



Master Education in Arts
Piet Zwart Institute
Marie Panken

Introduction

This research will explore **how we can use a Material Mediator to practice Boundary Making with children in primary education**. In the first year of MEIA, I was told that it is a common mistake to conduct research to which you already know the answer. Well, starting this year, I did not even know what a material mediator was, let alone how to use it to make boundaries. My time at MEIA instilled in me the capacity to not have answers. To bring a 60m² piece of fabric to my peers and ‘see what happens’. To have sensational ideas on making as a way to materialize social interactions, and not recede to the question ‘but how then?’. To enter a classroom and depend on my students to show me what they need. Over the course of this master’s, I witnessed a change in my teaching towards facilitation, which shifted my focus from knowing to noticing. I found my background in design form the core of my educational practice. And, I found that having strong boundaries around my weekends does, in fact, make life better.

I hope you enjoy,

Marie





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Context and Positioning

Educational Practice

Working as an in-house art teacher at a public primary school in Amsterdam Nieuw-West forms the foundation of my practice. This role grants access to team meetings, rapport card reviews, and incredible colleagues. It allows multi-year collaboration with students and school-ground interactions with their parents. This is the foundation that enables me to design assignments that hold genuine relevance to what is happening in the school and its students’ lives.

Influenced by my studies at the Design Academy Eindhoven, the art classes focus on learning through making. I relate to Barbara Hepworth’s description of sculpting as “*the three-dimensional realization of an idea.*”¹ Through making, our hands and thoughts engage in dialogue. I design theme-based classes that form a story, unfolding further every week. Theme-based learning shifts art classes from an isolated hour each week to a continuous narrative that runs through students’ education. Each assignment is layered over the last, enabling rich world-building. By rooting the assignments in my students’ realities, I invite them to draw inspiration from their personal and collective histories, neighborhoods, homes, struggles, and aspirations.

I view the art classes not so much as a subject to gain knowledge on, but rather as a way of learning that is different from the rest of the school. Social-emotional development is heavily incorporated into the curriculum, and I design assignments that specifically address the challenges I see students face. When I see children, daunted by the empty page, struggling to get started, I design a game to jumpstart their making. When I see children stuck in frustration when a project goes wrong. I come up with an assignment designed to collapse.

School-wide, we use the teaching method EDI (Explicit Direct Instruction)². EDI centralizes the teacher and their instruction. In this method, the goal of each class is for all children to reach the same predefined learning goal, one correct answer, one truth. There are tools within EDI that have greatly enriched my classes.³ It offers effective methods for asking questions in a way that engages all students simultaneously. They also stress ‘leaving no student behind,’ as the overall goal of the method is to ensure that all students meet the base, government-regulated requirements. To do this, they first focus on the needs of the lowest-scoring students. The method could be described as a return to the banking method, where the student is knowledge-less and needs to be filled with content disconnected from reality.⁴ A difference between the banking method and EDI is that in the banking method, students become passive listening objects. EDI places great importance on activating the students. To a certain extent. They are asked to read along, repeat sentences, and stand up when answering questions. All these active participations have the same predefined outcome for every student. The goal of the activation is to use voice or body to repeat the bite-sized piece of cognitive information the teacher has prepared. Through participation in the EDI course, my ability to transfer knowledge effectively has greatly improved. But a limit I find in EDI is that there is no need for self-reflection, creative problem solving, or dealing with contradictions. Skills I believe we should engage our children in. As Sage Crump puts it, “*Our ability to recognize, accept, and move with complexity is integral to how we dismantle the current state and build new ways of being with each other. The ability to engage complexity is directly tied to our ability to imagine.*”⁵ When I say practicing imagination, I do not mean dragons and fairies. I mean the ability to look at the script we are expected to follow and our capacity to come up with alternatives. When I say practicing curiosity, I mean fostering a genuine interest in understanding ourselves and a true listening to others doing the same. When I say complexity, I mean becoming accustomed to the friction of questions that don’t yield a single clear answer and maintaining connection with people whose ways or views don’t align with our own.

All of the aspirations described above are good and well, but they stay on the fairy-tale side of our imagination when we don’t acknowledge the reality of teaching in primary education today. Facing an ongoing teacher shortage, a post-COVID backlash in test results, and an increasing administrative load. In 2024, a quarter of Dutch primary school teachers reported symptoms of burnout.⁶ They lack the invaluable resource: time. I cannot stress the far-reaching effects of the following enough: In the art room, we are unbound by government-fed curriculum and standardized testing. This allows the art room to function as a counterweight to the practiced or suppressed values within the school-society. When students are consistently pressured for the correct answer, we can explore issues with multiple or impossible answers. When students are constantly graded on a 1-5 scale, we can design rapport cards based on self-evaluation and peer feedback. Within ongoing schedules and expectations, we can take the time to slow down. Through radical imagination, I ask students to use their imagination not to disconnect from their realities, but to expand their ideas of possible futures, for themselves and those around them.

“*Are we brave enough to imagine beyond the boundaries of ‘the real’ and then do the hard work of sculpting reality from our dreams?*”⁷

¹ Extracts from ‘Sculpture’, in *Circle: International Survey of Constructive Art*, ed. by J.L. Martin, Ben Nicholson, Naum Gabo, London, 1937, p. 113.

² Hollingsworth, J., Ybarra, S. (2020). *Explicit Direct Instruction (EDI): The power of the Well-Crafted, Well-Thought Lesson. Second Edition.* Thousand Oaks, California: Corwin Press.

³ Name-Sticks, Checking for Understanding (CFU), and the Teach-First method.

⁴ Freire, P. (1996) *Pedagogy of the oppressed.* Translated by M. Bergman Ramos. Harlow, England: Penguin Books.

⁵ *Essay Facilitation as Experiments in Culture Creation* by Sage Crump published in *Holding Change: The Way of Emergent Strategy Facilitation and Mediation* by adrienne maree brown.

⁶ <https://monitorarbeid.tno.nl/publicaties/werkdruk-in-het-onderwijs-2/>

⁷ Introduction by Walidah Imarisha in *Octavias Brood: Science Fiction from the Social Justice Movements* edited by Walidah Imarisha and adrienne maree brown.

Research Interest

When thinking of my research question for this thesis. I adapted the same approach as always. Looking at what is at play in the school society and lives of its children, and figuring out how the way of learning through making used in the arts room can be of value. The difference this time was the amount of time I would be able to invest and the access to peers' and tutors' help. This meant I could take on a task outside of my normal capacity.

In the spring of 2023, primary education in Amsterdam faced a major controversy over sex and relationship education. Every year around March, schools can participate in the week of Spring Tickles⁸ During this week, schools pay extra attention to their sexual and relational education. Specialized weeks are standard practice in primary education. Think, for example, about the children's book week, digital literacy week, or week against bullying. But in schools where sexual and relational education is a sensitive topic, the week of spring tickles can amplify friction. Unfortunately, this year, parents were actively riled up through campaigns using fake news aimed at the week of the Spring Tickles. Misinformation included false claims that schools would sexualize children and encourage group masturbation.⁹ In the same period, the National Children's Book Week announced Pim Lammers as one of their authors. Pim Lammers's work includes poems featuring homosexual parents and transgender family members. In response to this announcement, Pim Lammers started receiving anti-LGBTQ+ hate mail and death threats, which caused him to withdraw from the position.¹⁰

In the school I teach at, the combination of these events caused a flare in fear and distrust from the parents about the school's sex and relationship education. This escalated to parent-teacher conferences co-organized by the GGD¹¹, during which some parents became verbally aggressive, and multiple parents moved their children to a different school. In response to this, the school-wide sex and relationship program was halted. At the time of writing this, in the spring of 2026, a school-wide policy has yet to be reinstalled.

When I started my position in the fall of 2023, the aftershock was still making its waves through the school. I wondered whether the art room could contribute to the tension felt within the school and chose to work on the topic of boundaries for my thesis. A subject that would normally be addressed in sex and relationship education, and holds a key position in social-emotional development and the development of healthy group dynamics in the classroom. If we can't offer this skill through sex and relationship education, could we develop it through the art classes? Rather than focusing on the impossible reunification of parents' wishes and school policy, I wanted to find an alternative approach that could contribute to the students gaining boundary making skills.

⁸ Spring Tickles <https://seksuelevorming.nl/onderwerpen/week-van-de-lentekriebels/>

⁹ Misinformation about Spring Tickles <https://pointer.kro-ncrv.nl/aartsconservatieve-activisten-tegen-week-lentekriebels>

¹⁰ <https://nos.nl/artikel/2462510-schrijver-kinderboekenweekgedicht-trekt-zich-terug-na-doodsbedreigingen>

¹¹ Municipal health organization that monitors, protects, and promotes public health.



Pim Lammers

Tante Ben

Soms vragen kinderen aan mij:
is je tante een man of een vrouw?

Maar ik weet het niet:
tante Ben draagt jurken,
alleen nooit roze, altijd blauw.

Tante Ben heeft een hagedis met de naam Otje,
drinkt cassis bij het ontbijt, neemt de telefoon op
met 'Wat mot je?', heeft een driedagenbaard,
draagt lippenstift en is dol op makkataart.

Tante Ben speelt viool, spaart postzegels,
heeft een hoge stem, tienduizend volgers
op Instagram, een zeilboot, een ligfiets,
maar goed, dat zegt natuurlijk niets.

Tante Ben past nergens bij,
valt in elk hokje uit de toon.

Dus ik dacht, ik vraag het gewoon:
'Ben jij een hij of een zij?'

Tante Ben antwoordt:
'Geen hij, zij, hem of haar voor mij,
ik hoor liever *hen* of *die*.'

'Die?' vraag ik. 'Hen?'

Die glimlacht.
'Zeg jij maar gewoon tante Ben.'

Boundaries and Boundary Making

What Kinds of Boundaries?

The main boundary tool currently offered in primary education is the common Dutch phrase “*Stop, hou op!*” “*Stop, quit it!*” Within this research, I want to explore how we can move beyond teaching boundaries solely as an emergency break. What then are the kinds of boundaries we would want to practice towards? It is not a rigid border separating us from each other, keeping the world at a distance, where ‘safe’ becomes similar to ‘isolated’. Instead, we aim for boundaries that enable connection. A strong influence is the essay *Boundaries Can Be Love*, by Prentis Hemphill. “*The skillful use of boundaries allows us to create proximity, intimacy, distance.*”¹² She underlines that for a boundary not to become a fortress, the key is that it is responsive and highly dependent on real-time assessment. Put differently: There is no one-size-fits-all solution; boundaries change. From moment to moment, in slow tendencies, and with sudden ruptures. They are a meeting between people. Establishing our own boundaries is not enough. Boundaries live in the responses, negotiations, and adaptations between us. If we all blindly shouted out our boundaries, we’d meet none. Instead, we aim for boundary making to become a collective responsibility.

When looking at boundaries like this, it becomes clear that the simple catchphrase “*Stop, hou op!*” won’t suffice. Our boundary education will need to hold complexity, contradiction, and collaboration. It calls for a space where children can experiment, play, and collaboratively figure out where they want their boundaries to be. In this thesis, I will explore ways in which the art room can be that place.

Boundaries that enable connection, not isolation.

Boundaries that are responsive, rather than static rules.

Boundaries as a collective responsibility, not an individual practice.

Boundaries to reach for what we want, rather than only shielding us from what we don’t want.

Finding your YES!

A focus on the positive has become common practice when working with children in today’s primary education. Within sex and relationship education, however, we often still start from, and amplify the negative: the dangers and risks. I also find this to be true for education around boundaries, where we often start with boundaries to prevent what we don’t want to happen. In her essay *From #MeToo to #WeConsent*¹³ adrienne maree brown argues for a shift in the focus on undesired outcomes to a focus on desired outcomes. In her book *Pleasure Activism*¹⁴, she further untangles the notion of what we decide to be ‘good enough’ and urges us to incorporate into our self-image that we deserve more than ‘*survival and threat management*’¹⁵.

