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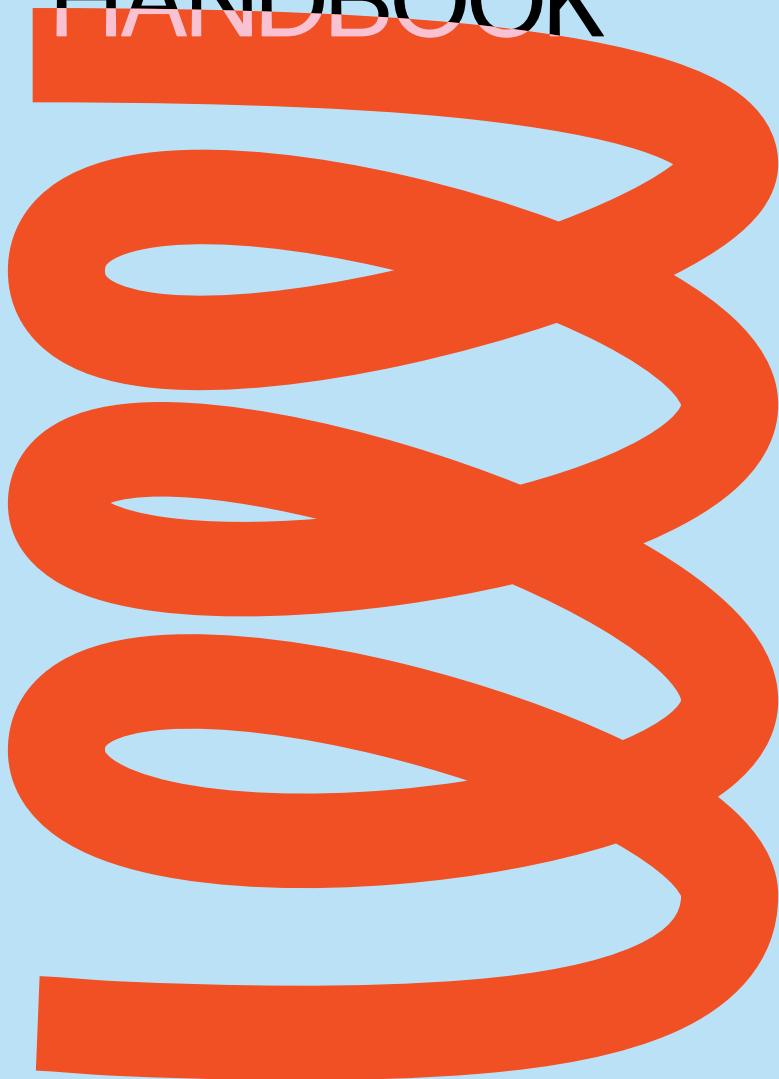


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THE RESILIENT DESIGNER'S HANDBOOK



REBECCA PRICE
MIEKE VAN DER BIJL-BROUWER

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I had been sitting in my small apartment in Delft for a few weeks. Outside, the world raged in the turmoil of the Covid-19 pandemic. Every day, news would inundate with new rules and restrictions, the number of cases, the number of hospital admissions, and the number of deaths.

While writing up a research article, I remember being hit by a jolt of clarity. This clarity came from a deep sense of concern for my university students. Where were my students, and how were they? Were they ok? I closed my work and put it aside.

In an act of bravery at the time, I ventured to the grocery store. Somewhere in the fruit and vegetable section, I ran into TU Delft colleague and work roommate, Dr Mieke van der Bijl-Brouwer. We spoke rapidly of our concern for student mental health and well-being. Of the threat of loneliness, disconnection, and the impact on education.

We vowed to support our student community as best we could. We didn't know it then, but this was the start of our journey toward developing designer resilience as a new outlook for teaching, learning, researching, and practicing design that acknowledges the difficulties of pioneering change and elevates well-being as a core competency of designerly problem-solving.

