarten, 2) 8th graders in middle school, and 3) seniors in an activity centre. A core philosophy of the innovation camp was to engage the moving body as a resource in the design process, aiming to understand, ideate, and test motivational movement activities. Starting playing out basic, daily movements of the target group, ongoing movement exploration and incorporating various artefacts and Movement-Modifiers continually challenged the current physical activities, developing new movement opportunities. We sketch a design flow where simple, isolated movements grow into a +20 min movement activity.



Movement-Based Design Flow #7

- 1) Create a persona based on interviews, observations, and role play. Establish a deep understanding of the target group's emotional, rational, and physical needs/wants/limitations.
- 2) Don't Do What I Do or Turn on a Body Part.
 - a. Set a mood and boost an embodied creative being.
- 3) Daily Movements.
 - a. Augment or disrupt familiar movements related to the target group to get perspectives and feel the sensation of movement.
- 4) Explore Movement or Embodied Sketching.
 - a. Build on the movement insights from Daily Movement. Choose different props and artefacts and explore various movement options. Use Modifiers to inspire and tweak.
- 5) Strong Prototyping or Action Mock-up.
 - a. Gather proper props and act out activities, preferential on peers or target group. Provide 1st-, 2nd- and 3rd-person feedback.
- 6) Video or Photo Sketch.
 - a. Document and store the activity. Afterwards, analyse learnings from testing the activity and adjust the activity accordingly.

Time: $\pm 2 * 8$ hours plus plus 6 hours of preparation and $2 * 7$ hours to make a persona.

Tip: Prepare a safe space with plenty of room for the participants to move. Make sure you have sufficiently props to Explore Movement.

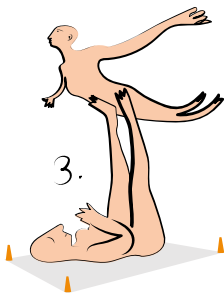
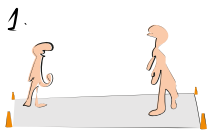
Develop Creative Acrobatic Performance

Introduce MeCaMInD methods for self-facilitation in the "design of movement"

Aiming for design "of movement" may be founded in the creative culture of the specific (sports) discipline. Alongside this, the creative process of creating new movement cultures or reforming known sports or aesthetic performances can be supported by using movement-based design methods.

Creativity is also part of play, games, and sports such as football, basketball etc. Thus developing new play skills and tactics can be supported by creating space for growing a creative body being. We recommend using Mood Setting, Movement Method, and Movement Concept combined with Modifiers for that.

As an example, we have sketched a design flow introducing movement methods focusing on the self-facilitation in developing an acrobatic performance, introducing how embodied creative and playful learning processes unfold within innovation.



Movement-Based Design Flow #8

Develop creative body being and skills in creating an acrobatic body performance

1. Leading Hand and Shrinking Ship.
 - a. Connect to a peer person and challenge each other's movement options. Followed by social play and acrobatically lifting each other in the Shrinking Ship activity.
2. Embodied Cognition.
 - a. Introduce how an acrobatic activity is cognitively embodied, founded, and trained. Also, introduce the Movement-based Methods founded in creative embodied cognitive thinking.
3. Embodied Sketching or Explore Movement.
 - a. Choose different apparatus or props and explore various acrobatic movement options. Use Modifiers to inspire.
4. Strong Prototyping.
 - a. Act out different acrobatic narratives and make refinements. Make sure to make 1st-person and 2nd-person feedback and keep safety high.
5. Video or Photo Sketch.
 - a. Document and store the acrobatic sequences, sketches, or show. Afterwards, analyse data from testing the show.

Time: 2 * 4 hours plus 3 hours of preparation.

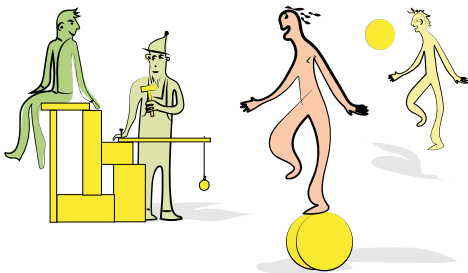
Tip: Acrobatic spotting is essential to promote a safe and friendly creative environment.

