

Before Certainty

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1. Before Certainty: A Manifesto for Ethical Response

I believe evidence matters.

Evidence protects people from assumption, accusation and premature judgement. It creates distance between suspicion and decision, and asks us to provide grounds for what we claim to know. My encounter with legal thinking has taught me to respect this discipline of proof: fairness cannot depend only on intuition, intention or confidence.

But I also believe that not everything that matters arrives as evidence.

In educational settings, harm does not always appear as a clearly visible event. It may appear through absence, silence, withdrawal, unequal participation, subtle exclusion, or a person's changing position within a shared space. These experiences may be difficult to name and even harder to prove, but uncertainty does not make them meaningless.

I believe care cannot always wait for certainty. Educators often work before the full story has emerged. They notice changes, tensions and shifts in relationships without yet knowing exactly what these mean. Responding too quickly may lead to misinterpretation; waiting indefinitely may become neglect. This tension is not a failure of professional practice. It is part of its ethical condition.

My research begins in this uncomfortable space between judgement and inaction. I do not want design to become another system for deciding who is at risk, who is responsible, or what a behaviour means. Nor do I want care to be easily translated into monitoring, prediction or classification. Visibility is not the same as understanding, and more data does not automatically produce a more ethical response.

I believe uncertainty should sometimes be preserved rather than immediately removed. It may be uncomfortable, but it keeps interpretation open, allows several perspectives to coexist, and reminds us that people always exceed the categories used to describe them. I am therefore beginning to understand design less as the production of solutions and more as the creation of conditions: asking before concluding, listening before labelling,

keeping other possibilities open, and thinking together before certainty closes the conversation.

I believe design should support judgement rather than replace it. It should not tell educators what the truth is, nor automate ethical decisions. I am interested in whether design practice can support collective sense-making: looking at a situation from different perspectives, acknowledging uncertainty, and considering together what a more responsible response might be.

This also means that a good design outcome may not be an answer. It may be a question held open for longer, a conversation that would not otherwise have happened, a visual object that makes disagreement visible, a scenario that reveals the limits of interpretation, or a pause before judgement.

I believe ethical response is relational. A response does not become ethical simply because it follows procedure. It also depends on context, power, consequences and the people involved. Care without reflection can become paternalism; evidence without care can become indifference; interpretation without humility can become judgement.

My practice therefore sits within these tensions: between evidence and care, uncertainty and action, the need to respond and the responsibility not to decide too quickly.

Design's responsibility is not always to make things clearer. Sometimes it is to make us more careful.

My research does not ask how uncertainty can be removed from educational relationships. It asks how we might remain attentive within uncertainty without becoming passive, and how we might respond without turning care into surveillance or ambiguity into premature judgement.

Fairness does not begin only when certainty has been reached. It may also begin in the way we choose to listen, interpret and respond before certainty arrives.

This position also changes what I expect from design research. I am not looking for a universal answer that can be transferred unchanged from one classroom to another. I am looking for principles that can travel while remaining sensitive to context: attentiveness without accusation, reflection without paralysis, dialogue without forced agreement, and action that remains proportionate to what is actually known. The framework I hope to develop must therefore remain open enough to support professional judgement rather than close it down.

2. Before We Know: A Dialogue Between Evidence, Care and Design

There is a moment before a situation becomes a case. Something may have happened, or something may be beginning to happen. A student becomes quieter; someone repeatedly sits apart from the group; a friendship changes; a joke makes everyone laugh except the person it is directed at. A teacher notices something but cannot yet say exactly what has been noticed. There may be no allegation, no confirmed pattern and no evidence sufficient for a formal judgement. Yet something has already entered attention. My research begins here.

The Problem of Not Knowing

Professional practice is often imagined as a movement from information to judgement: collect the facts, interpret them correctly, then act. This model is attractive because it promises procedural fairness. I do not reject this principle; evidence matters precisely because interpretation can be wrong.

However, educational relationships rarely arrive as complete information. In *The Reflective Practitioner*, Schön (1983) challenges the assumption of technical rationality: that professional problems can be solved simply by applying established knowledge and techniques. Real practice often takes place in situations of uncertainty, instability and even uncertainty about what the problem itself is.

An ambiguous relational situation is therefore not simply a clearly defined problem whose evidence has not yet been collected. Uncertainty may exist at the level of the problem itself: Is this conflict? Exclusion? Misunderstanding? A changing friendship? Something serious? Or nothing at all? Before educators decide how to respond, they have already begun to interpret.

The question shifts from 'How can educators make the correct decision?' to 'How might educators reflect while the meaning of a situation is still being formed?'