THE RESILIENT DESIGNER'S HANDBOOK
Rebecca Price and Mieke van der Bijl-Brouwer
2023, Delft University of Technology,
Faculty of Industrial Design Engineering

Design and Illustrations – Ema Uršič & Leon van Klaveren

For further insights, resources, and discussions, visit:
resilientdesigners.com

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THE RESILIENT DESIGNER'S HANDBOOK



REBECCA PRICE
MIEKE VAN DER BIJL-BROUWER

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DEVELOPING YOUR
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AS DESIGNERS,
WE LIKE TO FIX
THINGS AND MAKE
IMPROVEMENTS.
HOWEVER, IT
IS HARD TO FIX
THINGS WHEN YOU
YOURSELF FEEL
BROKEN.

Designing the future that ought to be requires us, as designers, to stand boldly for our ideas and ideals. Embodied in our design projects and concepts are our values for how people should interact, care, live, work, and flourish. While a deep dive into design education, research, and practice reveals a plethora of tools, techniques, canvases, methodologies, and methods for exploring problems, ideation, and prototyping, the process of driving change as a personal-professional journey remains a blind spot in discourse. In an academic context, we study the cognitive demand of designing but shy away from personal and emotional difficulties that accompany our discipline.

In an educational context, we ask our students to embrace uncertainty and fail fast, but didactically our instructions have no value; they are akin to asking someone to eat healthier or do more for the environment. What do these instructions really mean? How does one enact them? We must improve how we teach and learn design, and simultaneously challenge an academic and practice-based culture that glorifies the winners but does not reveal the real difficulties of participating in design work. This is an important and relevant conversation given the scale of the problems confronting us as we move further into the 21st century. We will need every ounce of impact we can muster, and this means continually self-improving as individual people and collectively as a design community.

In this book, we share our journey toward developing the concept of designer resilience. Designer resilience is a capacity and inner strength we call upon when designing gets difficult. It is a necessary capacity encouraged and cultivated in the designer, providing a way of practicing, teaching, and learning design that supports us to be more adaptive and authentic. This book is written for students of design. Those studying in universities, schools, and academies all over the world. We acknowledge, in one way or another, that we are all students of design. Some of us learn in classrooms and studios. The toughest lessons are often learned outside in the school of life. Use this book to reflect and make sense of your own experiences in becoming a designer. Use this book too to anticipate some of the challenges and setbacks you might face on your own journey. Whether you consider yourself an educator, researcher, student, practitioner, or something else entirely, we hope this book speaks to the resilient part of you that strives through adversity to make the world a better place.

This work is funded by the Netherlands Initiative for Education Research, through the Senior Comenius Fellowship Program, Grant number: 405.21865.414. The research was conducted at Delft University of Technology (TU Delft), in the Faculty of Industrial Design Engineering. Our project received Human Research Ethics Committee approval.

EXPLORING
THE IDEA OF
RESILIENCE
IN DESIGN

There is a clear and urgent need for change in our world. One only needs to look at the climate crisis and all subsequent consequences that accompany a rise in global temperatures in excess of 1.5° Celsius.¹ Associated with climate change are frequent and more severe natural disasters, a loss of agriculturally viable land while the global population still increases, forced migration of populations of now unliveable territories, more viruses and other pathogens that accompany closer interactions between humans and the changing natural world. Subsequent stress on our healthcare, education, and social services persists while we struggle to rein in mass consumerism and wean off excessive industrial growth targets. If there ever was a time for leadership and the optimism design inspires, it is now.

Yet taking design leadership, which we often refer to in this book as pioneering change, brings the designer into repeated and hostile resistance that accompanies challenging the status quo – life as it is. Imagine designing for women’s reproductive rights against a polarizing political and complex legal background. Or, designing for the removal of single-use plastics in a society where citizens and industry resent this change as an unacceptable inconvenience. Or, designing car-free zones in cities while the automotive industry lobbies government for more expansive road access. Or, designing to prevent the incarceration of indigenous peoples while a state’s constitution still does not acknowledge their voice.

No single project will simply ‘solve’ these example challenges. Therefore, further driving a need for designer resilience is the timescale of achieving change. The designer’s career becomes a journey of advocacy and even activism – of scaled yet accumulating interventions that lead to broader change. This career will be inherently difficult because even when our ideas for change are good and just, the very nature of systemic change can incite political, structural, cultural, and economic backlash. Our ideas, while good and just, may well render us incredibly unpopular. This is a true test of design leadership and because the journey to change is often uncharted territory (there are no examples or models to follow), we find the term pioneering fitting.