However understandable a fear-based mindset is, as an educational method, it won’t suffice. Instead of boundaries as a harm-prevention tool, we need boundaries to reach the things we want in life. We need boundaries that enable the relationships, interactions, and self-development that we desire. In *The Art of Receiving and Giving: the Wheel of Consent*¹⁶, Betty Martin describes this as the ‘Hell yes!’. A full, true, and embodied sense of yes. Your personal YES! starts from noticing what you truly want, without taking other expectations into consideration. This does not mean you will get your YES!, or will even try to get it. Other people, with their own boundaries and practical resources, are involved in our actions and decision-making. The point is that ‘*So few people make it to this question: what do I really want?*’¹⁷. To be able to start from our YES!, rather than our no’s or someone else’s yes, we first need the ability to notice what we want. ‘*If this sounds easy and obvious, it is not.*’¹⁸. Noticing what we want, “*getting to know the distinct energy between yes and no*”¹⁹, and, on top of that, noticing it quickly enough and then communicating it effectively are things many of us struggle with.

¹² Essay: *Boundaries can be Love* by Prentis Hemphill in: Brown, A.M. (2021) *Holding change: The way of emergent strategy facilitation and mediation*. Edinburgh, Scotland: AK Press.

¹³ Essay: *From #MeToo to #WeConsent* by adrienne maree brown in: Brown, A.M. (2019) *Pleasure activism: The politics of feeling good*. Edinburgh, Scotland: AK Press.

¹⁴ Brown, A.M. (2019) *Pleasure activism: The politics of feeling good*. Edinburgh, Scotland: AK Press.

¹⁵ Martin, B. (2021). *The art of receiving and giving*. Luminare Press.

¹⁶ Martin, B. (2021). *The art of receiving and giving*. Luminare Press.

¹⁷ Brown, A.M. (2019) *Pleasure activism: The politics of feeling good*. Edinburgh, Scotland: AK Press.

¹⁸ Levy, D. (2022). *Real estate: A living autobiography*. Bloomsbury Publishing.

¹⁹ Brown, A.M. (2019) *Pleasure activism: The politics of feeling good*. Edinburgh, Scotland: AK Press.

Your No creates the way for your Yes.

A vision towards our YES! Does not mean that we disregard our nos. It simply means that we see the no as a structural step, rather than the finished product. As adrienne maree brown puts it, “*Your no makes the way for your yes.*”²⁰. She explains that as long as we are not able to say no, our yes can never truly be a choice. For some people, their no’s have been so often disregarded, by themselves or others, that boundaries need to start with a practice of the no. For any boundaries towards the yes to happen, they first need to rebuild the trust that no is an option. In his essay “*Changing the Context*”²¹, Antonio Buehler advises making room for the no to take up space. To trust that this is a sense of safety and agency that needs to be felt before one can start thinking about their Yes!. He also describes moments of doubt in this process, giving the example of a student burnt out by public education who entered their alternative school. The student wanted to spend his days in a closed closet, playing video games. The school's principle was to let its students make their own decisions. Still, Antonio Buehler describes himself as very unsure at the time and found it a big relief when, after a few weeks, the student stepped out and started participating. Sometimes, overwhelm can create a state where everything feels too much, and the reaction can be to go into a ‘complete no’. This can be a valuable and purposeful phase for building trust and finding rest. It is important that this complete no does not become a static and permanent state, but a step towards a full capacity of yeses, nos, and a variety of in-betweens.

In the classroom setting, it might seem extreme when a student chooses their complete ‘no’ and excludes themselves entirely from the session. It is important to realize that for many students, saying no to a teacher might never have been allowed. It is very satisfying, as a facilitator, to see students open up their complete no and start experimenting with their yes. It is, however, important to respect a student’s pace and know that they might need more time within their no than you have to offer in your sessions. My approach to preventing the no from becoming static is to keep the student part of the group by offering multiple alternatives for participation. Having chairs in the activity area where kids can be close by, yet out of the activity. Having many entry and exit points throughout the session. Having a drawing table on the side where students can make a picture of the assignment. These can be ways to keep students involved and part of the group while still respecting their no. Within primary education, the experience of having your no respected, especially by a teacher holding power over you, takes precedence over your participation in the exercise.

Betty Martin in *The Art of Receiving and Giving: The Wheel of Consent*²² argues that, besides the right to say no, there is also the responsibility to say no. Throughout this research, I have started viewing my no, not just as something I do for myself, but also as something I do for the people I am in a relationship with. When I cannot take ownership of my own no, the other cannot trust that my yes is true. They won’t be able to trust my boundaries. In other words, I put full responsibility for my boundaries in the hands of the other. This is a heavy responsibility to carry, especially because they miss the crucial information of feeling what my body feels. This duality of boundaries as both a right and a responsibility highlights that becoming skilled at boundary-making is not an egoistic practice but is vital to keeping our relations and community healthy.

To people who have experienced trauma, their trauma response might make it difficult or impossible to reach a no. In *Decolonizing Nonviolent Communication*²³ meenadchi describes two trauma responses that might prevent a no. “*Fawn response: a response to threat in which our body decides it is safest to people-please until the threat goes away.*” And “*Freeze response: a response to threat in which our body decides the safest option is to play dead, faint, or dissociate because it is impossible to make the threat go away.*” By fostering a collective responsibility for our boundary making, we learn to take the time and care needed for everyone in the group to reach their boundaries.

The In-Between

In practice, boundaries are rarely reducible to a binary yes-or-no. I appreciate Betty Martin’s definition of consent as an agreement you arrive at together.²⁴ This arrival can be an easy one, but we often find ourselves in a muddy mix of good intentions, conflicting needs, and limited capacity. It can be full of friction, it can be hurtful. And even after we managed to arrive at the boundary, I and anyone have had boundaries crossed and crossed boundaries. We cannot expect a perfect world in which all boundaries are intact all of the time. Skillful boundary making is as much about finding our YES!, as it is about accepting and having the capacity to deal with these complexities, to know how to make repairs when boundaries are crossed. To become more skilled, we practice becoming better at noticing our own and others’ boundaries and becoming more trustworthy in respecting our own and others’ boundaries.

²⁰ Brown, A.M. (2019) *Pleasure activism: The politics of feeling good*. Edinburgh, Scotland: AK Press.

²¹ Essay: *Changing the Context* by Antonio Buehler in: Bergman, C. (2023) *Trust kids!: Stories on youth autonomy and confronting adult supremacy*. Edited by C.J. Bergman. Edinburgh, Scotland: AK Press.

²² Martin, B. (2021). *The art of receiving and giving*. Luminare Press.

²³ Meenadchi. (2023). *Decolonizing Non-Violent Communication : A Workbook*. Third edition. Los Angeles, California: Co-Conspirator Press

²⁴ Martin, B. (2021). *The art of receiving and giving*. Luminare Press.

Boundaries between the Teacher-Adult and the Student-Child

In many primary education settings, boundaries are defined as rules imposed by the adult teacher upon the student child. Verbal force and punitive measures are standard tools for enforcing compliance. Meanwhile, children are rarely allowed to assert boundaries toward adults. For example, they may not be permitted to remove themselves from a situation, take a break, look out of the window, or simply say no. Within this kind of teacher–student relationship, there is little space for children to practice negotiating boundaries or to experience what it means for their bodily autonomy to be respected.

In the first year of MEIA, I voice-recorded a day of teaching to examine power dynamics within language. I spoke: “Eyes are looking my way, and mouths are closed. I do not want to hear it. I do not believe that. It is quiet while I explain the next step.” Within 30 words, I physically confined the children, told them I did not want to listen to them, that I did not trust them, and that finishing the assignment was what mattered most. It can be hard to stop oppressing children within an oppressive system, a place where they are not used to being trusted, and where my worth as a teacher is determined by a classroom full of quiet, still-sitting students.

It was clear this was not how I wanted to speak to others. Nor did it represent the values I would like to transfer. It was unclear to me how to change within an institution where oppression not only seemed like the norm, but also seemed to be what the children felt most comfortable with. Teaching in rooms with physically and verbally aggressive students, I held fear of losing control, of not being able to protect my students. While I simultaneously did not yet realize that violence done to me by a child is still violence.

By investing in years-long, personal and respectful relationships with each of my students, by setting my own boundaries and voicing the process of doing so, and by rigorously checking in with myself about when and why I enforce restrictions, I am facilitating a classroom that increasingly enables student boundary making. Now: A student is tapping the table as I am explaining the assignment. Other children start focusing on it, and some join in. I stop my instruction and turn to the student: *“Dear, it is difficult for me to concentrate while hearing that sound. Would it be okay if I gave you a soft ribbon to play with, that way the sound won’t distract me?”*

Boundaries Among Students

Dutch primary schools have a minimum requirement of 3,5 m² per student.²⁵ This includes all floor space within the school, including classrooms, stairs, hallways, toilets, etc. In practice, this means we require students to spend the better part of 5 days a week in a 50 m² classroom, sharing this space with around 23 other people. They do not get to choose with whom, they do not get the choice to leave. I see my students in a near-constant negotiation of limited space. These negotiations quickly become tense, out of balance, or even aggressive.

In the informal conversations we have in the teachers’ lounge, my colleagues and I often reflect on the social tensions we observe among students. One way we’ve come to describe this is through what we call the “bump-meter”. It refers to how children respond when they accidentally bump into one another. Do they exchange a quick glance, say sorry, and carry on with their day? Or does it escalate into an outraged screaming match? We suspect this heightened reactivity is linked to a decreasing sense of safety. When a child does not feel secure in the classroom, even a small bump can feel like an aggressive violation of personal space. I have also noted that a sense of ‘being watched’ can occur. When students feel like the other students are constantly watching them. “Stop looking at me!” is often exclaimed in anger.

I hope that, especially in classrooms where these kinds of tensions can be recognized, practicing skillful boundary making can improve group dynamics and help students feel safer.

Boundary Making

In this chapter, I have defined and elaborated on the kinds of boundaries I aim to practice with children in primary education. From here on, I will refer to the practice of noticing, establishing, reading, and meeting boundaries as *boundary making*. By using the verb making I underline the understanding of boundaries as adaptive and moldable. Because this research will take place in an education space grounded in learning through making, the term *making* becomes even more appropriate. The research will focus on bodily boundaries that address how we physically relate to each other.

²⁵ <https://www.rijksoverheid.nl/onderwerpen/basisonderwijs/vraag-en-antwoord/hoeveel-leerlingen-klaslokaal-groep>

The Material Mediator

The Concept of the Material Mediator

What would boundary making look like in an art class? What kinds of possibilities open up in a space centered in learning through making? Can we make something as abstract as boundaries tangible? Sculpt them? A core inspiration is a series of works by Judith Seng called *Acting Things*. In this ongoing series, she explores production processes as if they were a dance, a play, a ritual.²⁶ I was struck by the work depicted below, named *Silent Negotiations*, a beautiful example of actions made tangible.

Judith Seng describes the material acting as a catalyst for the actions and interactions of the human actors involved.²⁷ I love the idea of approaching a material like this, of seeing it as an invitation to interact. When I see the image above from the perspective of boundary making, I see the blue sand piercing the protective ring of yellow. And the material not only prompts our actions, but also leaves a physical trace, allowing us to reflect on what has happened. *Silent Negotiations* is a performance by professional dancers in the fine art context, but it made me wonder what introducing a material could bring to practicing boundary making with children.

The **Material Mediator** is a material used to represent the boundary between two or more people. By acting as the in-between, the material helps us mediate our boundary making. In *Holding Change: The way of Emergent Strategy Facilitation and Mediation*, adrienne maree brown encourages us that “Mediation helps to clarify power dynamics, make harmful patterns visible, and introduce the possibility that things could be made right, whole, and easeful.”²⁸ I am curious if, by pulling our boundary making from an abstract, internal process into a physical material, the material mediator can indeed form a tool to more easily navigate and reflect on our boundaries.