Care Enters Before Certainty

Reflection creates another question: how long should we reflect? When does caution become inaction? Tronto's ethics of care (1993; 2013) changes the terms of this question. Care is not simply emotion or goodwill, but a practice involving attentiveness, responsibility, caregiving, responsiveness and power.

For this research, attentiveness is especially important. Attention occurs before a complete interpretation. Recognising that someone may need care is not the same as proving that something has happened. This creates an important distinction: recognition is not accusation. An educator can notice a relational situation without declaring that bullying has occurred, and can respond to a student's withdrawal without assigning blame.

Care therefore offers a way of acting between premature judgement and passive waiting. If every response must wait for certainty, subtle experiences may receive attention only when they become visible, serious or recordable enough. But if every uncertain signal is treated as evidence of harm, care can become surveillance. The ethical question is not simply whether to act, but how to act without claiming to know more than we do.

Who Gets to Say What Is Happening?

Fricker's (2007) concept of epistemic injustice reminds us that power operates within practices of knowledge and interpretation. Testimonial injustice occurs when someone's account is given less credibility because of prejudice; hermeneutical injustice concerns gaps in shared interpretive resources that make some social experiences difficult to understand or express.

An unavoidable question follows: whose interpretation counts? An educator may see an ordinary friendship conflict; a student may experience exclusion; another student may understand it as humour; a school procedure may require a definable category. None of these interpretations is neutral.

Design must therefore be careful too. A tool that asks users to choose from predetermined categories may make experience visible while reducing the ways in which it can be understood. A dashboard shows only what it was designed to measure; a reporting form records only what its categories allow to be reported; an algorithm recognises only what has already been defined as recognisable. What happens to the rest?

Design Arrives at the Table

Buchanan's (1992) discussion of wicked problems reminds us that complex design problems do not always arrive in a fixed form; how a problem is framed is itself part of the problem. Ambiguity may involve competing interpretations, incomplete knowledge, unequal visibility, changing relationships, or the limits of institutional categories.

The designer's responsibility may therefore not be to make ambiguity disappear. Sometimes design can make ambiguity available for shared examination. My design logic consequently shifts from 'detect → classify → recommend' to 'notice → represent → discuss → reflect → respond'. The first places design in a position of authority; the second makes design a participant in interpretation.

A Table with No Head

I imagine the theoretical framework as a table. Evidence, care, interpretation and design sit around it, and none occupies the head. Evidence says: do not conclude without sufficient grounds. Care replies: but do not mistake insufficient evidence for the absence of need. Interpretation reminds us: what counts as evidence also depends on what we have learned to notice. Design asks: then what can I responsibly make?

Perhaps the answer is not to build a machine that resolves disagreement, but to make the table larger. Scenario cards can allow different interpretations to emerge; visual maps can

represent relationships that categories struggle to express; conversational artefacts can help educators externalise uncertainty rather than hide it. Design can allow someone to say, 'I noticed this,' without immediately requiring, 'Therefore, this is what happened.'

Schön reminds me that professional practice cannot escape uncertainty; Tronto reminds me that uncertainty does not cancel the responsibility to care; Fricker reminds me that interpretation and credibility are connected to power; Buchanan reminds me that the framing of the problem itself must be examined.

When we do not yet know what happened, the ethical question is not only 'What is the truth?' but also 'How should we treat one another while we are still trying to understand it?'

This is also why uncertainty should not be treated as an empty space between ignorance and knowledge. It is an active interpretive condition. In that condition, educators compare partial accounts, read changes in behaviour, draw on professional experience, consider institutional responsibilities and imagine possible consequences. Each of these moves can be reasonable, but each can also introduce assumptions. A design intervention can make those moves more visible, giving educators a chance to examine how they arrived at an interpretation rather than only defending the interpretation they finally reached.

The aim is not endless hesitation. Reflection becomes useful only if it can inform a proportionate response. A conversation, a check-in, a change in classroom arrangement or a decision to gather further information may all be responses that acknowledge uncertainty without pretending it has disappeared. This is where design may contribute: not by resolving the ethical tension, but by helping practitioners recognise the difference between what they observed, what they inferred and what they are prepared to do next.

3. What Did I Already Decide Before I Called It a Finding?

I write a situation on a small card: 'A student has recently become quieter. During group activities, they often join last. At lunchtime, they sometimes sit alone. No incident has been reported.'

I read it again. The problem seems to be not the student, but the card.

I delete 'join last'. The phrase already suggests exclusion. I replace it with: 'The student joins after the others have already formed their groups.' Better? Perhaps not. Now I have made the situation sound accidental.