The examples above are heightened, but we are also challenged to lead and pioneer change in more mundane everyday settings. Imagine presenting the work you've invested your heart and soul into, to a room full of people ready to critique it. As our design ideas are often formed on a hunch and intuition, we are always open to conjecture. Imagine pushing yourself for yet another concept iteration when all you really want to do is stop your process to create a sense of control. You may not need to imagine the pain of working with a difficult group member or for a seemingly impossible client. You may need to trust your uncertain design process as the best way forward – yet to a destination that is undetermined. You may need to try to sleep at night, not knowing where your next paying job will come from. Finally, developing design capabilities requires experiential learning. A learning-by-doing pedagogical model is itself a destabilising factor. As a student of design, you are asked to believe in the design process before you even understand it. In addition to addressing the world's complex challenges listed in the prior paragraph, these everyday situations are also reason enough for designer resilience.

Nobody acknowledges it, but designing makes us vulnerable. Instead of insulating ourselves from our vulnerability by designing to please people or achieve conformity within obviously undesirable systems, we instead call for designers to be courageous and stand for positive impact. Instead of cutting off our empathic qualities to shield ourselves from witnessing pain in the world, we call for designers who can process the raw depths of feeling that accompany actual empathy. Taking this harder route in your studies and career will require you to pioneer change and become a resilient designer.



FROM PSYCHOLOGICAL RESILIENCE TO DESIGNER RESILIENCE

Before we go further into designer resilience, it is wise to establish the psychological foundations upon which our work resides. This gives us strong ground on which to proceed. Broadly defined, resilience is the ability to bounce back from adversity and cope with stress.² Psychological resilience is formed through life experiences and acquirable through cognitive and behavioural training. Importantly, psychological resilience acknowledges that adversities, stressors, and setbacks are part of life and cannot be eradicated. Therefore, developing an adaptive capacity is vital. Negative events in our lives can be a source of transformative learning, provided we have the tools to cope with these events.³

Practising resilience has very clear connections to designing. Being resilient after a negative event requires a person to revisit the source of conflict, tell and retell stories about their experiences. The ability to cognitively reappraise (or reframe) an experience drives the development of new meanings, understandings, and learning that helps us to move forward and adapt in our lives. Sounds like design, right? At a neurological level, reframing negative events through storytelling activates our prefrontal cortex which assists us to think more clearly, rationally, and plan decisive actions. This helps us to overcome a flood of emotions typical of the fight, flight, or freeze response triggered by amygdala activity in our brain. While this response is vital in survival settings, fighting, taking flight, or freezing in a design project is not ideal. Our design process requires us to be quite the opposite - collaborative, engaged, committed, and adaptive.

Like in design, practising resilience requires us to reflect upon events as a foundation for learning. And, as in the practice of psychological resilience, a fixed mindset in design can be especially detrimental to problem-solving.⁵ In design, we must be open to viewing the world around us from a multitude of perspectives, and the same is true for practising resilience. There are many more synergies between design and resilience, of which we will not cover here but if you are interested to read more, you can read on elsewhere.⁶

One key inference of this synergy is that designing as a way to consciously adapt ourselves and the environment around us for the better may increase our psychological resilience. Learning to design might make us more resilient to setbacks experienced in our lives. This is an unexplored but exciting research prospect.

SO, WHAT IS DESIGNER RESILIENCE?

While emergent, we provisionally define it as a meta-cognitive capacity and adaptability we draw upon when designing gets difficult. Meta-cognition is a higher-order form of thinking that allows us to reflect critically on our own lives, our thoughts, and the decisions we make. Not only does designer resilience support us through challenges and setbacks by helping us to learn about the world around us and our place in it, but designer resilience also crucially makes us better designers by unlocking authenticity, integrity, and empowerment in our work.

While this book is written for students of design, we will also briefly share our research approach so that you, the reader, can understand how designer resilience came to be.

RESEARCH APPROACH

While the Covid-19 Pandemic moved us to explore the importance of well-being and resilience in design education, during the last three years since the pandemic, we have developed an understanding of designer resilience through an exploratory and participatory research approach. We have worked with over 300 design Master's students, 50 leading design academics, and more than 50 senior design practitioners. We have conducted more than 13 resilience workshops where we have listened to the challenges and setbacks faced by communities and individuals.