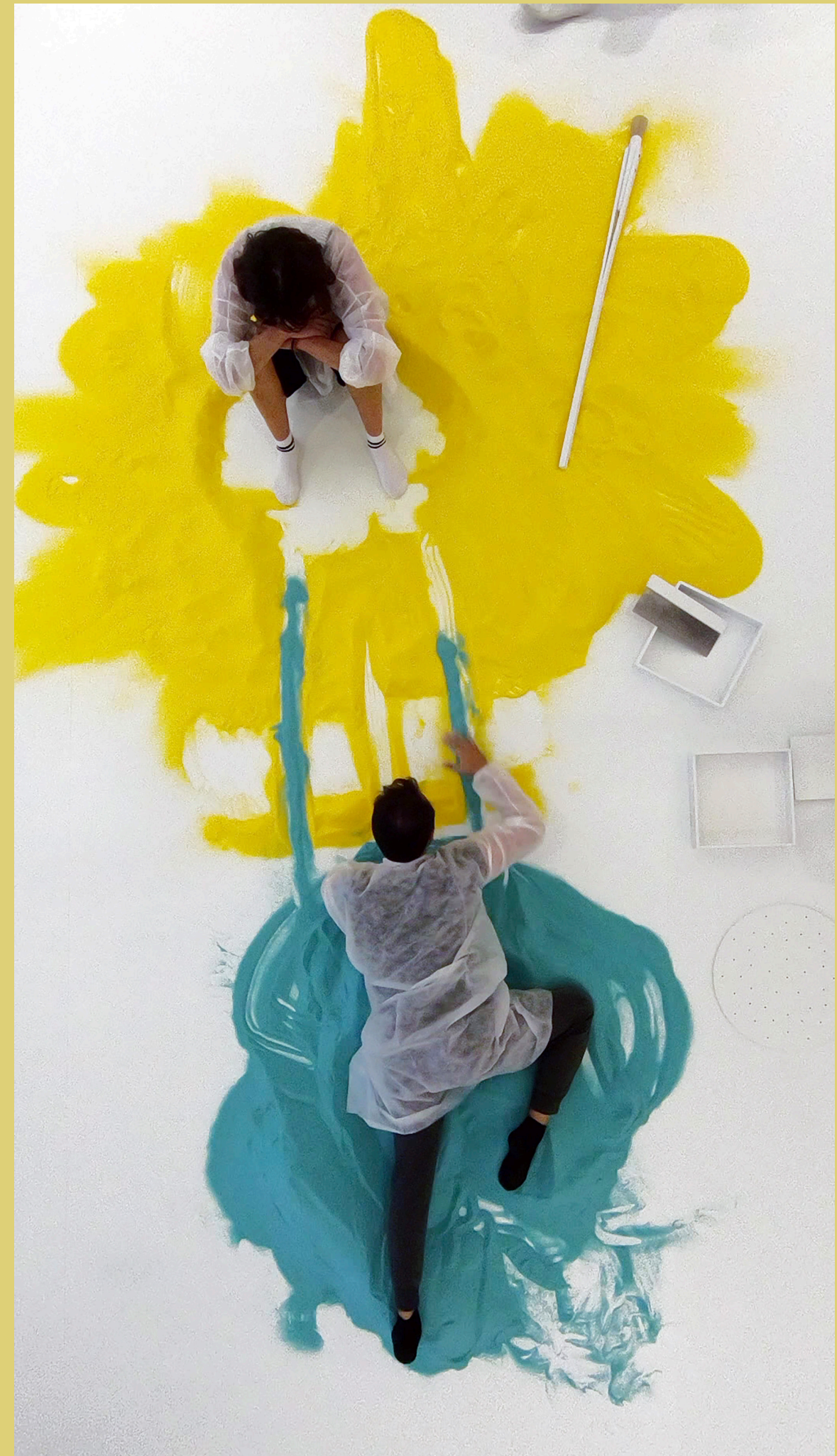
Rather than instructional exercises, the material mediator will focus on embodied learning through making. Because noticing, establishing, reading, and respecting boundaries are highly embodied practices, theoretical knowledge disconnected from experience is not enough. I hope this applied approach will contribute to the students’ ability to apply the skills they have gained to their daily lives. Learning through making inherently involves the body and touch; this research will lean into those qualities of making.

By bringing in materials and prompts associated with play, I hope the sessions will lose the weight often felt when approaching the topic of boundary making and instead allow students to adopt a curious, experimental attitude. I also expect that using a material, sometimes literally between us, can create a safe distance from which students can feel more comfortable exploring.

²⁶ <https://www.judithseng.de/works/schooloffluidmeasures/>

²⁷ Dörrenbächer, J. and Plüm, K. (eds.) (2016) *Beseelte Dinge: Design aus Perspektive des Animismus*. transcript Verlag.

²⁸ Brown, A.M. (2021) *Holding change: The way of emergent strategy facilitation and mediation*. Edinburgh, Scotland: AK Press.



Judith Seng

The Design of the Material Mediator

There is no one material mediator. It is a concept that can take many forms. For the scope of this thesis, I aimed to design three material mediators. In this practice-led research, I explore what makes a material a material mediator and determine whether we can indeed use these material mediators to practice boundary-making.

My bachelor's at Design Academy Eindhoven, a social and conceptual design education that emphasizes learning through making, heavily influenced this part of the research. The art classes I teach are firmly rooted in learning through making, but in this research, I aim to explore what learning through material might mean. As an art educator who designs her own classes on a weekly basis, I am constantly on the lookout for interesting materials to use in my classes. I love the part of my job I spend wandering through craft stores, Action, hardware stores, and trash day treasures. As I set out to find materials suitable for becoming a mediator, I began to define what a material mediator is. A process that can be divided into four steps. I want to underline that an endless number of material mediators can be invented, and what they will be depends on the resources available and the choices of the designer/educator. I will describe what I found relevant in this process, not to create a set of rules, but to dive deeper into how each element within its design is informed by its intended purpose: practicing boundary making.

1. Choice of Material
2. Shape of the material mediator
3. Placement in space
4. Used Prompts

1. Choice of Material

The main question asked when looking for a material is: What interaction does this material provoke? Look at the material's characteristics as qualities to be explored. My first material mediator, for example, was made out of fabric. This material had many interesting properties. It could be flat, it could be a ball, one could be on top of it, as well as below. It could divide us, or wrap around us. The fabric I chose had a light stretch, creating a literal tension between the people holding it. It worked together beautifully with the air in the room. Blowing up into a giant bubble, slowly coming down as the air seeps through the material. You can work it with one person, two, a group. A material that prompts a wide variety of possible interactions. I took my time imagining the effects of different fibers, thicknesses, transparencies, weights, and stretch, and I am sure the resulting interactions would have been different had I chosen another fabric.²⁹

- For the Material Mediator, we are looking for materials for which we can imagine **multi-body interactions**. We want a material that involves our body and can be used together. The transparent paper invites us to look through it, and it becomes great fun to see the morphed faces of the person on the other side.
- Use **unfamiliar** materials. We want the interaction with the material to be an experiment, opening up new ways of interacting. If we use a material that the students recognize, for example, wooden blocks, they will recognize a purpose: building a tower. Instead of an exploration, the students will follow the script attached to the material.
- We would also like the material to be **open-ended**. When a material has one clear and limited use, it is more difficult to experiment with. I found that simple, easy-to-handle materials work best.
- Lastly, the material should be **enough**. When too little of the material is available for everyone to play, this can lead to a focus on obtaining enough for oneself. It promotes starting from a scarcity mindset rather than an abundance mindset.³⁰ Walling off enough material for oneself is, of course, also an opportunity to set boundaries, but rather than fostering boundaries for connection and care,



²⁹ Chapter 8 The Theory of Affordance in: Gibson, J.J. (1979) *Ecological approach to visual perception*. Houghton Mifflin.

³⁰ Brown, A.M. (2021) *Holding change: The way of emergent strategy facilitation and mediation*. Edinburgh, Scotland: AK Press.w

2. Shape

After choosing the material, the next question is: what shape should this material take? A material mediator is not made of a material, it is the material. Nonetheless, the provoked interaction will differ between a 5 M² piece of fabric and a 25 M² piece of fabric. Aim for the same qualities used when choosing the material. Find a shape that involves our bodies and promotes collaboration, is unfamiliar, open-ended, and enough. In this research, I used each material mediator multiple times and found that it works well to change the shape throughout. This can be seen with the transparent paper material mediator, where we started with A4 paper, went to full body size, and ended the third session with a classroom-length sheet.

To avoid the material turning into an object, keep it simple. In the work *Devisor* by Lygia Pape, the only thing added to the fabric is a series of holes. Still, this steers the interaction to the point that it becomes limiting. It becomes a tool. The material mediator works best if you let the material be the material.



Devisor by Lygia Pape

3. Placement in space

When the children enter, I like them to instantly see the material mediator. Fostering immediate curiosity and excitement, I often hear them wonder out loud how they will interact with the material mediator. The way the Material Mediator is placed in space significantly affects the interactions it provokes. It is also worth noting that a well-staged material mediator can explain its intended use and requires fewer verbal prompts. A large sheet of transparent paper lying on the floor gave much more restricted interaction than when I hung it up and down the ceiling in the next class. Notice what is happening in your first session and adapt your next setup based on those findings.



4. Used prompts

To figure out what prompts to use with the material, I do not sit behind my desk and come up with a good exercise. The Material Mediator is the guide. We don't think of what to do with the material, we find out what the material wants to do. And the way to do this is an exciting one, we get to play with the material! Half an hour of open-ended play gives you all the information you need. But as the assignment is about the relationship between multiple bodies, it is important not to play alone. For each Material Mediator, I would invite a peer to help me uncover the prompts of this material. When you do, things become obvious. For the first session with the transparent paper, for example, I had come up with the prompt to trace each other's faces. Through peer testing, we found out that it was too intimidating to start the first class covering the face completely. Being blinded behind the paper felt isolated, disconnected from the drawer, and I found the risk of an unnoticed freeze or fawn response³¹ significant. The need for small eyeholes became clear.

When playing with the large fabric, we found it felt wonderfully relaxing to lie on the floor and have the fabric move over you. Then again, what a material prompts in two adults in a living room can be very different from what it provokes in a classroom with 12 nine-year-olds. Try to pay great attention to the moment of meeting between the children and the material. How do they first approach it? What is their intuitive response? Often, this is the interaction on which I will base all my further prompts. Whereas the big fabric provoked calm, focused touch in my peer and me, I could chuck this plan out the window immediately, as the irresistible urge in the children was to create wild waves. Use the prompts as a starting point, rather than an A-Z exercise. Rather than letting the children free-play with the Material Mediator, we use the prompts to steer them towards involvement of the body, interaction with others, and, as a result, boundary making. We fine-tune our facilitation to amplify this boundary making. We want to be able to slow down enough and have the boundary moments tangible enough so that we can actually see and respond to what is happening. If not for the prompts and facilitation, boundary making would continue as it always would in this specific group. And when you are calling in the aid of a material mediator, chances are there is a need for change, rather than a repetition of the norm.

Please note that during this research, I had the luxury of stepping outside the limited time and resources teachers face when preparing their classes. Below, I added some images that inspire more affordable, easily accessible material mediators.



Francis Alj's



Segni Mossi

³¹ Meenadchi. (2023). *Decolonizing Non-Violent Communication : A Workbook*. Third edition. Los Angeles, California: Co-Conspirator Press

The Facilitation of the Material Mediator

For the first Material Mediators try-out, I invited my fellow MEIA students to play. It was beautiful; we negotiated, collaborated, and enjoyed making shapes and constructions. The group, with care and focus, created a bubble of air, slowly closing in on one of us. Lightly blowing the surface, creating a gentle ripple as the fabric lowered. I met with my physical theater maker friend, Tom de Ronde³² to unlock more specific exercises, and we came up with three tactile and caring exercises. I was confident my students would love it.

Session 1

For the first session with my students, I booked the school gym and set up my camera. I sat the students down in the art room, explained what we were going to do, and what the rules of the class would be. We calmly walked towards the school gym, and as we entered, two things happened. One: screaming. Two: running. I spend the rest of the hour trying to get the group of students to use the fabric to touch one student in the middle calmly and intentionally. I went about this by continuously telling my students to stop touching the fabric, come out from under it, and listen to my instructions. But it was impossible not to touch the fabric. The material mediator did exactly what it was supposed to do: provoke curious interaction, and all I was doing was cutting it off and telling the students to sit still. More concerningly, as I chose students one by one to come under the fabric, conflict and jealousy erupted like little volcanoes, anger towards me and each other when it was not their turn. At one point, the children did not even want to participate when it was not their turn. Instead of the sense of collective care I had aimed for with my exercises, a general sense of begrudging and hostility took over. This was a disaster. I was exhausted. In the last 10 minutes, at my wits' end, tired of telling students to get out from under the fabric. I gave in, held up the fabric, and let them dive under, run from one side of the fabric to the other, circling back to the beginning to go again. I didn't see the value of this exercise at the moment, but I was happy to finally not be in a fight with the students and have an exercise flow. I brought the students back to their classroom, sat down, and concluded that this was a complete failure, and my beautiful idea of boundary making simply impossible.