Quieter - compared with when? Alone - by choice? Recently - how recently? I thought I was designing ambiguity. Perhaps I am designing an interpretation.

The fictional situation was intended for a participatory design workshop. I wanted educators to discuss what they noticed, what they did not know, what they might ask, and how they might respond before reaching a conclusion. But every time I write it, I change the shape of uncertainty. Every word points in a direction.

One value of fiction is that it keeps real children and identifiable cases out of the research space. I do not want the workshop to become a catalogue of cases in which students, colleagues or schools can be recognised. Fiction creates distance, but it does not make me neutral. I still decide what enters the room.

If I write, 'Three students stop inviting another student to sit with them,' responsibility seems too clear. If I write, 'A friendship group has changed and one student now spends more time alone,' responsibility disappears. Is that more neutral, or have I simply hidden power in softer language?

There is no neutral description waiting for me to discover it. The moment I describe the situation, I frame it; and when I frame it, some interpretations become easier than others. This changes how I understand research ethics. Ethics includes informed consent, information sheets, anonymisation, secure storage and withdrawal. But it also exists inside design decisions: inside an adjective, inside what I show and what I withhold, even inside the difference between 'alone' and 'excluded'.

This leads to an ontological question: what is an 'ambiguous relational situation'? Does it exist as a stable object before it is interpreted? There may be events, silences and changes in behaviour, while different people understand the same moment in very different ways. A 'situation' may not be a fixed object waiting to be correctly identified. It may be partly produced through attention, language, institutional categories, prior experience and relationships.

If educators face the same card and one says, 'I would not intervene yet,' another says, 'I would speak to the student immediately,' and another says, 'I need more information,' I should not turn the workshop into a test. Waiting may mean caution or neglect; intervention may mean care or intrusion; asking for more evidence may protect fairness or delay responsibility. The same action can carry different ethical meanings.

The important data may therefore not be the decision itself, but the movement around it: What was noticed first? What was assumed? What created hesitation? Whose perspective was missing? What changed after hearing another educator's interpretation? Did the artefact open the situation or close it?

Research will still interpret. I will record language, select quotations, construct themes and write patterns. Anonymous participants can still become examples within someone else's argument. I cannot promise not to interpret, but I can remain responsible for how I interpret. What did I already decide before I called it a research finding?

I return to the card and add four questions: What do you notice? What do you think you know? What remains uncertain? What could you do without first deciding exactly what has happened?

This is not neutral or objective, and it does not escape my assumptions. But it is more honest about what design is doing. It does not ask educators to find the correct category. It invites them to examine the relationship between attention, interpretation and response.

Participatory research does not remove researcher power simply because it is participatory. I choose the scenario, the activity, the time, the questions and the form of analysis.

Participation is not the absence of power. If my research asks others to reflect on the limits of their knowledge, the same demand must apply to me.

I still do not know what happened to the fictional student. Good. I do not know whether anyone intended harm. Good. I do not know whether intervention is necessary. Good. But I know enough to remain attentive.

The question is not certainty or ignorance, intervention or inaction. It is how response remains possible while interpretation stays open.

The scenario card therefore becomes more than a prompt. It is also a small test of my own research position. If I make the situation too obvious, participants are invited to confirm a conclusion I have already designed. If I make it too vague, the discussion risks becoming detached from practice. The task is to create enough specificity for ethical judgement to matter while leaving enough openness for disagreement to remain genuine. That balance will need to be revised through making, discussion and reflection rather than fixed in advance.