Our workshops can be as simple as working through a particular setback within a design project and identifying subsequent transformative changes - to - sophisticated sessions that work with design educators on ways to reform what is our higher education system fixated on student performance, enrolment growth, and rankings.⁷ We have worked with senior design practitioners to journey through the difficulty of working for clients who are ethically questionable or carry preconceived expectations of project outcomes. We have heard stories of suffering, uncertainty, isolation, and loss. Through this whole experience, we have been continually uplifted by the courage and resilience of the design community in all its forms.

As much as our workshops are about learning for our research, these workshops are also about creating safe spaces in which the design community can sit/stand, reflect, and discuss the good, bad, and ugly experiences of design work. We capture some of these experiences in our notes, which we process after each workshop. While we have not recorded workshops to create a safe space for our participants to discuss sensitive experiences, we have recalled memorable anecdotes. This is not the most rigorous data collection method, and we acknowledge this limitation to our work. However, participant safety is and always has been the emphasis in our work. Without a sense of safety, we question if our participants would;

(A) ATTEND OUR WORKSHOPS &

(B) OPEN UP AND SHARE THEIR
RICH YET PERSONAL EXPERIENCES

Our analysis and reflection sought to;

- (A) IDENTIFY WHAT NEGATIVE EVENTS CONFRONT STUDENTS AND PRACTITIONERS
- (B) FORMULATE TECHNIQUES OR STRATEGIES OUR PARTICIPANTS APPLIED TO OVERCOME THESE NEGATIVE EVENTS

We have published in a number of scientific journals, conferences, and through blog posts throughout our journey.⁸ Sharing our work opens channels to the community for feedback, discussion, and relationship forming.

WELL-BEING AND RESILIENCE IN DESIGN

You cannot pause life and say, 'now I will work on my resilience.' Because resilience is a capacity that we grow over time in relation to life events around us, we need to be ready to live a full life, commit ourselves to our passions, and even go beyond our comfort zone where adversity often lies. To practice designer resilience, you must be committed to the practice of design. That means giving your best on any given day. Sometimes that means acknowledging when rest is needed too.

As a capacity, designer resilience connects us to the environment and varying contexts around us. Based on our conversations with students and practitioners, we identify three layers of designer resilience. The first is the layer of designing where we shift from problem framing to possible solutions. The second, the layer of becoming a designer as an ongoing transformative learning process. The third layer is generating impact throughout our careers and studies as the outputs of our projects, processes, interactions, studies, and activities.

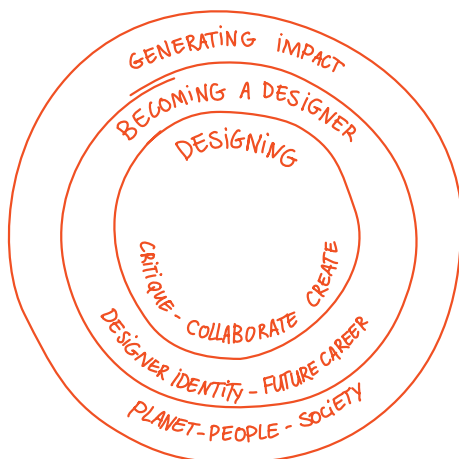


Figure 1. Layers of designer resilience

Based on our research with the design community, we've recorded many setbacks. Here is a brief snapshot of some of the difficulties of designing we've learnt about. These difficulties or setbacks are all reasons for design-specific resilience.