At our next MEIA meeting, I firmly stated to my peers that I was not able to facilitate a class like this. But of course, this was not true. What is true, however, is that the facilitation of the material mediator is as important as the design of the material mediator. In a group of people, like my peers at MEIA, where we have established relations of trust and care and a healthy practice of boundary making, one can expect healthy boundary making when prompted with a material mediator. Chances are, however, that when one calls in the help of the material mediator, boundary making is a point of friction in the group, there is a lack of skill or attention to this topic, or there is not enough trust or safety to hold this activity. This is where facilitation is crucial. In this chapter, I will describe the facilitation I have found useful. The point of the facilitation is to enable students to use the material mediator for constructive boundary making interactions. This section is heavily informed by the summarized knowledge adrienne maree brown shares in *Holding Change: The Way of Emergent Strategy Facilitation and Mediation*³³, and most importantly, gained by trial and error. By noticing what is happening between the students, the material mediator, and me, and responding rather than reacting. Because of this research, I had a third aid, video documentation. This allowed me to look not just at the children's behavior and boundary making, but also to observe and analyze myself to figure out what kind of facilitation worked.

³² <https://derondederoo.com/>

³³ Brown, A.M. (2021) *Holding change: The way of emergent strategy facilitation and mediation*. Edinburgh, Scotland: AK Press.

Let's have a look at my conclusions after this first class and the changes I made for the second.

- **Less verbal instruction:** After giving the first instruction in the art room, I try to give a second instruction in the school gym. As the whole point of this research is embodied learning and learning through making, I am countering my own intentions. For the next class, I will limit verbal instruction as much as possible. Instead, I will demonstrate, ask children to demonstrate, and when words are needed, I will ask questions and let the children speak as much as possible. I don't have to tell students where they should enter the fabric, one by one. I can simply lift the fabric, open the 'door', and close it again. No one enters elsewhere, and I can decide on the pace, without discussing a set of rules beforehand.
- **Prompts instead of full exercises:** It also became clear that full, step-by-step exercises were not a suitable companion for the Material Mediator. They eliminated room for play and experimentation. And with a fully formed plan to get through, there certainly wasn't enough space to respond to what was happening in the room. I understood I needed prompts rather than finished exercises. I would walk into the room with a handful of prompts, but was equally ready to throw them all out the window. I found it worked best when I paid attention to the children's intuitive reactions to the material and worked with those. This meant that my final impromptu exercise, letting the children run under the fabric, would become the opening prompt for the next class. That is what the material provoked in them, that was what we were going to do, and we would see what followed.
- **Energy-filled start:** After consulting the physical education teacher about the screening and running upon entering the gym, I understood this was the appropriate response to this space. As it was very different from the expectation within the art-room, soft voices that listen to each other, I knew I needed to get comfortable with this real quick, and the best way would be to let them run, hard. I needed an energy-filled start, and running under the fabric would provide this. I still secretly hoped that a side effect would be that they would tire out a bit.
- **Name sticks:** If you are not convinced yet by the significance of name sticks, I would advise you to have a second look. This is the most important change I made to my teaching based on the EDI method. It is a cup with sticks with the names of all students inside. After asking a question you give all students time to think, and they will be motivated to do so, as everyone could get the turn. You wait long enough and then draw a name. Besides having a much more engaged group, this prevents you from teaching only to the children who raise their hands, and thus already know the answer. They give you a much better idea of whether the knowledge you are trying to check is actually learned. But the name stick uses are manyfold and in this case they remind us that simple solutions do exist. One of my main problems in the first class was jealousy and conflict over whose turn it was, and a lack of interest in helping with the assignment when it wasn't your turn. In this class, I used name sticks to give turns, and these issues vanished in thin air. There was no need for jealousy over my subjective choice for the next person, and no worries about whether they would even get a turn, as I was picking all the sticks one by one.
- **Smaller groups:** I was curious to see what would happen if we worked in small groups of 4 rather than the full 12 children. I hoped that in the small groups, they could collaborate and develop their own ideas. My second prompt in the small groups was that one person lay down on the fabric while instructing three others on how they would like to be moved. My limit was that the person lying down's face should remain visible so that we could maintain clear contact.
- **Side activity:** In the first class, I had laid out some drawing materials in a corner for an autistic student for whom I wanted to have an alternative option present. As I wanted to work with part of the group, I needed to make a side activity for the rest of the students. But I also found that it was crucial for all students to have alternative options for participation.

Session 2

The difference was night and day. The class went from forcing to inviting and responding, facilitating rather than battling. Now that I had found out how to facilitate the material mediator, I began figuring out how to facilitate boundary making. I learned a lot from participating in a Wheel of Consent workshop. Here, I could experience firsthand the facilitation of Sinsia, an experienced somatic coach.³⁴ This resulted in a facilitation that focuses on what is already in the room. Notice important moments, in this case, moments of boundary making, slow them down and zoom in.

I realized I didn't need to stage boundary making. If I designed and prompted the Material Mediator well, these moments would happen. In which way or shape would depend on the students. And this is exactly the strength of boundary making through the material mediator. We respond to what is actually happening in real time in the class; we don't create a fictional story about a boundary-making scenario. There is a real situation and a real need. In my overall work with children, I believe in respecting children's lives to be real. In giving real, honest answers to their questions, explained in clear, age considerate language. I believe in admitting to flaws and complexities, most importantly, of myself. This can be as simple as daring to say *'I don't know'*, or *'I overreacted because I was so tired I did not see a better solution in that moment, I am sorry.'* As teachers, we are expected to produce a constant stream of nuanced answers, patient responses, and just resolution of conflicts. I think that acknowledging our struggles and limitations to our students is more honest, more educational, and in many ways a better example of real-life boundary making.

Facilitating the material mediator required letting go of control. That I, as a teacher, do not need to orchestrate, but that I can trust that what will come up from the children, when and if it happens, will be much more relevant than what I could have planned out alone.

Use the Language of the Children

Key in this research is that I am not trying to convey theoretical knowledge. I do not explain the definitions of abstract concepts such as 'boundary' or 'consent'. I do not even use these words. We talk in much more practical terms, focusing on things we actually do or say. *"We need to ask her if we can start drawing, because we cannot see her face behind the paper, and we need to make sure she feels good."* *"It is important to listen to her answer, because it might be different from the last time."* *"When you don't like being traced anymore, you just take the paper off your face."* The language focuses on actions and what is happening in the room. It is not there to describe general or abstract terms. Something I found worked very well was adopting terms and examples coined by the children. They saw the moving fabric and called it 'waves'. They use going on a roller coaster to describe the difference between fun-scary and bad-scary. They call in examples of themselves or their friends. They have a world of words and experiences, use them.

Crossing of Boundaries

When playing and experimenting with boundaries we will cross them, that is part of being in practice, we have not mastered the skill yet. But it is also mirroring reality, where a state of perfectly clear, uncrossed boundaries isn't real. Just like when we learn grammar, there will be hiccups. What I try to do in these classes is to create a container within which we can feel brave enough to choose to take on that risk. And where I, as the adult-teacher, can facilitate conscious attention to maintained boundaries and to the repair of crossed boundaries. The aim is not to draw a perfect line around ourselves and safely sit in there. We complicate. What happens when 25 people draw a line, and they start to overlap? How do we negotiate the shared spaces? Where is the friction, and how do we hold each other and ourselves? A main goal is to create exercises in which boundary making becomes a shared activity and responsibility.

As the facilitator, it is my responsibility to point out moments of boundary crossing and demonstrate a skillful response. I always assume good intentions, pause the activity, explain what is being crossed, and ask the crossing student to verbalize what happened and what they can do differently. When a crossing is repeated, I ask them to step out of the exercise. I tell them they can rejoin in two minutes. After two minutes, I invite them back in, and we reflect verbally again. Facilitated without anger or blame, but with a focus on the importance of maintaining the boundary, I find these interventions very useful. I see the children who crossed the boundary gain pride when they recognize how to maintain the boundary, often gaining a sense of responsibility and sometimes even helping others avoid similar crossings afterwards. Do note that I work with these students on a weekly basis and have had the opportunity to work on a basis of connection and trust before starting the material mediator classes.

One thing that had not changed was my exhaustion by the end of the hour.

Session 3

During the third material mediator session, I would like to see what happens if we repeat the same prompts a second time. I am curious to see if I notice a difference in boundary making compared to the first time. I also wonder if, now that the children know what is going to happen, they will be better able to take collective responsibility for the activity and boundary making. I learn to place responsibility toward the children by slowly removing myself from the center of the activity. I ask the children to explain and initiate the prompts. The ultimate aim would be collective responsibility for each other's boundaries being met.

As I facilitate more boundary making, I become more trustworthy in my ability to read physical cues. The tensing up, the slight pause, and the lingering movement of a student who just verbally agreed become increasingly clear. Again, noticing what happens allows me to respond. A response in this and many situations means a pause, calmly repeating a question, and calmly creating more options. *"Wait a moment -breathe in and out calmly- Do you want to go under the fabric? - breathe in and out calmly - It is also possible to go over it, or think about it a bit longer. Student: mmmmh I want to think about it for a bit. Marie: Wonderful choice, I will come back in a few minutes."*

In the earlier-mentioned Wheel of Consent workshop, I noted how much time was spent creating alternative options for each activity. A non-engagement zone, for example, where you could go if you didn't want interaction with the facilitator or participants, seemed like an interesting addition to my classes. The workshop also made clear how small exercises show big patterns. A starting exercise in opening and closing your eyes, for example, gave many people information about behavioral patterns. A big difference in my context is that, in this workshop, people chose to attend, paid to be there, and were interested in the topic of boundary making. And although the workshop focused on doing exercises, we spent a lot of time verbally reflecting on the experience. In this research, I decided against verbal or written student reflections. I experimented with informal group interviews at the end of the session. When asking what the big fabric class was about, the students would enthusiastically talk about waves and oceans. When I nudged the conversation towards boundary making, the students were perfectly capable of discussing the importance of listening and why we should respect another person's decisions. While I don't doubt my students' capacity to do so, this approach to gaining results runs against the core purpose of embodied learning through making. Facilitating material-led sessions and then squishing them back into verbal answers did not suit the purpose of this research. Instead, I decided that the results of this research would be obtained by analyzing students' (inter)actions.

³⁴ Sinsia is an Amsterdam-based somatic sex coach who supports (mostly) queer people in creating a sex life rooted in choice.

Results

The Material Mediators were used in a combined total of 47 sessions.

- 03 sessions using the big fabric with MEIA peers and tutors
- 16 sessions using A4 transparent paper with primary school students during a pilot study
- 03 sessions with peers to uncover the prompts of each material mediator
- 06 sessions using the large fabric with primary school students in
- 07 sessions using the transparent paper with primary school students
- 12 sessions using the kinetic sand with primary school students

The sessions with peers and tutors ranged from 30 to 10 minutes.

The sessions with primary school students during the pilot study lasted 1 hour each and included 12 students. The session took place during the weekly art class I teach them.

The further sessions with primary school students were one hour each, with 12 students. Most of the sessions took place during the weekly art class I teach them. Some of the sessions took place during the after-school art-plus-program, for which the students in my art class can sign up. The art-plus-program is voluntary and combines students of different groups and ages.

I video recorded 3 sessions of each material mediator and used photography and field notes throughout all sessions. This documentation, especially the video footage, was then used to analyse the sessions and answer the research question.

In this chapter, I will visualise the sessions with special attention to the moments of boundary making, the material mediator facilitated. These visuals follow a chronological order, illustrating my findings along the way.





Material Mediator 1

Big Fabric

In March 2024, I sewed together a 7.5 by 8.5 m piece of fabric. At the time I had not yet introduced the term material mediator, but I was fascinated by the interactions this piece of fabric provoked. The experiments started with friends at home and peers at MEIA.





One person can try to be as small as possible.



We can also use the fabric to create large bubbles over eachother.



Or stumble upon eachother in the dark.



2 ▶

Tom and I discuss what kind of assignments will be good for the children.



During the first session with the children, we see:

- The Material Mediator is very successful in provoking touch and interaction, but I spend a lot of time telling the children to sit still and stop touching the fabric.
- I start with rules and restrictions.
- I spend a lot of time verbally explaining.
- I prepared full, rather complex exercises.
- The children find it nearly impossible to sit still; they literally start to spin in their place. This will increase during the class.
- The start of competition over whose turn it is, which will later escalate to jealousy and conflict.



In this example, I have no idea how the students under the fabric are doing, and no influence in guiding their interactions towards skillful boundary making.