Designing Interactive Playground Elements

Play is vital for child development as it fosters social skills, including turn-taking, sharing, and communication. It potentially promotes cooperation and conflict resolution. It can facilitate learning, problem-solving, critical thinking, and exploration of ideas. Playgrounds may enhance motor skills, coordination, and muscle control, benefiting children's future development. The gain of interactive playground equipment is to combine gaming and exercise, blending technology with outdoor fun. Educators have long used playgrounds for teaching, and now academic concepts can be learned through interactivity. Fitness and interactive features can make exercise more enjoyable.

Setting: A public children playground.

Goal: Come up with new games to be played on traditional playgrounds by appending small technological "enhancers" to play equipment. A button, a sensor, a lamp, a speaker... Additional requirement: the designed games should be accessible to a wide range of playing children.



Movement-Based Design Flow #9

Develop interactive playground game elements

1. Action Syllables
 - a. Warm-up: playful, explorative, free, social and responsive, aware of others, and to get moving. Use modifiers to cover a range of movement qualities & body parts.
2. Context Play – without the play activity.
 - a. Sensitizing stage: exploring the environment. how does place feel when experienced from unexpected spots?
3. What Can I Do With This?
 - a. Ideate focusing on autotelic movement experiences and on core mechanics (informed by embodied sketching variations).
 - b. Modify and vary, e.g., by special users to change the meaning and to experience perspectives of other players (weak climber; no feet; no hands; hard of hearing).
4. Generate Games from Play.
 - a. Design a game with some rules: pick most interesting core mechanics and use them to define a game. Use game modifiers to explore variations, like game structure, time, opponent format, etc.
5. Mockups for Movement Design.
 - a. Including technology options: we had someone play the machine; Wizard of Oz – using tangible props taking place of the technology that we did not have.

Time: ±2 * 4 hours plus ±4 hours of preparations.

Movement-Based Design Facilitation

The emergence of movement-based design methods presents new challenges for design facilitators. They must guide activities to foster productive outcomes and be skilled in co-operative processes and decision-making. The primary role is facilitating dialogue and collaboration among group members. The facilitator significantly impact participatory design outcomes and have six key functions:

1. **Building trust.**
2. **Enabling participation.**
3. **Asking questions.**
4. **Setting direction.**
5. **Providing values.**
6. **Advocating for users.**

If participants have little movement experience, the facilitator must motivate, engage in play and animate to incorporate bodily experiences.

The facilitation of movement-based design rests on four pillars: creating a safe and welcoming space, training of methods, embodied ideation, and verbalising embodied experiences.



Movement-Based Design Facilitation

The facilitator manage their various roles

Applying movement-based design methods, the facilitator plays a crucial role in guiding and shaping the outcome of the design process. The facilitator can adopt different roles, including a games master, instructor, coach and mediator, role model, and initiator and animator.

The game master selects appropriate methods, make solid plans, and sets up the activities.

The instructor explains the rules and structures the execution of the activity but ultimately allows the participants to take the lead.

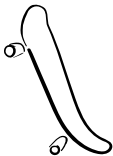
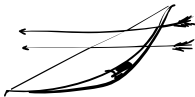
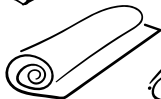
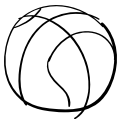
The coach and mediator guide the direction of the activity, taking a more active role in steering the group towards the correct execution of the activity.

The role model acts as an “undercover facilitator” and helps others participate in the group activity.

The initiator and animator control the purpose of the activity and focus on manipulating the energy of the process to achieve the desired outcome. This role explicitly uses 1st, 2nd, and 3rd-person perspectives and encourages exploration and improvisation.

The facilitator is critical in creating a safe and welcoming space for participants and guiding the process towards a productive outcome.