(A) SETBACKS AT THE LEVEL OF DESIGNING

- Harsh or prejudicial criticism of work
- Paralysis within the design process due to a lack of confidence
- Having to work on projects that create interpersonal conflict with team members
- Not knowing what to do next in our projects
- Having to present a project outcome that you know needs another iteration
- Not being proud of your project outcome, feeling embarrassed

(B) SETBACKS ON THE WAY TO BECOMING A DESIGNER

- Not knowing what to do in your project
- Lacking the courage to share your learning journey with others
- Being driven by grades and performance rather than learning
- Failing a course then losing scholarships
- Being rejected by design schools during the enrolment process
- Feeling like you don't fit in anywhere

(C) SETBACKS AT THE LEVEL OF GENERATING IMPACT

- Not seeing good and just ideas realised in society
- Coping with the pressure to create positive impact
- Working for unethical clients but needing the work anyway
- Thoughts of imposter syndrome
- Doubting the bigger legacy when reflecting on your career
- Sacrificing time with loved ones to pursue positive impact
- Feeling that whatever work you do, it will not be enough (to avert xyz crisis) anyway

THE TEN
PRINCIPLES
OF
CULTIVATING
DESIGNER
RESILIENCE

We learnt from our participants that there are many ways to overcome and learn from setbacks in design. Rather than describe every single approach to every single individual setback, we have clustered and converged toward *ten (10) principles* that describe and inspire designer resilience.

In the section that follows, each principle is introduced, briefly explained, and accompanied by one or more activities to which the reader can implement in their design studies or work. Each activity has been tried and tested. Some of these activities are sourced from pioneers already working in the domain of design education or from much broader contexts such as psychology. We include the voice of design students in the reporting of these principles.

We wholeheartedly recommend you apply these principles in your own design work. However, these principles are by no means exhaustive. If you develop your own in time, please connect with us and share your experiences.

FIND PURPOSE BY EMBRACING THE JOURNEY

The resilient designer might
be lost now, but knows
every day is a step closer
to finding their purpose

In such a busy and loud world, it is only natural to feel lost at times and question, 'What is my purpose? Where am I going? Why?'

We found through our research that design students often are not able to articulate to themselves or others, why they are studying design. Many students returning to study a Master degree after a few years in professional practice could not explain their motivations to do so, only that they felt they needed, 'a change in the direction of my life'.

To be a resilient designer is to accept that we are not always 100% clear in our purpose or motivation, but that every project we undertake and all interactions with people offer touchpoints to help us learn about ourselves and find clearer meaning in our lives.

In short, principle 1 asks us to be kind to ourselves and embrace the uncertainty of the journey.

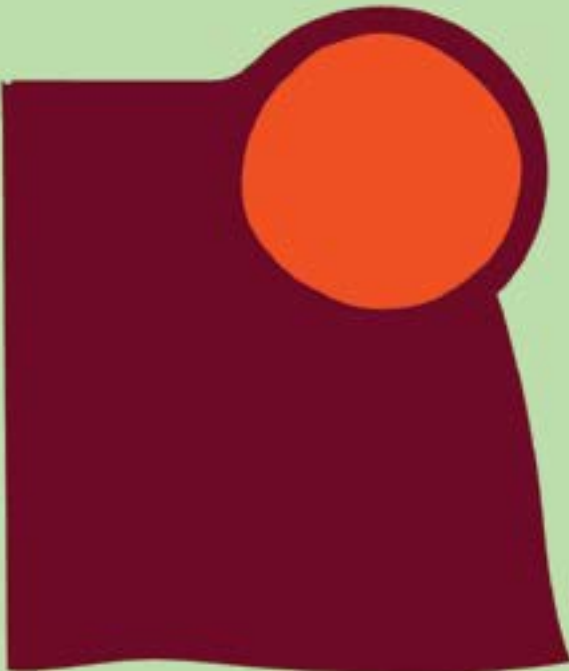
To initiate learning about Principle 1, we recommend reflective practice to 'connect the dots'. Look to past projects, people, life experiences or courses and map on a timeline where you have come from to where you are today. What projects form the dots, and what have you learnt from each dot? How have you evolved over this timeline in your own knowledge, skills and world view? In following your past trajectory of projects and own personal evolution, you will be more able to see 'where you are going'. While your purpose might still not be 100% clear, it does enable perspective. Do this activity together with peers and exchange your stories.