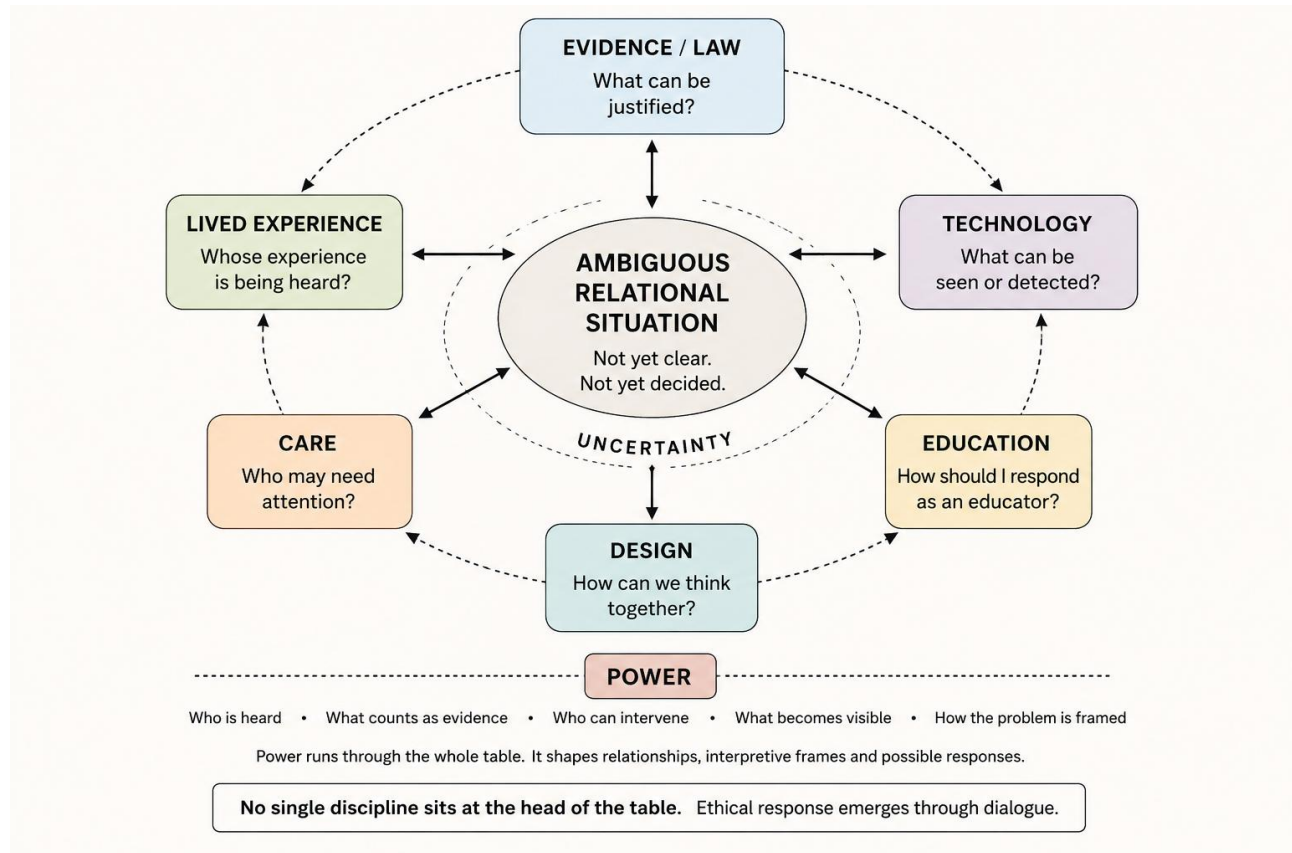
This is why I want the eventual workshops to produce traces of interpretation as well as spoken answers. Notes, annotations, mapped relationships and changes made to the artefacts can show where participants pause, revise or encounter another perspective. Such material may help me analyse not only what educators say they would do, but how their reasoning changes when uncertainty is made visible and shared.

4. The Table Before the Verdict

I imagine the research as a table already set before a verdict is reached. At the centre is an ambiguous relational situation: something has been noticed, but its meaning remains uncertain. Around it sit different ways of knowing. Evidence asks what can be established; care asks who may need attention; education asks what responsible response requires; design asks how different interpretations can be made visible and explored together; technology promises greater visibility and pattern recognition while also raising questions

of surveillance, classification and power. No single voice is sufficient to complete the judgement.

A Simple Text Map of the Research Ecology



Evidence

Evidence protects people from arbitrary judgement. Legal and procedural traditions remind us that serious conclusions require grounds, and that fairness partly depends on resisting unsupported assumptions (Fuller, 1969; Galligan, 1997). Yet evidence has a problem of timing: it is often strongest after something has become visible, reportable and recordable. My research is interested in what happens before that point. Insufficient evidence means that a conclusion cannot yet be justified; it does not necessarily mean that nothing deserves attention.

Care

Care asks a different question. Rather than 'What can be proved?', care ethics begins with relationships, needs and responsibility. Tronto (1993; 2013) understands care as a relational and political practice; Noddings (2013) similarly places relational responsiveness at the centre of educational ethics. Care makes it possible to notice without immediately accusing. Yet care itself must remain careful: attention can become intervention, intervention can become paternalism, and the desire to protect can produce increasingly intensive observation.