Physical Props



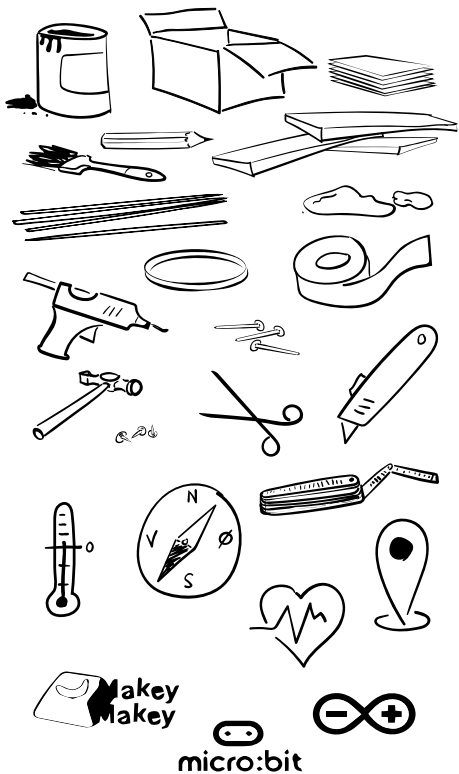
Physical Props

Physical props used as modifiers

The below provided list of props and artefacts is not complete, so we recommend that you supplement with your own props.

- + Different balls, football, basket ball, handball, tennis ball, etc.
- + A stick/Foam stick/Rod.
- + Rope.
- + Cones.
- + Tape.
- + Rackets.
- + Floor cloth.
- + Cover vest/belts, gloves....
- + Tilting board.
- + Training rubber band.
- + Car/bike tire hose.
- + Hula-hop rings.
- + Pillow.
- + A glass.
- + Swimming tiles.
- + Foam noodle.
- + Chairs.
- + Laserpointer.
- + Flag.
- + Tube.
- + Cardboard.
- + Elastic bands/textiles.
- + A fixing elements: velcro, safety pins, etc.
- + Handcuffs.
- + Glasses (sun, frames...).
- + Crowns, headbands, scarfs, jewelry, bags...

DIY Mock-up Material & Tool



DIY Mock-up Material & Tool

Physical material + DIY computers and tools

The below provided list of props and artefacts is not complete, so we recommend that you supplement with your own props.

- + Post-it.
- + Flip-over folie.
- + Different kinds of tape + Masking tape.
- + Glue.
- + Newspaper front page template.
- + Pipe cleaners.
- + Carton.
- + Tin foil.
- + Scouring sponges.
- + Play dough.
- + Foam board.
- + Straw.
- + Plastic mug.
- + Barbecue sticks.
- + Lego bricks.
- + Cardboard tube.
- + Writing tools.
- + Glue gun.
- + Scissors.
- + Knife.
- + Mini-computeres such as Arduino, BBC Micro:bit, MaKey MaKey, etc.
- + Breadboard and sensors, accelerometer, HR, temperatur, gyroscope, GPS, etc.
- + 3D printer.
- + Laser cutter.

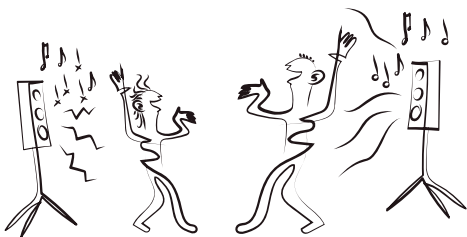
Recommendations for the Use of Music

Music can support a variety of movement practices. It can create moods, stimulate our imagination, inspire movement, and define the energy in our movements.

Knowing what, when and how to use music is a valuable tool as a facilitator.

Picking music for, e.g., warm-up, it is essential to choose music with a basic rhythm. Beats Per Minute (BPM) describes the number of beats per minute and correlates with the intuitive movement speed. If you want to run or move fast, you need a high BPM of over 120; if you're going to stretch or move slowly, choose under 120 BPM.