"After each project, course or other learning experience, make an overview of what you have learned. Make it well-organised and easy for yourself to look back at it. So whenever you get lost, you can have a quick look at your past experience and growth." — Academic counsellor

EXPLORE
ACTIVITIES



DECISIVELY GO BEYOND YOUR COMFORT ZONE



Build instincts to 'go for it!' and leave your comfort zone. Always striving for impact

Principle 2 asks those that have a strong sense of their purpose to 'go for it' by leaving the comfort zone and striving for impact. In one workshop we were inspired by a senior practitioner who had left a comfortable senior service design position in a stable agency. She followed her driving passion to work on sustainability and circular economy projects to a small start-up design firm. She risked everything and made short-term chaos for herself by making this change. Bravo. Our students also demonstrate decisiveness and show courage to go out of their comfort zone when learning new knowledge, skills and capabilities.

To go out of your comfort zone is a uniquely personal activity. First you need to understand where your comfort zone starts and ends, before you can take courage and test yourself. Draw a circle on an A3 sheet of paper and call this your comfort zone. What activities lie in the centre and what activities lie toward the edge – and importantly why? Now, start to plot down things outside your comfort zone. What activities make you feel uncertain, lack confidence or are totally new? Start to look ahead and plan to do some of these activities. Maybe this means signing up to speak at a conference, facilitating a lunch meeting at work, or saying yes to lead a new project or workshop. Going out of your comfort zone might be just making your voice heard in a group meeting.

Tip: Say yes to a challenge, even when you don't feel totally prepared. Work hard to prepare and then 'go for it.' Reflect on how it went after and see what new things you've learnt. Did the circle of comfort you drew expand a little?

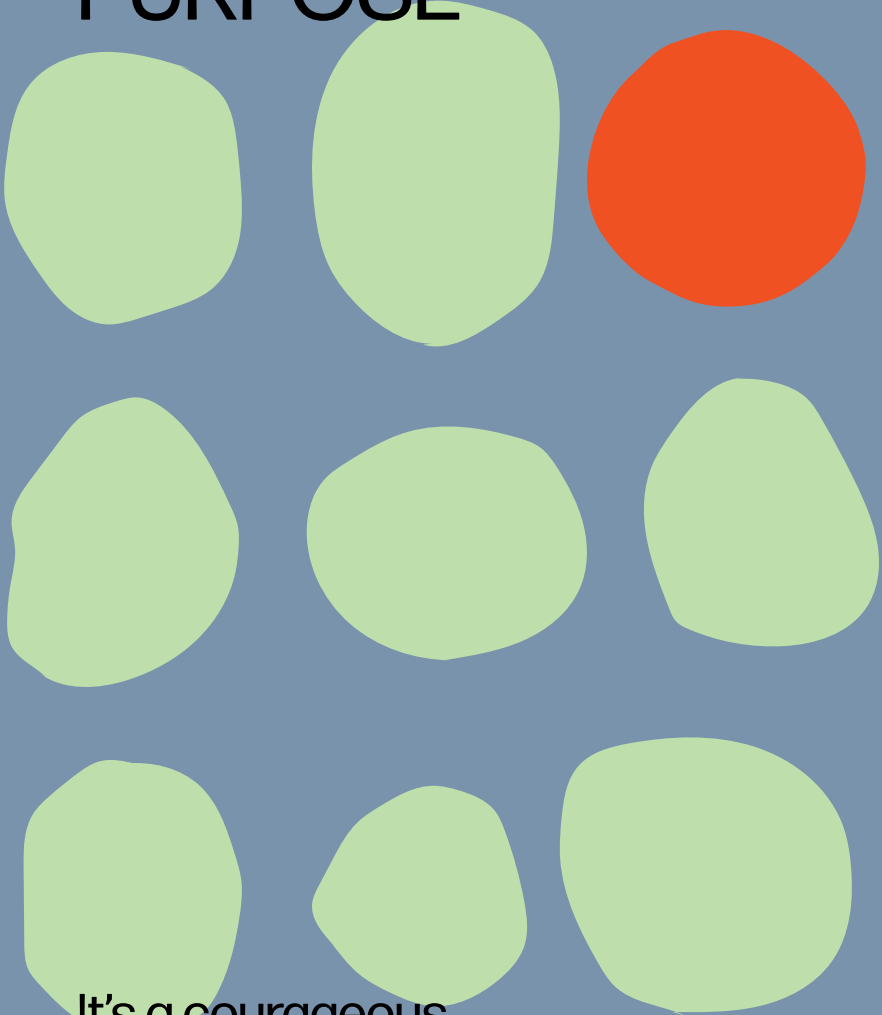
“I think we more and more see everything as a definitive lost opportunity and have regret about that. It must be very clear that even if you take the chance and things don't go as planned that failing in something out of your comfort zone does not mean that we are an individual failure. We take feedback very personally, since as designers your identity is very connected to the work and projects you do.” — Design student