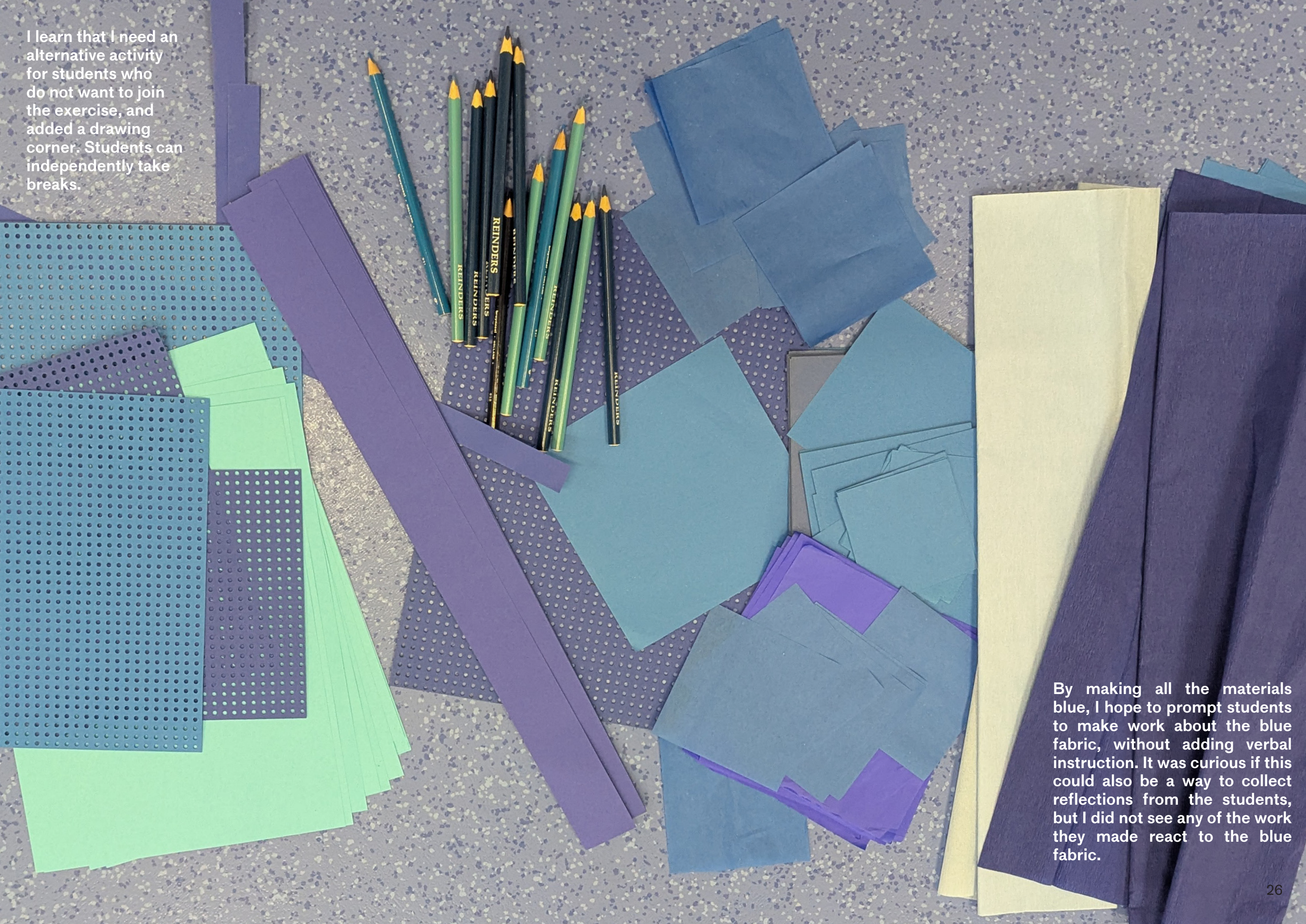


My choosing whose turn it is next causes conflict and jealousy. In this clip, we see Eimy walk away from the exercise when it is not her turn.



I learn that I need a different way to decide on turns. A simple but highly effective alternative to subjectively giving turns was the use of name sticks. This is a tool I learned from EDI # This one adaptation eliminated the conflicts and jealousy about turns entirely. It instilled a sense of fairness over who was next, as well as trust that they would not get skipped. This simple change, with a large effect, reaffirmed the importance of the session's design.

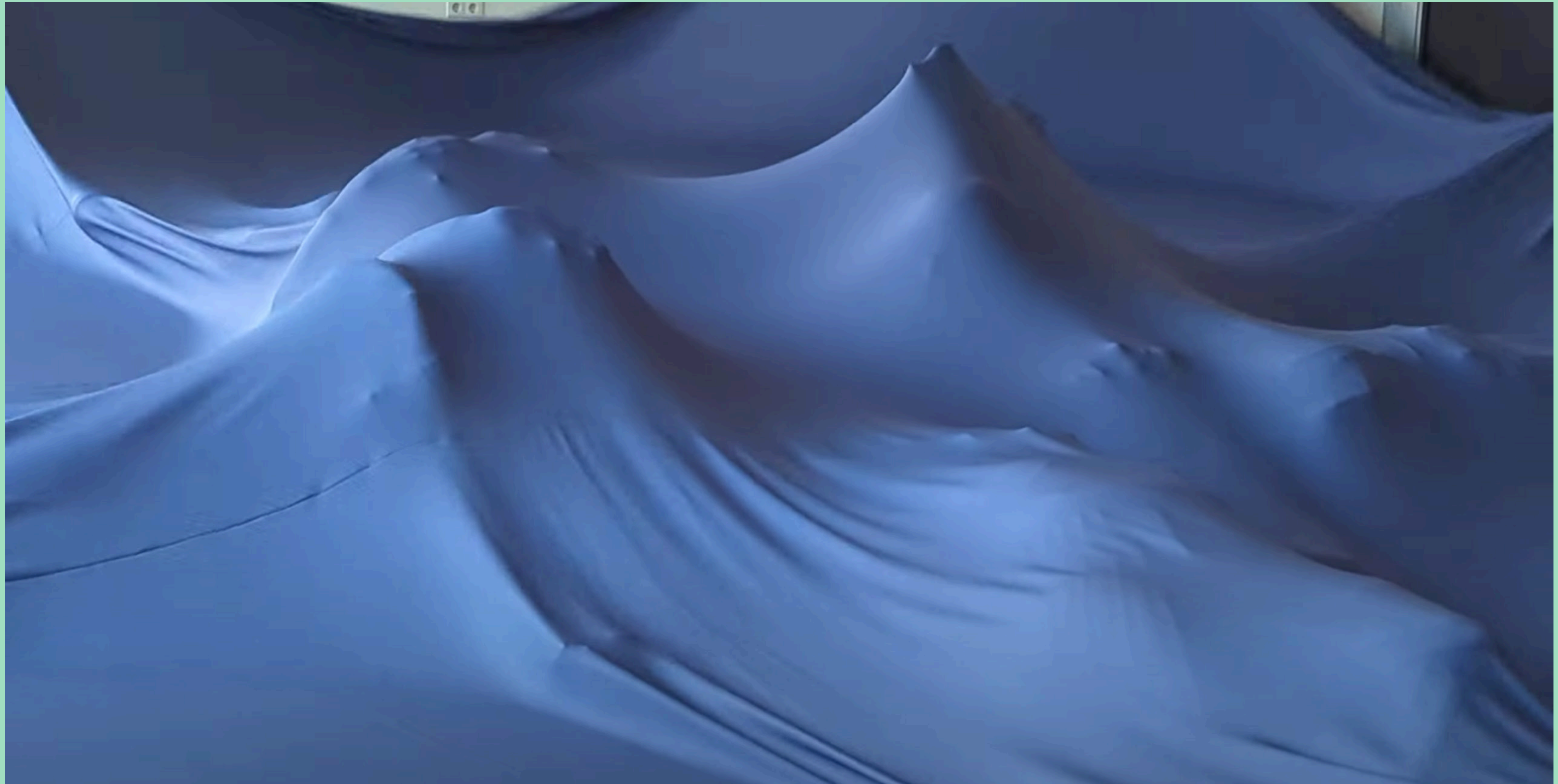
I learn that I need an alternative activity for students who do not want to join the exercise, and added a drawing corner. Students can independently take breaks.



By making all the materials blue, I hope to prompt students to make work about the blue fabric, without adding verbal instruction. It was curious if this could also be a way to collect reflections from the students, but I did not see any of the work they made react to the blue fabric.

I learn to look at the initial reaction the material provokes in the children, and use that interaction as the foundation. Rather than full and complex assignments, I give simple prompts, based on the initial reaction, that form a starting point.

With the fabric, there were two actions that were strongly provoked: 1) Going under the fabric, and 2) Making waves with the fabric. Instead of prohibiting this, I based the first prompt on it. One by one, we crawl under the fabric and make our way to the other side.



We practise establishing boundaries by facing the group and telling them, in a clear voice, what we want. We practise respecting boundaries by listening to what the person wants and refraining from the very fun wave-making when that is requested.



Safier establishes his NO, goes at his own pace, and stretches his boundaries.



When the first exercise starts, Safier asks to go to the bathroom



When he returns, he chooses to sit and observe the exercise.



Later on, he wants to participate by holding the fabric.



By the end of the third session, he clearly states that he wants no waves and chooses to go under the fabric.

A child says, 'I already know what she wants' before listening. I take this moment to slow down and zoom in on boundary making. I do not need to have predefined explanations, I respond to what is happening in the room. What we learn directly stems from what we do.



7 ►

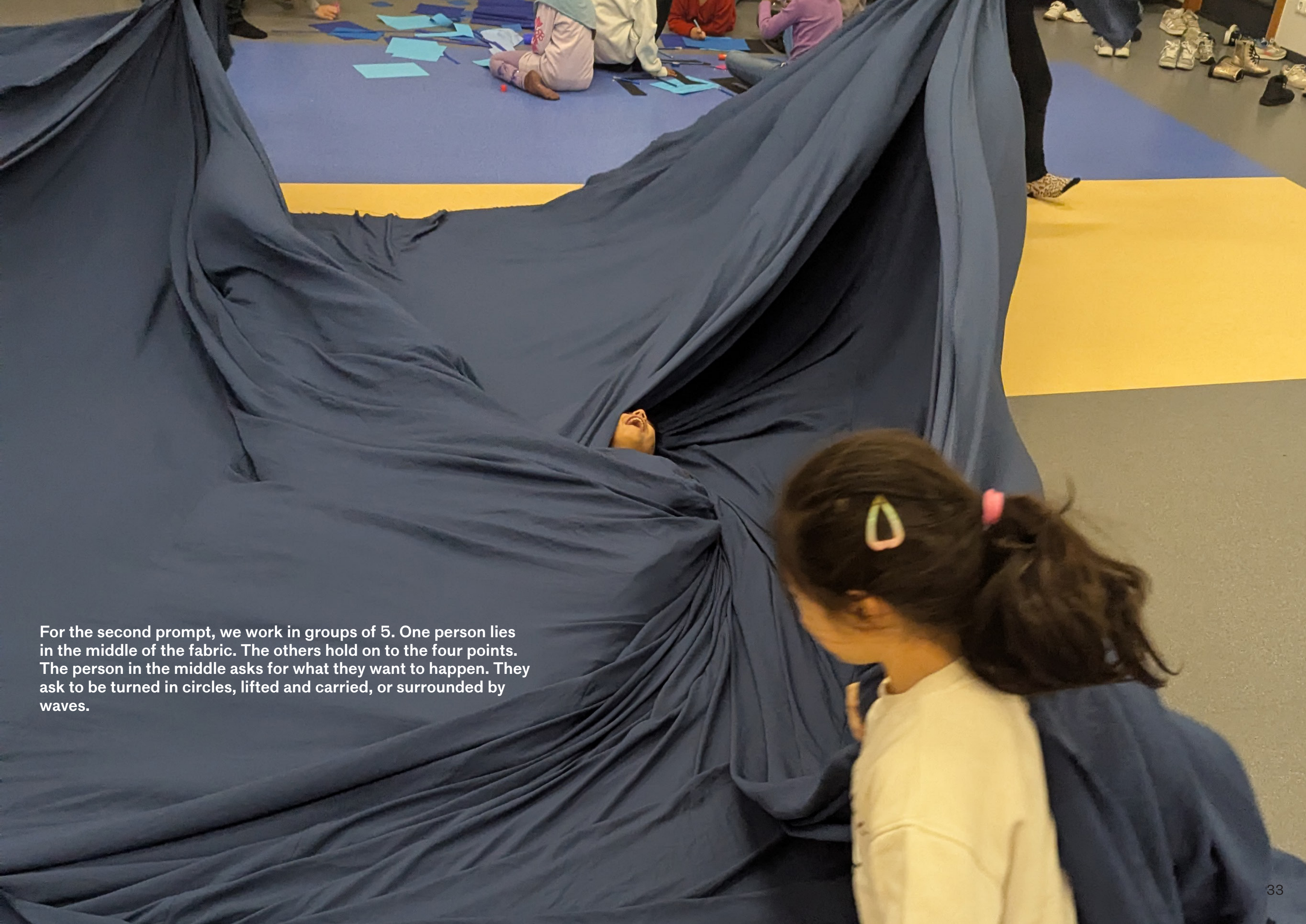
In this clip you see how I facilitate a crossed boundary. Nouvel crossed the boundary twice in a row by making waves, and was asked to step a way for 2 minutes. Safier crossed the boundary as well. I ask them to reflect on what happened after which they are invited back in. Later in this session Nouval calls another child to stop making unsolicited waves. I try to make my explanations clear, repeat information, and step in when boundaries are crossed without blame or further punishment. We are learning and within boundary making that means crossings are not only expected, but vital for obtaining the full scope of skills necessary for boundary making that happens in the students' daily lives.