When choosing music, you must consider which emotion you want to stimulate in your participants – do you want to make them optimistic or happy (try Happy with Pharrell Williams), or do you want to make them melancholic (try Hallelujah). You can also create paradoxes between music and movement, e.g., let people move fast and direct, but play some slow classical music.



Music Genres + Popular Tunes #1

Pop

- + Beyonce - Single Ladies.
- + Adele - Rolling in the deep.
- + Amy Winehouse - Rehab.

Disco

- + Disco Inferno - Disco Inferno.
- + Saturday Night Fever - Stayin' Alive.
- + C'est Chic - Le Freak.

Jazz

- + Take Five - The Dave Brubeck Quartet.
- + Miles Davids - So What.
- + Benny Goodman - One O'clock Jump.

HipHop

- + The Sugarhill Gang - Rapper's Delight.
- + Grandmaster Flash and the Furious Five - The Message.
- + Public Enemy - Fight the Power.

Electronic Dance Music

- + Deadmau - Strobe.
- + Kiesza - Hideaway.
- + Skrillex - Bangarang.

Rock

- + Lynyrd Skynyrd - Free Bird.
- + Deep Purple - Smoke on the Water.
- + Led Zeppelin - Kashmir.

Music Genres + Popular Tunes #2

Punk Rock

- + Sex Pistols - God save the Queen.
- + Ramones - Blitzkrieg Bop.
- + The Clash - Complete Control.

Heavy Metal

- + Iron Maiden - Hallowed Be Thy Name.
- + Judas Priest - Painkiller.
- + Metallica - Master Of Puppets.

RnB

- + Blackstreet - No Diggity.
- + Tweet - Oops (Oh My).
- + The Weeknd - Can't Feel My Face.

Funk

- + Kool & the Gang - Jungle Boogie.
- + Marvin Gaye - Got to Give It Up, Part 1.
- + Earth, Wind & Fire - Shining Star.

Reggae

- + Jimmy Cliff - Many Rivers to Cross.
- + Bob Marley & The Wailers - Three Little Birds.
- + Johnny Nash - Hold Me Tight.

Classical

- + Mozart - Eine kleine Nachtmusik.
- + Beethoven - Für Elise.
- + Vivaldi - The Four Seasons.

Music Genres + Popular Tunes #3

Yoga Music

- + Namaste - Yoga Namaste.
- + Shakuhachi Sakano - Bliss (Yoga Space).
- + Spirit Out - Mindfulness Liquid.

Gospel

- + Praise & Worship - Worship Songs.
- + Sam Cooke - Touch the Hem of His Garment.
- + Samsong - Jesus.

Country

- + Bailey Zimmerman - Rock and A Hard Place
- + Morgan Wallen - You Proof.
- + Walker Hayes - AA.

Blues

- + Muddy Waters - I Just Want to Make Love to You.
- + Otis Rush - I Can't Quit You Baby.
- + Buddy Guy - Stone Crazy.

Folk

- + Woody Guthrie - This Land Is Your Land.
- + Steve Goodman - City of New Orleans.
- + Bob Dylan - Blowin' in the Wind.

Soul

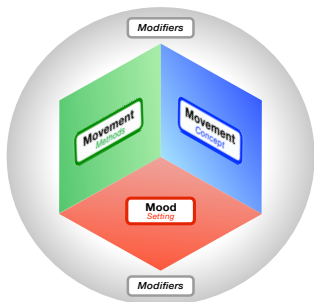
- + Smokey Robinson - The Tracks of My Tears.
- + The Temptations - Get Ready.
- + Sam & Dave - Soul Man.

The 4M Framework

Designing for bodily experiences is challenging. To engage the lived body that creates meaning in interaction with the environment, we have created below 4M movement-based design framework that bridges the abstract 4E idea of Embedded, Enactive, Extended and Embodied cognition theory with the perspectives of structuring the movement-based methods.

3 types of facilitator-mediated methods


1. Mood Setters fuel the creative body being.
2. Movement Methods for creating immersion in creative bodily design activities.
3. Movement Concepts are knowledge content for developing movement solutions and technologies.
4. Besides the facilitator cards, Modifiers are participant cards to be used in conjunction with the other methods and can be used to disrupt the design process.