“It can be scary to leave your comfort zone and enter an unknown area with all the risks involved. By nature, people are risk averse. It is interesting to realise that, when asked to elderly people, the biggest regrets in life are not the actions that went wrong, but rather the actions they did not take/ the chances they missed.” — Academic counsellor

EXPLORE
ACTIVITIES



BE AUTHENTIC TO YOUR IDENTITY & PURPOSE



It's a courageous
contribution to live
authentically and be
confident in your own
journey

It's all too easy to look at others and try to replicate their success. Social media in particular shows our friends' and colleagues' best snapshots.

Throughout our workshops with students, we have observed that students who have strong sense of purpose, know why they are studying design and what challenges they want to work on in their career. These young designers seem to have a sense of direction that helps them to learn in a focused way and use new knowledge and skills toward their bigger design purpose. While these students are not always the most technically exceptional, they do appear driven and highly engaged in the classroom. What is critical is that these individuals are authentic to their own ideas and sense of direction.

During his PhD, design education researcher Ehsan Baha, developed design identity work sessions to help students identify their own principles for good design and therefore begin a more authentic learning journey. Baha asked students to develop an annotated portfolio of projects they like. The students annotated their portfolio with why they thought the project were examples of good design. Students then rapidly met each other (in a sort of speed dating style) to exchange their annotated project portfolios.⁹ Students would draft and redraft five principles of good design based on peer feedback and intense discussion. At the end, the student would have five personal yet powerful principles of good design, for example: good design is timeless, or, good design is just. Baha found this a highly effective way to help students develop their own sense of designer identity. This process can be done in student speed sessions, or through longer coach/teacher to student dialogues.¹⁰ With the five principles of good design, an individual student can then consciously design in future projects and courses based on their own authentic identity.