It is not always easy to say what you want in front of a group. In this clip, Aymen practices using his voice.





For the second prompt, we work in groups of 5. One person lies in the middle of the fabric. The others hold on to the four points. The person in the middle asks for what they want to happen. They ask to be turned in circles, lifted and carried, or surrounded by waves.

To be able to clearly communicate our boundaries, the rule is that the face needs to stay visible.





At first, I, the teacher, participate and narrate the assignment.



Throughout the sessions, the children are encouraged to self-facilitate. They are now able to do the exercise with me as an observer/facilitator. They say stop the game when something goes wrong. They uncover her from the fabric. They spread out the fabric. They do a check-in with each other.



Material Mediator 2

Transparent Paper

As the Second Material Mediator, I use Transparent paper, also called tracing paper. In the first session, we use A4 sheets and black markers. Students work in pairs to create portraits. One student holds a transparent sheet of paper over their face, peeking through small eye holes while their partner traces their features. When one is done, they switch roles. The core learning goal is to verbally communicate boundaries in an intimate interaction.

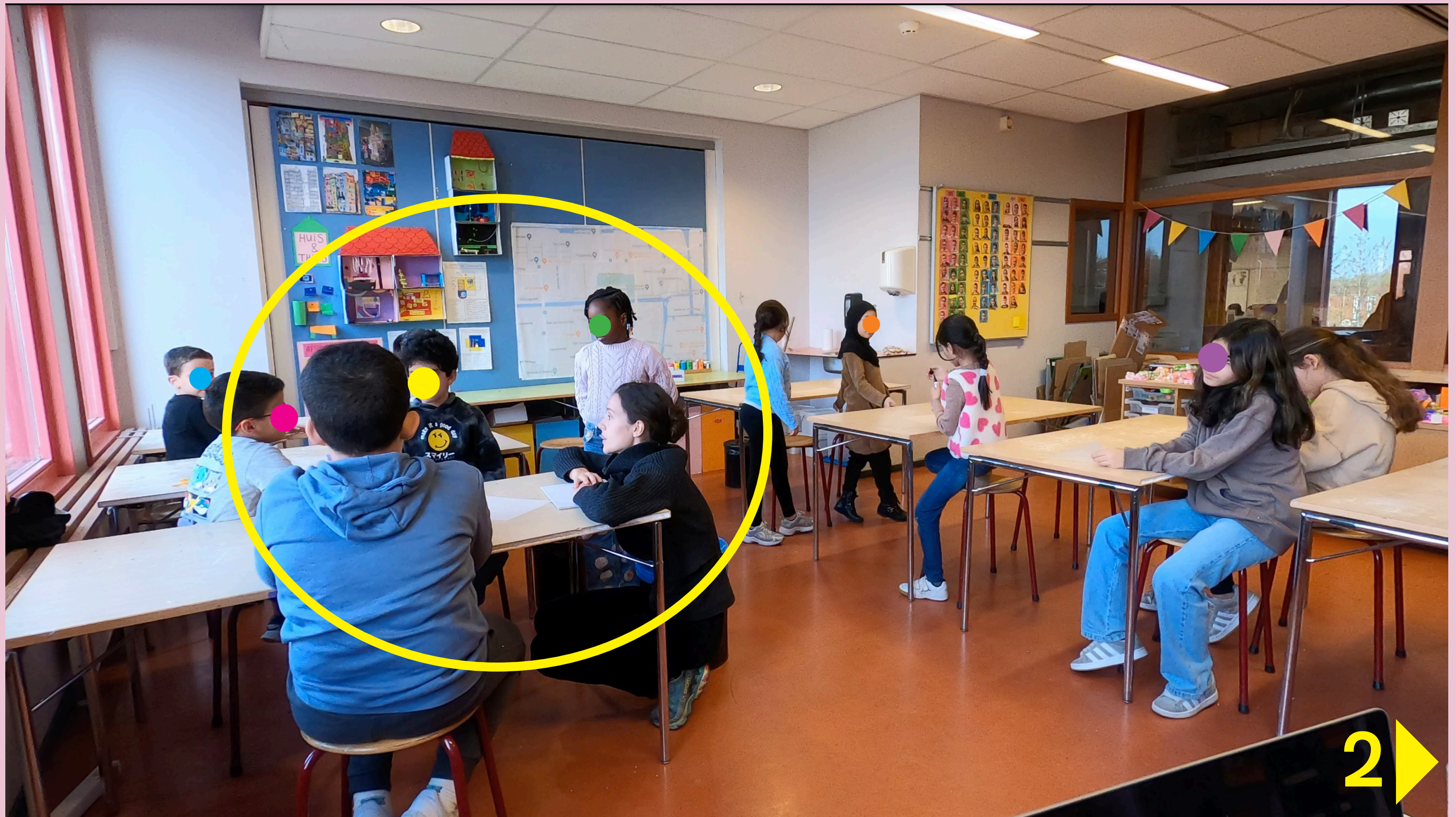
By hiding facial expressions, students are prompted to use their words more intentionally. Together, we explore the question: How can I make sure the person behind the paper feels good? We focus on requesting permission before starting, asking where to begin, checking in frequently, and listening carefully.



At first, I did not cut eye holes in the paper. While preparing the prompts by experimenting with a peer artist, I noticed that having your face drawn while being practically blindfolded was more intense than I expected. You didn't see the pen approach, and the sound of scratching on the paper was surprisingly loud. As an introductory exercise, I found this to be too potentially overwhelming. Having the eye holes makes a big difference. I could now see the pen approaching, the face and expressions of the person drawing me, with whom I could make eye contact. This is a good example of the importance of a peer-experimenting with the material mediator beforehand.



This exercise relies on enthusiastic participation. Mandatory participation would undermine the objective of boundary making.



Aymen en Nouval get started right away. Makeda needs some time to think about it. Rayan sits alone but wants to collaborate. Saffier wants to work in quiet and Hania wants to work with the teacher. In the next pages, we will see how that goes.



I ask Makeda if she needs time to think, she says yes.



Makeda tells me she would like to work by herself.



A little bit later, Makeda tells me she would like to draw Hania.



Makeda draws Hania



Makeda decides she would also like to be drawn by Hania



Makeda shares that at first she did not want to be drawn because she was afraid of the pen poking in her eye. She said later she did want to be drawn.

Makeda takes her time to think about what she would like to do. She is supported in her boundaries and adapts them herself as the class progresses.

This is an example of **boundaries that are responsive, rather than static.**



During the instruction, Saffier asks what happens if you do not want to join the assignment. I repeat, you do not have to do the assignment if you do not feel like it, and give alternative options.

Using a mirror to trace your own face, working with the teacher, only drawing, or only being drawn. A bit later, Safier suggests drawing his face from memory with the paper lying on the table. I tell him that it is a great idea. In the ending circle, he proudly shows his drawing.

This is an example of a student finding their YES!



Juf Marie: What are you going to ask?
Mousa: Where shall I draw now?
Rayan: My eyebrows.

In this video, you see Mousa, Rayan, and Juf Marie practicing asking for permission to start drawing. Asking questions is a useful way to read someone's boundaries.



Aymen and Nouval start the assignment enthusiastically and finish quickly. They are in a playful and experimental mood. So, Juf Marie tells them they can now trace different parts of their body. Nouvel asks Aymen to draw his but. There is a lot of laughing and looking my way. Nouval asks Aymen to start, and after one cheek is done, he asks again for the second. Juf Marie tries to look calm and positive.

This is an example of students experimenting with their and the teachers' boundaries.

For the second session, I laid a full-body-sized sheet of transparent paper on the floor. We briefly go over how to ask for permission to start drawing and how to check in with the person you are drawing. I also introduce two new prompts.



When looking at the large paper, a student immediately asks, “Are we going to do the whole body now?” The Material Mediator changing in size immediately prompts the inclusion of more of the body.

1) You are only allowed to draw what you actually see through the paper. In the previous session, I saw students tracing the face outline, after which they would fill in the details with the paper on the table. This reduced the time they spend in physical interaction with each other

2) The aim of the assignment is to find something you are really excited to draw. Don’t start drawing until you really feel happy to do so. With this prompt, I try to have the children actively search for their YES! Inspired by: ‘If your heart is heavy, stop and ask yourself, What do I need to change? It’s not your attitude; it’s your agreement. ... Reverse the sequence. Instead of trying to change yourself to suit that activity, what might happen if you change the activity to suit yourself?’³⁵

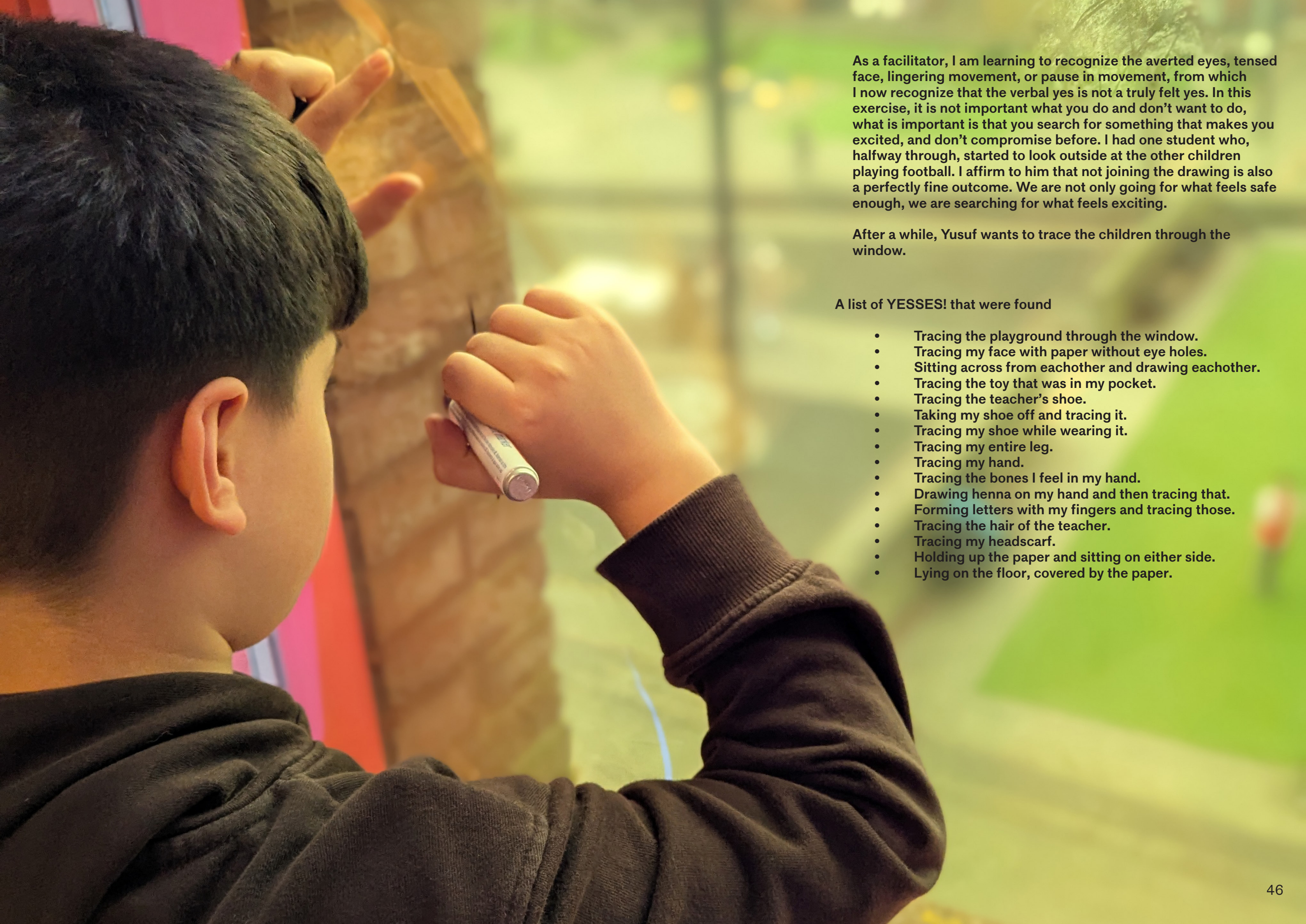
³⁵Martin, B. (2021). *The art of receiving and giving*. Luminare Press.