Education and Lived Experience

Education is where these tensions become practical. Educators encounter relationships that are still unfolding, not cases that are already complete. Schön's (1983) reflective practice makes uncertainty part of professional practice rather than an exceptional interruption. At the same time, the person living through a relational situation may understand it very differently from an educator, institution or researcher. Fricker's (2007) epistemic injustice shows how credibility and interpretation are connected to power. Some experiences are easier than others to name, hear and recognise. Making something visible is therefore not the same as understanding it; who is heard matters as much as what is recorded.

Technology

Technology arrives at the table with an attractive promise: perhaps more information can reduce uncertainty. Data can be collected, patterns recognised, relationships mapped and risks predicted. But technology is not a passive observer. Crawford (2021) shows how AI systems are embedded in material, political and classificatory structures; Williamson (2017) and Selwyn (2019) similarly encourage a critical view of datafication and automation in education.

The question is no longer only 'Can we know more?' but 'What kind of relationship is produced by the way we choose to know?'

Design

Design does not sit at the head of the table. It is not the discipline that arrives with a solution after law, education and care have failed. Buchanan (1992), Cross (2006; 2011), and discussions of Research through Design (Gaver, 2012; Zimmerman, Forlizzi and Evenson, 2007) help me understand design as a way of generating knowledge through making, framing and reflection.

Within this ecology, design can hold different interpretations in relation. Fictional scenarios can expose disagreement; visual maps can externalise relationships; conversational artefacts can slow judgement; participatory workshops can allow one interpretation to encounter another. The value of an artefact lies not only in what it expresses, but in the kinds of attention and conversation it makes possible.

The Fog on the Table and Power Beneath It

I imagine uncertainty as fog across the table. The instinct is to clear it: evidence seeks clarification, technology seeks to see through it, institutions seek to classify it. Yet the fog can also remind us that several interpretations may remain possible, evidence may still be incomplete, categories may be limited, and suspicion should not become fact too quickly. The research does not celebrate uncertainty. It distinguishes remaining attentive under uncertainty from remaining inactive because of uncertainty.

Power is not another chair at the table because it runs through every position. It shapes what counts as evidence, whose account is credible, what behaviour becomes institutionally visible, who is authorised to intervene, and how technologies, categories and my own research framing operate. This ecology is therefore not a harmonious circle. It is an imperfect and unequal table.

Design does not own the table. It helps make the tensions around it discussable.

The table is therefore not intended as a model that neatly separates disciplines. In practice, the positions overlap. Evidence can be an expression of care because it protects people from unjustified conclusions; care can influence what evidence is sought; technology can shape what becomes visible to education; lived experience can challenge institutional

categories; design can amplify or suppress any of these relationships. The diagram is useful precisely because its boundaries are imperfect. It gives me a provisional way to see the research ecology while remembering that the relationships are dynamic.

Seen in this way, the centre of the table is not a problem waiting to be owned by one discipline. It is a shared ethical question. The purpose of the ecology is to keep that centre open long enough for different forms of knowledge to meet without assuming that they are equal, neutral or easily reconciled.

5. From Designing Solutions to Designing Conditions

For a long time, I understood design through the language of solutions: there is a problem; the designer investigates, understands users, identifies needs, develops possibilities and produces an intervention. I still believe this practice has value. But this research has made me increasingly uncomfortable with another assumption - that all important problems should become clearer as the design process advances. Some do become clearer. Others only appear smaller because we have simplified them.

At first, I was attracted to visibility. If subtle relational harm is difficult for educators to recognise, perhaps design can make it easier to see. Systems can show patterns; visualisations can reveal change; technology can detect what human attention misses. The logic seems reasonable: if we can see more, perhaps we can respond better.

But what happens when seeing becomes watching?

The distance between attention and monitoring can be short. A system that identifies relational change must first decide what counts as change. A tool that identifies risk must define what risk looks like. A system intended to help educators interpret behaviour may begin to interpret behaviour for them. The more confidently design claims to know, the more authority it acquires.

I therefore moved from 'How can I design something that identifies the problem?' to 'How can I design something that helps people notice a situation without deciding too quickly what it means?' This moves design from certainty towards attention, from diagnosis towards interpretation, and from providing answers towards creating conditions in which questions can be explored together.

It also forces me to reconsider what counts as an outcome. If an artefact does not tell an educator what to do, has it failed? If a workshop ends with greater awareness of complexity rather than consensus, has it produced nothing? Perhaps a successful artefact can legitimise hesitation, allow someone to encounter an interpretation they had not considered, or expose assumptions hidden inside an apparently obvious judgement.

Making therefore remains central to the research. I do not only want educators to describe uncertainty in interviews. I want uncertainty to take material form. A scenario can deliberately withhold information; a map can place several perspectives side by side without forcing a hierarchy; a conversational artefact can slow the movement from observation to conclusion; a workshop can bring different interpretations into contact.