The 4M Framework

Searching for the cards needed for a design activity is based on identifying the type of activity required among the four varieties of methods in the cards.

For the Mood Setting & Movement Methods, search is further based on estimated preparation time:

 (none, short, medium, long)

Proposed activity time:  (± 5 , ± 10 , ± 20 , ± 40 , and ± 60 min).

A needed number of people for the activity:



An estimate of material needed for the activity:



(none, few, some, or many).

The typology of the Mood Setting or Movement Methods are sorted according to body Awareness (sensitising), Playfulness, Creativity or Role-Playing, Exertion, and for Movement Concept, the type of theory application: concrete vs abstract, and design vs analysis. Thus concepts can be used being guiding, inspiring, sensitising, or analytical.

The cards on the description side contain:

- + Outcome or result of doing the activity.
- + A list of specific Props needed.
- + A detailed description of how the methods can be facilitated.
- + If any Variations and as part of this suggested use of Modifiers.
- + A description stating the Why this method should be used.

Instruction Mood Setting

We advocate that being in the 'right' state of body being is essential for choosing a movement first approach in the design activities and thus practising warm-up like activities. Mood Setting activities is activities like icebreakers, warm-up exercises, teambuilding, and physical technology-supported games.

Mood Setting

1. Activities direct the mood of individual or group.
2. Typically used before doing movement-based design activities.
3. Aims: set mood; warm up physically/socially/mentally; train embodied creativity.
4. Can also be used mid-design to re-energise the process.




Instruction Mood Setting

Identifying the most appropriate Mood Setting, the search is based on estimating the duration of preparation time:

 (none, short, medium, long)

Proposed activity time:


(± 5, ± 10, ± 20, and ± 40).

A needed number of people for the activity:



An estimate of material needed for the activity:



(none, few, some, many).

The typology of the Mood Setting activities are sorted according to body Awareness (sensitising), Playfulness, Creativity (training), and Exertion and are graded as non, one, two, or three stars:



The method cards on the description side contain the:

- + Outcome or result of doing the activity.
- + A specific Props list needed.
- + A detailed description of how the methods can be facilitated.
- + Followed by, if required, Note.
- + If any Variations and as part of this suggested use of Modifiers.
- + A description stating the Why this method should be used.

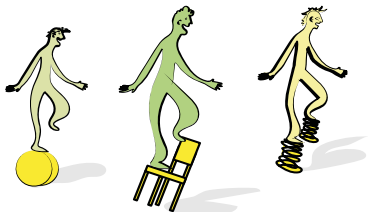
Instruction Movement Method

Movement Methods are design activities that use movement as a medium to explore, stimulate and activate designers and their creativity.

Movement Methods are design activities that sensitise the inner bodily experience of the movement or feeling in the moving body in the environment. It is the movement-based generative method. The third type is testing methods. Finally, there are documenting methods.

Movement-based design methods:

1. Recognises the body and movement as a way for designers to engage in design challenges to pursue insights.
2. Use Movement Methods when you think the movement can help you explore, stimulate and activate your ideas in a purpose-driven and people-focused design.
3. We recommend using Movement Methods for specific context-bound design goals.
4. Start by reading the instruction cards concerning the outcome and the method's why; to reflect the method's usability.



Instruction Movement Method

Identifying the most appropriate Movement Methods, the search is based on estimating the duration of preparation time:

 (none, short, medium, long)

Proposed activity time:



(± 10, ± 20, ± 40, and ± 60 min).

A needed number of people for the activity:



An estimate of material needed for the activity:



(none, few, some, many).