Dilruba explains she does not like the feeling of the paper on her face.



Dilruba and I talk about what her YES! could be.

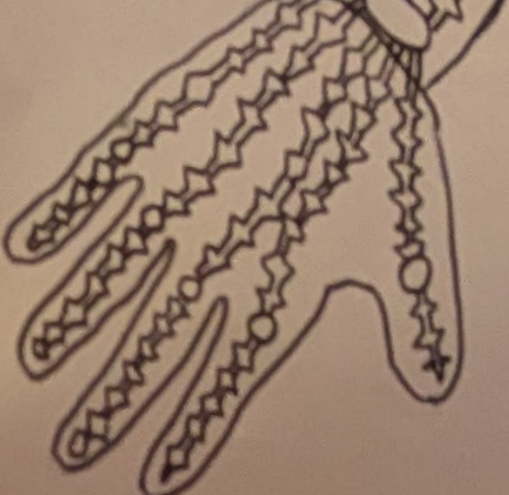


As a facilitator, I am learning to recognize the averted eyes, tensed face, lingering movement, or pause in movement, from which I now recognize that the verbal yes is not a truly felt yes. In this exercise, it is not important what you do and don't want to do, what is important is that you search for something that makes you excited, and don't compromise before. I had one student who, halfway through, started to look outside at the other children playing football. I affirm to him that not joining the drawing is also a perfectly fine outcome. We are not only going for what feels safe enough, we are searching for what feels exciting.

After a while, Yusuf wants to trace the children through the window.

A list of YESSSES! that were found

- Tracing the playground through the window.
- Tracing my face with paper without eye holes.
- Sitting across from each other and drawing each other.
- Tracing the toy that was in my pocket.
- Tracing the teacher's shoe.
- Taking my shoe off and tracing it.
- Tracing my shoe while wearing it.
- Tracing my entire leg.
- Tracing my hand.
- Tracing the bones I feel in my hand.
- Drawing henna on my hand and then tracing that.
- Forming letters with my fingers and tracing those.
- Tracing the hair of the teacher.
- Tracing my headscarf.
- Holding up the paper and sitting on either side.
- Lying on the floor, covered by the paper.



Hania is trying out what it feels like to be behind the paper. She then decides she does not want to be traced.

She experimented and noticed her boundary.





Yousra wants to lie under the large paper while Maya traces her. She wants to lie on top of another piece of paper so she does not touch the floor.



Maya wants to sit behind the paper while Yusra traces her face and hands. Yousuf and I help by holding up the paper.

I found there was little collaboration between the children until we started holding up the paper and crawling under it.



Through this material mediator, I discovered how important the scale and positioning of the material mediator are. It influences which parts of the body are included and whether we collaborate.

In this video, we see that without any verbal prompting, going in between the paper is immediately triggered.



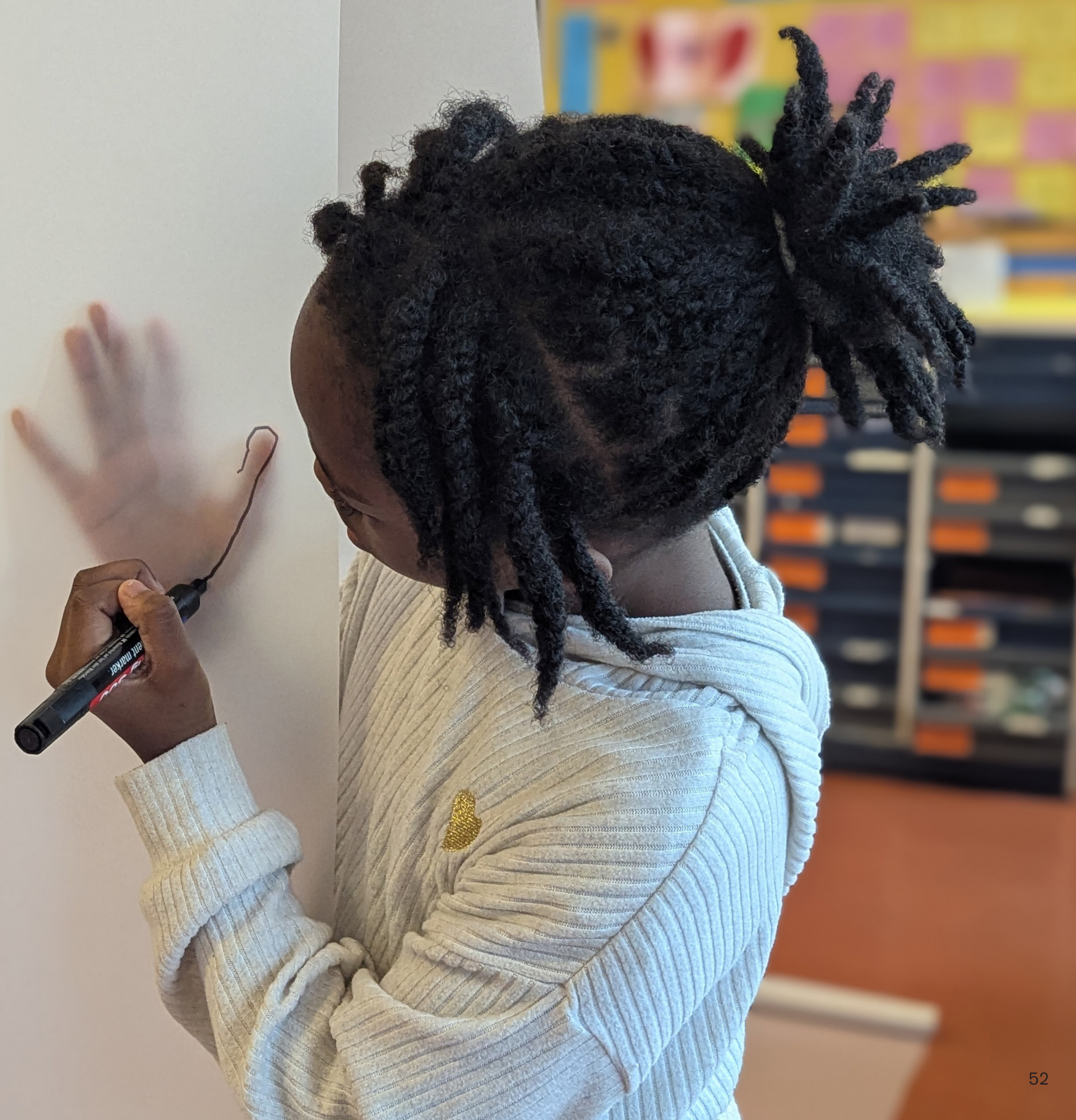
Because holding up the paper worked so well, I now hang the paper from the ceiling. This way, it is much easier to go under and behind it. I also introduce a new rule: you cannot pick up objects and draw them. Only yourself and the things you already have on you. Both of these changes invite a focus on the body and collaboration.



The children start to ask for permission and direct each other on how they would like to be drawn without me intervening.

Mert: Ozan I will draw you.
Ozan: No, no, no.
Mert: Ali Ensar, shall I draw you?
Ali Ensar: Okayyyyyy, start here.

Makeda wants to draw her own hand.



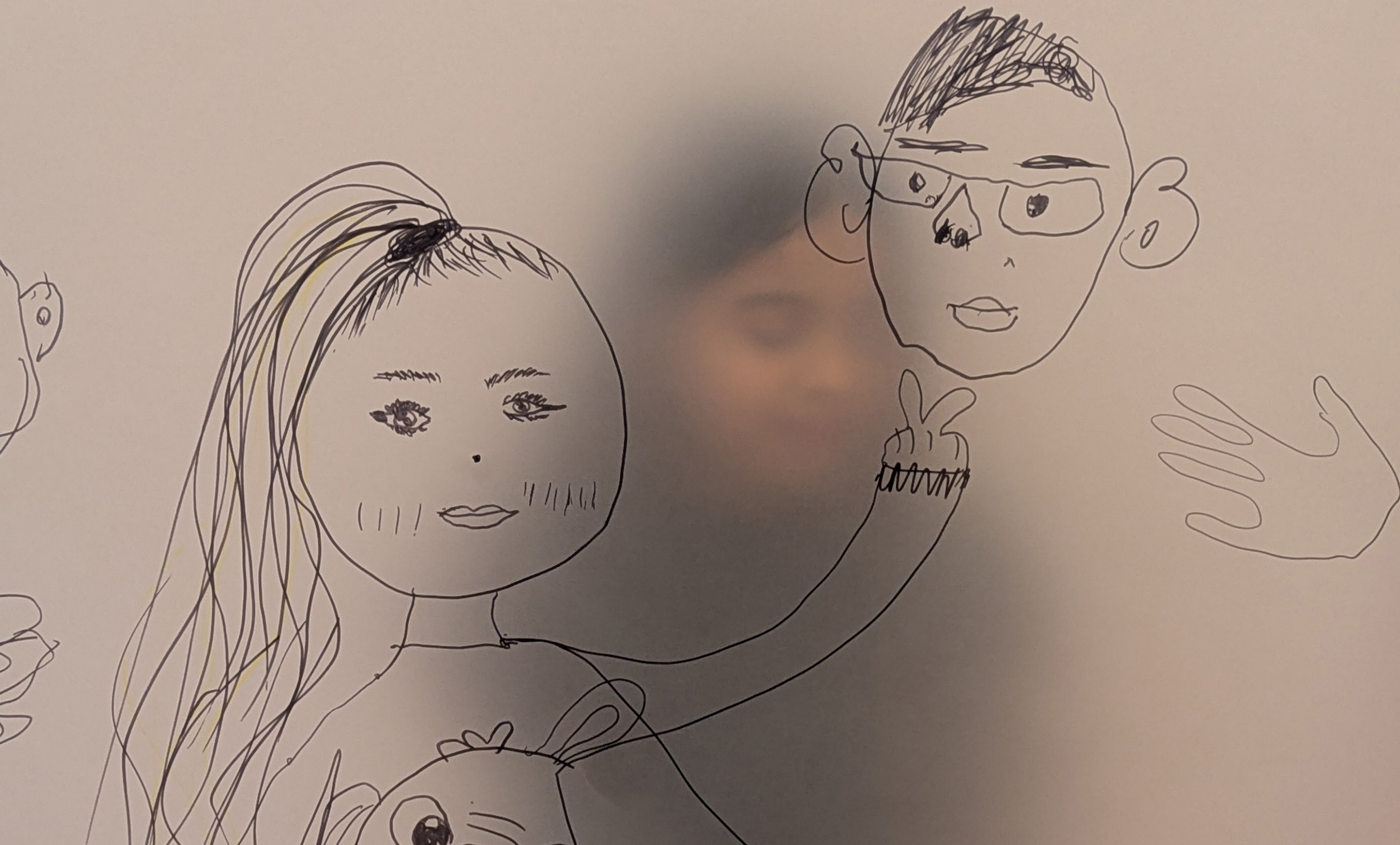


Whereas Mohammed prefers to have his face drawn by someone else.

Samuel is very smart. He wants to write but is only allowed to draw what he actually sees through the paper, so he forms letters with his fingers.



The drawings form the traces of our interactions.
And allow us to collectively reflect on them.