Making is not an output that happens after I have understood the research problem. Making is part of how I understand the problem.

Every design decision then asks me another question. What information should be visible? What should remain absent? Does this word imply responsibility? Does the visual hierarchy make one interpretation appear more legitimate? Am I inviting reflection, or quietly directing participants towards the response I prefer? Practice begins to form a rhythm: make - encounter - question - reflect - remake, rather than problem - solution - completion.

Uncertainty therefore becomes not only the subject of the research but part of its method. I cannot know in advance how educators will interpret a situation, nor can I fully predict what a conversational artefact will open. Practice-based research requires me to enter this uncertainty rather than remove it before beginning.

Participation does not automatically distribute power. I still decide whom to invite, how the activity is structured, what materials are used, how long it lasts, what questions are asked, and what is recorded and analysed. Even when participants are invited to interpret freely, I have designed the conditions of that freedom. My responsibility is not to pretend that I disappear from the research, but to remain attentive to how my choices shape possibility.

Legal thinking has made me sensitive to evidence, procedure and the danger of unsupported judgement. Design has taught me to work through making, iteration and alternative possibilities. Education and care add another demand: ethical responsibility cannot always be postponed until knowledge is complete.

Do not judge without evidence. Do not ignore what cannot yet be proved. The space between these two demands is gradually becoming the research itself.

I do not want to design a machine that says, 'This is what happened.' I am more interested in an artefact that asks: What have you noticed? What are you assuming? Whose perspective is absent? What remains uncertain? What response is possible now without pretending that uncertainty has disappeared?

I am moving from designing solutions to designing conditions: conditions for attention, conversation, disagreement and reflection, and conditions in which uncertainty does not have to be immediately converted into a label. This does not mean refusing action or romanticising ambiguity. My interest lies in the moments before the conditions are clear.

I used to think design demonstrated its value by resolving uncertainty. I am beginning to think that, sometimes, design demonstrates care by helping us remain responsible within it.

This shift also changes how I will evaluate my practice. I cannot judge an artefact only by whether participants find it clear, efficient or easy to use. A very efficient tool may close interpretation too quickly. Instead, I need to ask whether the artefact supports thoughtful attention: Does it allow more than one perspective to appear? Does it help participants separate observation from assumption? Does it make missing voices noticeable? Does it

create a route towards action without presenting that action as automatically correct? These questions turn evaluation itself into an ethical part of the design process.

I also expect failure to be informative. A scenario that produces immediate consensus may reveal that I have over-framed it. A visual map that confuses participants may show that complexity has been represented without enough structure. A conversational prompt that feels intrusive may expose a boundary between reflection and unwanted disclosure. Rather than treating such moments only as defects, I can use them as evidence about how the design participates in judgement.

6. Dear Teacher I Have Never Met

Dear Teacher,

I do not know what your classroom looks like. I do not know the students who enter it each day, the relationships they bring with them, or the small changes that perhaps only you notice first. But I imagine you have experienced moments when you see something and do not know what it means.

Perhaps a student becomes quieter. Perhaps a friendship group changes. Perhaps someone who once joined others easily now often remains at the edge of the room. No one has reported anything. No one has asked for help. There is no clear incident to record and not enough evidence to reasonably conclude that harm has occurred. So what should you do?

This is why I am writing to you. My research is not trying to teach you how to identify the correct answer. It begins from another possibility: sometimes there may not yet be enough information for a correct answer to exist.

Research on school bullying has shown the importance of recognising different forms of harm, but relational forms can be especially difficult to interpret. An experimental study in China by Gong et al. (2024) found that relational bullying was less likely to be regarded as

school bullying than verbal, physical or cyberbullying, and that students, parents and teachers differed in what they considered to count as bullying.

This suggests that the difficulty may not simply be visibility. We may be looking at the same situation and understanding it differently. Paljakka (2024) showed that teachers' recognition and assessment of bullying do not always fully coincide with formal research definitions. Later work on teachers' responses further suggests that decisions are shaped by beliefs, attitudes, personal and professional experience, and consideration of the consequences of intervention (Paljakka, 2025).

In other words, response is not simply a matter of seeing a problem and applying a procedure. Interpretation sits in between, and interpretation carries responsibility.

Evidence matters because it protects people from accusation, assumption and unsupported judgement. But education creates another ethical demand: what happens when the need for care appears before proof is complete? Waiting for certainty may protect someone from being wrongly judged, yet it may also leave someone else unheard. Immediate intervention may express care, yet it may impose a meaning that the people involved do not recognise.