The typology of the Mood Setting activities are sorted according to body Awareness (sensitising), Playfulness, Creativity (training), and Exertion and are graded as non, one, two, or three stars:



The Movement Method cards on the description side contain the:

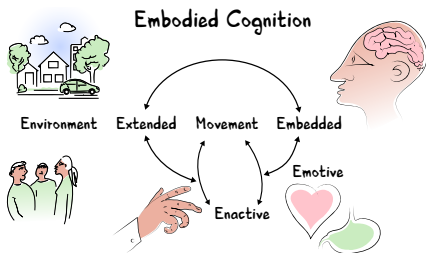
- + Outcome or result of doing the activity.
- + A specific Props list needed.
- + A detailed description of how the methods can be executed/facilitated.
- + Followed by, if required, Note.
- + If any Variations and as part of this suggested use of Modifiers.
- + A description stating the Why this method should be used.

Instruction Movement Concept

Informing the design, we propose using multi-disciplinary sports and movement research-based evidence and theory as a knowledge foundation when designing for and of movement. Movement Concepts are also highly relevant in the design of sports and movement, human-computer interaction, and embodied interaction technology.

The Movement Concept

1. Have on the front a short teaser for the relevance of the research theme in focus.
2. Have questions and proposals to reflect on and support informed decision-making during the design process.
3. Proposals for the Use of Modifiers .
4. The back presents a short, manageable text, including descriptions of theories or evidence and informative illustration.
5. There is a QR-code link to the knowledge research basis.

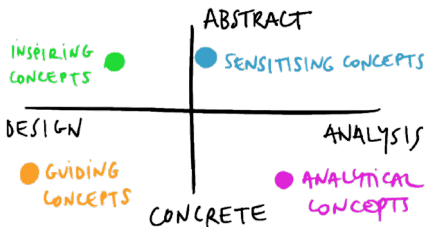


Instruction Movement Concept

Searching the Movement Concept cards needed is based on different disciplines in sports and movement-specific scientific areas. We have developed Movement Concepts in the areas of:

- + Philosophy of Sports and Movement
- + Understanding the Psychology of Humans
- + Understanding the Humans in Society
- + Motor Learning and Biomechanics
- + Physical Training and Physiology
- + Sports, Games and Play
- + Sports and Movement Technologies

Searching is also based on their relevance to design, we categorise the concepts into inspirational, guiding, sensitising and analytic concepts. We categorise in terms of how concrete they support designs like guiding or analytical towards the more broadly abstract concepts like inspiring or sensitising. We also differ the concepts in how they can be used in a design process, from providing direct inspiration or guidance towards design exercises to being geared towards analysing or evaluating like the sensitising or analytical concepts.



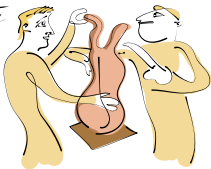
Instruction Modifiers

Movement Modifiers include cards and physical artefacts that support, modify, tweak, or disrupt design practices.

Modifiers

1. Includes cards with words or pictures related to a sport-movement theme and are placeholders for components within a system.
2. Cards can easily be putted around and used within the design processes
3. Tweak movement via 17 sub-category of cards that modify Movement, Structures, Artefacts, People, and Motives.
4. Are formed as props that fuel and scaffold the design process.
5. The artefacts stimulate physical exploration and creativity when participants use them in real-life design settings.

*Creative
Cards &
Chris*



Instruction Modifiers

Searching the Modifiers cards is based on the seven main categories mentioned and further in the 17 sub-categories with ± 17 cards in each sub-category + a blank set of cards for your use:

1. Modifying Movement.
 - a. Basic Movement.
 - b. Movement Perspective.
 - c. Training Element.
2. Modifying Structures.
 - a. Play & Sports Discipline.
 - b. Play Element.
 - c. Play Perspective.
3. Modifying Artefacts.
 - a. Technology.
 - b. Game Genre.
 - c. Game Structure.
 - d. Game Mechanic.
4. Modifying People.
 - a. Persona.
 - b. Environment.
 - c. Impairment
 - d. Constrain.
5. Modifying Motives.
 - a. Metaphor.
 - b. Logic, Stance & Value.
 - c. Role & Perspective.
6. Music of different genres.
7. Physical artifacts (props).

XX

Movement-Based Design Flow #10