I found that allowing the object to be traced was bringing the assignment too far away from the body. But I still wanted a way for students to participate without having to touch physically. Coincidentally, the sun came into the classroom, allowing us to project our shadow on the paper. This way, we could trace a person without them touching the paper. This was a wonderful opportunity to start a group reflection: If you are going to draw someone's shadow, do you still need to ask for permission? Some of the children's answers:

- You do not have to ask for permission because when you draw someone's shadow, they do not feel it.
- You do need to ask for permission, because someone might not want or like it.
- You do have to ask for permission, because otherwise someone might move.
- I do not know, I am a bit in-between both.
- (From the student whose shadow was drawn) For me, you do not need to ask me, but I would ask someone else, because they might not want it, and it is their shadow, and it is polite to ask.



Material Mediator 3

Kinetic Sand

The sand instantly provokes touch. I see the children use their hands not as tools, but for the sensory experience.





A gentle prompt, like asking them what the sand feels like, is enough for them to start experimenting with different ways of touch. The cold firm feeling of pressing your hand in the sand, the tickling sensation of crumbling the sand over your hand. The rough friction of rubbing the sand between your fingers.



In the first session, I have two setups for the sand. One taped off circle on the floor and three taped off tables.

During this session, I see boundaries emerge quite literally as a wall to separate us from each other. This is not the kind of boundary that we are after. I will need to adjust my prompts to foster responsive boundaries that create connection.



Perhaps I set the example for static boundary making by using sand colored tape to establish a non-responsive boundary?





After establishing the boundary, Dilruba and Samuel play in their own section and have no further interaction.



To promote more interaction, I ask the children to bury each other's hands.



Ozan and Mustafa are cumblyng sand over each other's hands. Without being prompted to do so, Ozan asks Mustafa until where he would like the sand to go.

Looking for a way to involve more of the body, I decided to use washing machine buckets to present the sand in.



To promote more collaboration, I ask all students to make shapes together.



Some children did not enjoy touching the sand directly, so they decided to wear their gloves.

In the next prompt, I ask them to bury one limb at a time. This exercise promotes the sharing of space, touch, and collaboration.





For many students, involving the feet is exciting and a bit strange.



After involving our feet in the burying assignment, it does not take long before students start involving their whole bodies.



Here we see Ryan giving instructions as his classmates cover him in sand. After some wiggling around, Nouvel and Ahmen also manage to get both their feet into the bucket.



In the free play after the burying prompts, I see much more collaboration between students. In this example, they pass a ball of sand, each student adding another scoop to make it as big as possible.



The change in setup changed the collaboration between students and the involvement of the body entirely.

Conclusion

Answering the question: How can we use a material mediator to practice boundary making in primary education?

Looking for a way the art classes could help improve skillful boundary making among the students at the primary school I work at, I came up with the concept of the material mediator. The first stage of this research involved defining what a material mediator is. Once I got a clear idea of its aims and characteristics, I set out to design three material mediators. The design process was an accumulation of the material mediator's physical form, its spatial arrangement, the prompts used to activate it, and the facilitation strategy supporting it. As illustrated in the results chapter, this was an iterative process in which findings from one session served as the basis for alterations in the next. I would enter each session with a set of tools and prompts at my fingertips, but I soon found that remaining adaptive and grounded were equally important. Adaptive, to truly respond and be able to change plans based on what was unfolding with the students in that room at that moment. Grounded, in keeping a clear vision towards boundary making, and frequently checking in if my choices and facilitation truly aligned with this purpose.

Why I found the material mediator to be of additional value to the boundary making curriculum within the sex and relationship education in primary schools.

- One of the main additional values of practicing boundary making through making exercises is that students can enter the session in a curious, relaxed state. This is the state where the experimentation and collaboration in our aimed for boundary making thrives. Whereas in many schools, the classical sex and relationship curriculum often prompts fear and tension in students as well as parents. The material mediator creates a positive and playful approach to boundary making.
- Another benefit I found in the material mediator is that it can create a layer of safety between students. The students are not prompted to touch each other directly, but through the material mediator. Having this distance, a stretched fabric, sheet of paper, or layer of sand, between us can make the physical interaction less intimidating. In this way, the material serves as a true mediator. Allowing us to explore complicated negotiations in a way that feels safer. Especially for students who find physical interaction challenging, this can lower the threshold for participation.
- The material mediator materializes our boundary making. A boundary is abstract and fluctuating. Having a physical material represent it, suddenly, we are able to look at it and touch it. In an educational setting, this grants us new opportunities to experience and reflect on boundary making.
- Another value of boundary making through the material mediator is that it centers embodied learning through making. There is no verbal explanation of abstract concepts such as boundary or consent. Instead, the material mediator allows us to physically experience what boundary making feels like. Embodied experiences, such as noticing how you feel and what you want, are at the very core of boundary making. The material mediator encourages a shift toward the physical experience, asking us to touch the material and involving our entire bodies in the exercises.

How to use the Material Mediator to practice Boundary Making in primary education?

This is what I found to be effective in my educational setting, where I facilitated the sessions. You and your context are different. Consider them food for thought and alter, add on, and disregard them to fit your context needs.

- This approach to boundary making stands or falls with the students having agency over their participation. Before they start making boundaries with their classmates, they need to be able to assert their boundaries against the assignment and thus against the teacher giving the assignment. It is not common practice within primary education for a student to be allowed to say 'No' to their teacher. Because of this, it is of the essence to install multiple options and alternatives for participation, prolong the time available to make decisions about participation, and have check-ins throughout the session. When a student says they do not want to participate, affirm their choice verbally and with a calm and positive attitude.
- To make a material mediator, I found it best to use a material unfamiliar to students so that they do not fall into a predefined script. It should be an open-ended material that allows experimentation. And there should be enough of the material to foster a mindset of abundance rather than scarcity.
- For boundary making to happen, both the material mediator and its prompts need to provoke involvement of the body as well as interaction between students.
- Rather than thinking up the prompts, hold the material in your hands and notice the interactions it provokes. Invite one or more people and play with the material mediator together. Always make sure to test your prompts on yourself so you get a sense of their effect before you bring them into the classroom.
- Use simple prompts rather than elaborate assignments. The focus should not be on correctly following steps, but on the interaction with the material and between the students.
- Pay close attention to the initial response of the students to the material mediator. The best prompts are an extension of this initial reaction.
- The size and spacing of the material mediator heavily influence students' interactions and boundary making.
- Try to keep verbal instructions limited. Make your set-up self-explanatory where possible, demonstrate visually, and invite the students to speak by asking them questions.
- Use name-sticks or another system for taking turns, which is unbiased and reassures the students they won't be skipped or forgotten.
- The facilitation is as important as the design of your sessions. When facilitating, be on the lookout for moments of boundary making. When they happen, slow down and zoom in. Involve the group in what is happening, ask questions, and reflect. Use simple, concrete language that talks about what is happening here and now. Adopting terms and examples coined by the students works best.

- The crossing of boundaries is an innate element of learning how to make boundaries. Rather than seeing it as a failure of the exercise or the student, it is a moment for the facilitator to point out that a boundary has been crossed and demonstrate a skillful response to crossed boundaries. Stop the activity, collectively reflect, and ask the crosser what they are going to do differently. When the crosser repeats the crossing. I instruct them to sit out of the activity for 2 minutes, after which they are invited back in, and we again collectively reflect. After an intervention, I mostly see the crosser become aware of and proud to recognize and respect the boundary, sometimes even encouraging others to do the same. It is important that your reaction to a crossing is without anger or blame. Instead, you offer calm, clear, and firm instructions.
- Know that boundaries will get crossed, keep the stakes low enough for that to be okay. An appropriate level of crossing is a student making a wave in a fabric when no waves were requested, or a student forgetting to check in before starting to draw. Prompts do not have to be high-risk or intimidating to enable meaningful boundary making. We practice boundary making by giving it our active attention.

In which ways did the use of the Material Mediator result in Boundary Making?

In the *Boundaries and Boundary Making* chapter, I defined boundary making as the practice of noticing, establishing, reading, and respecting boundaries. Through my literature research, I further described the kind of boundaries we aim for: boundaries that create connection, boundaries that are responsive, boundaries made collectively, and boundaries aimed to reach what we want. Within this research, we keep the focus on bodily boundaries that address how we physically relate to each other.

Each Material Mediator uplifts different elements within boundary making. With the fabric, the main focus was to practice telling what we want (establishing boundaries) and obliging by that wish (respecting boundaries). With the transparent paper, we practiced asking questions (reading boundaries) and finding our YES! (noticing boundaries). With the Kinetic Sand, we focused on the sensory experience of feeling a material, physically interacting with each other, and involving our whole body in an exercise (noticing boundaries).

In the results chapter, I used images and video to illustrate specific moments of boundary-making that occurred during the material mediator sessions. Here, I will list in more general terms what kinds of boundary making I observed.

- I saw students who crossed a boundary change their behavior. Maintaining the boundaries afterwards.
- I saw students point out moments of boundary crossing and encourage each other to respect boundaries.
- I saw students take an ever increasing level of ownership in finding their YES!

- I saw students adapt the assignments to fit their needs.
- I saw a growing capacity of the students to say no to the assignment.
- I saw students moving at their own pace. Making conscious decisions about their participation and increasing their involvement over the course of one or more sessions.
- I saw students collectively reflect on moments of boundary making.
- I saw students experiment, increasing intensity, pushing their boundaries.
- I saw students approach the material mediator with curiosity and playfulness.
- I saw students taking time to think about their boundaries.
- I saw a transition throughout the sessions to students asking questions independently to find out their partners' boundaries.
- I saw students starting to co-facilitate the assignments by narrating the assignment, deciding tasks, and having check-ins.

Alterations and further interests.

If I were to facilitate the current selection of material mediators again, I would change the order and start with the kinetic sand. This material mediator is wonderful for awakening the senses, prompting physical interaction, and involving the whole body. It would be an appropriate start to set the tone before introducing the big fabric and the transparent paper, which offer more opportunities for concrete boundary making. In this research, I facilitated a total of 47 sessions over the span of two years. During the final phase of the research, each group of students would have a maximum of 9 sessions, three per material mediator, spread over four months. This meant that there would be multiple multi-week gaps between the boundary making sessions. I am curious to see whether more concentrated, consistent sessions will give different results.

I observed myself through video documentation, which was absolutely educational. It would be incredibly interesting to see how other art educators with an interest in social-emotional development through making would use the material mediators. I would be very curious to see how they would collaborate with the material mediator and students, and the differences that would create.

Bibliography

Barton, C. (2024) Tending grief: Embodied rituals for holding our sorrow and growing cultures of care in community. Berkeley, CA: North Atlantic Books.

Bergman, C. (2023) Trust kids!: Stories on youth autonomy and confronting adult supremacy. Edited by C.J. Bergman. Edinburgh, Scotland: AK Press.

Bey, A.H. (2019) Who cares?: A children’s book about what we owe each other. London, England: Serpentine Galleries

Brown, A.M. (2019) Pleasure activism: The politics of feeling good. Edinburgh, Scotland: AK Press.

Brown, A.M. (2021) Holding change: The way of emergent strategy facilitation and mediation. Edinburgh, Scotland: AK Press.

Butler, O.E. (1995) Parable of the sower. London, England: Women’s Press.

Dörrenbächer, J. and Plüm, K. (eds.) (2016) Beseelte Dinge: Design aus Perspektive des Animismus. transcript Verlag.

Freire, P. (1996) Pedagogy of the oppressed. Translated by M. Bergman Ramos. Harlow, England: Penguin Books.

Gibson, J.J. (1979) Ecological approach to visual perception. Houghton Mifflin.

Hollingsworth, J., Ybarra, S. (2020). Explicit Direct Instruction (EDI): The power of the Well-Crafted, Well-Thought Lesson. Second Edition. Thousand Oaks, California: Corwin Press.

Imarisha, W. and Brown, A.M. (eds.) (2015) Octavia’s brood: Science fiction stories from social justice movements. Edinburgh, Scotland: AK Press.

Ivinson, G. and Renold, E.J. (2021) “What more do bodies know? Moving with the gendered affects of place,” Body & society, 27(1), pp. 85–112. Available at: <https://doi.org/10.1177/1357034x20923017>.

Levy, D. (2022) Real estate: A living autobiography. Bloomsbury Publishing.

Martin, B. (2021). The art of receiving and giving. Luminare Press.

Meenadchi. (2023). *Decolonizing Non-Violent Communication : A Workbook*. Third edition. Los Angeles, California: Co-Conspirator Press