I do not think technology should stand in this position instead of you. Data, AI and monitoring systems may identify patterns that human attention misses, but greater visibility does not automatically mean greater understanding. Crawford (2021) reminds us that AI systems are not neutral ways of seeing; Williamson (2017) and Selwyn (2019) also critically examine datafication and automation in education. If an algorithm is to recognise exclusion, exclusion must first be made measurable. If care depends on continuous observation, we must also ask: when does attention become surveillance?

My research has therefore moved away from designing a tool that identifies relational problems and towards exploring whether design can support the work of human interpretation. Imagine an artefact that does not provide a risk score but invites you and your colleagues to face an uncertain situation together: What did you notice? What are you assuming? What evidence is available? Whose perspective is missing? What other

interpretations remain possible? What could be done now without pretending to know exactly what happened?

These questions do not remove professional judgement. They ask judgement to become more reflective. Schön (1983), Tronto (1993) and Fricker (2007) help me understand this space through professional uncertainty, the responsibility to care, and the power involved in knowledge.

I do not want to design the verdict. I want to design the conditions before it.

My doctoral research therefore explores how practice-based and participatory design might allow educators to work with fictional or speculative relational situations, map different interpretations, discuss uncertainty and reflect together on possible responses. The aim is not to rank teachers as good or bad decision-makers, nor to create a universal procedure for every ambiguous situation.

I hope to gradually develop a Design-Led Framework for Ethically Informed Responses to Ambiguous Relational Situations. Its value would not lie in telling you exactly what to do, but perhaps in helping you ask better questions before deciding, making disagreement visible without immediately resolving it, and distinguishing noticing from accusation, care from surveillance, and uncertainty from indifference.

Of course, some situations require immediate action. Some evidence cannot be ignored. Some safeguarding responsibilities cannot be delayed. This research does not challenge those responsibilities. It focuses on the earlier moments, when a situation is still taking shape and professional judgement has not yet settled.

These moments may look small, but ethical relationships are formed within them: in what we notice, whom we believe, what questions we ask, how quickly we apply a label, whether we remain willing to hear another interpretation, and what we choose to do while we still do not know.

So, dear teacher I have never met, I am not writing to give you an answer. I am writing because I think the uncertainty you experience deserves to be taken seriously - not simply as a gap waiting to be filled with more information, but as an ethical space where evidence, care, interpretation and responsibility meet.

Perhaps fairness begins not only when all the evidence has finally been gathered. Perhaps it also begins in the way we choose to keep listening before certainty arrives.

If this research is useful, I hope its usefulness will be modest but practical. It may give educators a language for saying, 'I am concerned, but I am not yet certain,' without treating that statement as weakness. It may support colleagues in comparing interpretations before a situation is formalised. It may also help designers recognise that tools for care carry ethical consequences when they determine what becomes visible, recordable or actionable. In this sense, the framework I am developing is less a decision system than a structure for responsible attention.

Yours,

A designer learning not to design the answer

7. Learning to Stay with the Question

I did not begin this research with uncertainty. I began with a problem: exclusion, bullying, subtle relational harm in educational settings, and the difficulty of recognising what is happening between people. At first, I followed a familiar design logic. If the problem was difficult to see, perhaps design could make it visible. If educators struggled to recognise it, perhaps better tools could help. If evidence was insufficient, perhaps technology could provide more information.

But the more precisely I tried to define the problem, the more uneasy I became with the solutions I was imagining. My first shift came from questioning visibility. Visibility sounds inherently good, but visibility always requires a way of seeing. A system cannot detect 'exclusion' unless someone first decides what exclusion looks like. Data cannot simply

reveal relationships; parts of those relationships must first be translated into categories that can be recorded. My question therefore changed from 'How can we see relational harm?' to 'How do we decide what we are seeing?'

AI initially interested me because of its capacity to detect patterns beyond human attention. Later, I became more concerned with what technology must decide in advance in order to notice anything at all. A predictive or classificatory system does not simply observe; it participates in defining what counts as meaningful. In education, this classification takes place within unequal relationships between students, teachers, institutions and systems. I gradually realised that treating uncertainty as a technical problem to be eliminated can itself create risk.

Moving away from technological detection did not make evidence less important. It made me value evidence more. Legal study made me sensitive to the relationship between evidence and judgement: evidence restrains interpretation and requires conclusions to be justified rather than merely believed. A person should not become a 'perpetrator' simply because an observer suspects them. Yet educational relationships do not pause while evidence remains incomplete. Educators may still need to decide whether to ask a question, create an opportunity for conversation, pay closer attention, or temporarily do nothing.

My central question is now: How can we take uncertainty seriously without allowing uncertainty to become an excuse for indifference?

As the question changed, my understanding of design changed too. I was once comfortable with the idea that designers solve problems. But when a relational situation can support several interpretations, moving design too quickly towards a single definition may reproduce the very problem I am trying to study. I therefore began to move from designing solutions to designing conditions.

A scenario card can allow several interpretations to coexist. A visual map can give material form to disagreement. A conversational artefact can slow the movement from observation to judgement. A participatory workshop can allow educators to encounter perspectives

different from their own. None of these can guarantee an ethically correct decision. That limitation no longer feels like a failure of design. Design does not need to replace judgement in order to support it.

The research has also changed how I see myself. At first, it was easier to position myself outside the problem: educators were judging, technologies were classifying, institutions were making procedures, while I studied them and designed something better. Practice-based research has made that distance increasingly difficult to maintain. I classify too. I decide which words appear in a scenario, which questions a workshop asks, which quotations are selected, which themes are constructed, and what is called an 'important finding'.

I cannot ask educators to reflect on the limits of their interpretation while pretending that my own interpretation has no limits.

Looking back, I also understand more clearly why the research has taken this shape. Design first taught me to ask, 'What else could this become?' Law later taught me to ask, 'On what grounds can this judgement be justified?' Returning to design, and entering doctoral research concerned with educational relationships and care, produced a third question: 'How should we respond when justification is not yet complete?'

Law taught me why judgement requires evidence. Education taught me why care cannot always wait for certainty. Design is becoming the space in which I am learning how to hold both.

I remain interested in relational harm, but I no longer think the doctorate is primarily about identifying it. I am more interested in the interpretive space around it: the moment when something has been noticed but not yet understood; when several interpretations remain possible; when an educator must decide whether and how to respond without pretending to possess knowledge that does not yet exist.

My research therefore currently explores how practice-based and participatory design can support educators in reflecting on ambiguous relational situations through scenarios, visual mapping, conversational artefacts and collective sense-making. I hope to gradually develop a Design-Led Framework for Ethically Informed Responses to Ambiguous Relational Situations, but I also expect that framework to change. The research has already taught me to be cautious of conclusions that arrive too early.

I began this research wanting design to help us know. I now ask whether design might first help us listen. This is not a celebration of uncertainty. There are times when uncertainty must become evidence, decision and action; there are safeguarding situations in which hesitation itself would be irresponsible. But before that clarity arrives, there are still many moments in which work must be done.

Perhaps this is also where I currently stand as a researcher: not outside uncertainty and not above it, but within it. Making something, questioning what I have made, listening to what others see in it, and changing it.

Responsible research does not always mean reaching the answer more quickly. Sometimes it means becoming more careful about how the answer is reached.

Perhaps fairness begins not when all the evidence has been gathered, but when we choose to keep listening before certainty arrives.

What I now understand more clearly is that the contribution of the research will not come from choosing one side of these tensions. Evidence and care are not opponents; uncertainty and action are not mutually exclusive; design and professional judgement do not need to compete for authority. The contribution may instead lie in articulating how these elements can remain in productive relation, and in demonstrating through practice what that relation feels like when educators are asked to interpret together.

This leaves me with a research position that is more provisional than the one I began with, but also more precise. I am not designing a detector of relational harm. I am investigating how design can support ethical interpretation before certainty, and how artefacts can

create conditions for attention, dialogue and proportionate response. The question remains open, but it is now an openness I can work with.

This also gives the practice a clearer criterion for responsibility. The artefacts should not reward certainty for its own sake, nor imply that hesitation is always virtuous. They should help participants identify when uncertainty can be held open and when a duty to act becomes more important. That distinction cannot be encoded as a simple rule because context matters: the seriousness of a concern, the available evidence, safeguarding responsibilities, the possibility of further harm and the perspectives of those involved all affect what a proportionate response may require. For me, this is where the proposed framework must remain deliberately modest. It can structure reflection, surface assumptions and support conversation, but it cannot remove the educator's responsibility for judgement. Its contribution will depend on whether it helps make that responsibility more visible, more accountable and more attentive to the limits of what is known.

The next stage is therefore iterative rather than confirmatory. Interviews and workshops will not be used simply to validate a framework already decided. They will help expose where its language is too abstract, where a prompt closes discussion, and where educators need different ways to express uncertainty. The framework should emerge through this movement between theory, practice and reflection.

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