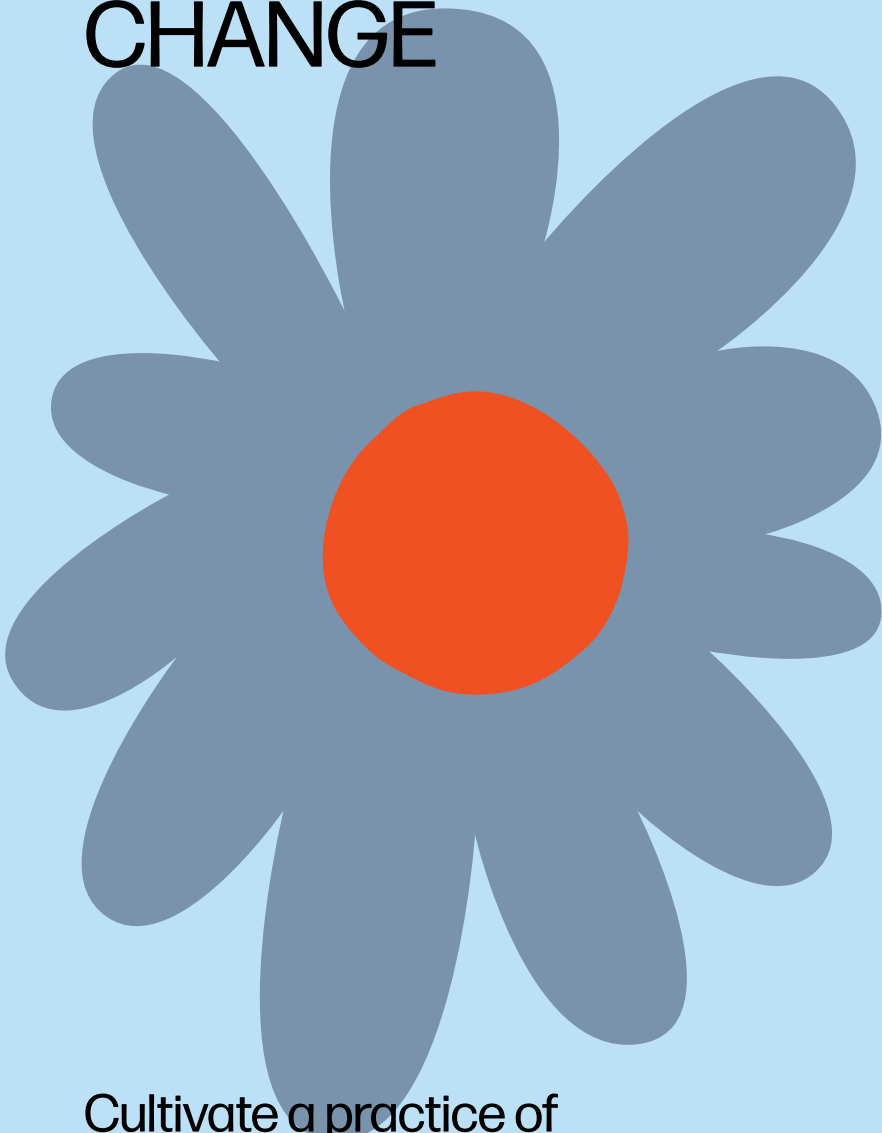
EXPLORE
ACTIVITIES



“At Aalto we reflected together with a professional from the field on our own personal learning and our group projects. By externalizing and openly expressing my thoughts, it made me realize what gave me energy and where my interests lie.”

— Design student

FUEL YOUR APPETITE FOR CHANGE



Cultivate a practice of mindfulness to prepare oneself to address and even solve complex problems

Looking at the news on any given day, one can be forgiven if they feel depressed or disappointed. There are constantly news stories of natural disasters accelerated by climate change, geopolitical crises, rampant inequalities, and human suffering.

As designers, we are trained to address problems for people. Our ability to problem solve requires us to be resilient as we understand the full state of how problems affect people and planet, and yet hopeful and pragmatic enough to move into an addressing those problems through our own design processes and projects. Even small interventions as the outcome of a design project provide progress. However, our work can leave us feeling overwhelmed, as an outcome of fluctuating between feelings of hope at the changes we can make and despair at the sheer vulnerability and suffering we have witnessed.

Principle 4 calls upon us to practice self-care. One effective way is to slow the mind. In the context of design, being able to achieve presence and clear thought is very useful when making sense of all the information in our process. Clarity assists us to make creative leaps toward solutions.¹¹

Contemplative practice or meditation are very effective ways to slow the mind and achieve presence. Box breathing is an easy starting point. Simply find a comfortable place to sit or lie down. Begin by breathing in for 4 seconds, holding that breath for 4 seconds, exhaling for 4 seconds and then holding for 4 seconds. Repeat and slowly increase your time spent across the four breathing stages. 4-4-4-4 to 5-5-5-5 (etc).

Other ways to slow the mind and engage with the body can be found activated through dance, sport and painting. The idea is to engage the body, move away from rational thinking and enable your creativity to flow. While this may all seem unsubstantial, the science is clear on the benefits of these practices. For example, moderate physical exercise each week can reduce symptoms of depression¹² and anxiety.¹³

EXPLORE
ACTIVITIES



SHARE UNFINISHED WORK

The background is a solid yellow color. In the upper half, there are three large, light pink, rounded rectangular shapes that resemble the letters 'U', 'U', and 'U' stacked vertically. In the lower-left quadrant, there is a solid orange circle.

Design ideas become stronger when we are brave enough to share our unpolished concepts

Throughout our workshops, it has been startling to see and hear how students are afraid to share their work for fear of criticism and rejection. Students describe that when they have put their heart and soul into a project, receiving negative feedback can be particularly painful.

“This has a lot to do with the fact that, as designers, we create.... We tie our identity to the things we make. Getting feedback can feel like a personal attack, which of course it is not. But how can we understand that the two are not connected? That making mistakes, or simply not making things perfect, is our best learning mechanism.” — Design student

Design ideas grow stronger when we are brave enough to share concepts with peers, experts and everyday people. By sharing our ideas, we test assumptions, activate empathy, invalidate features and generally build better solutions for people. The design process can feel messy, with many unresolved jumps from one concept to the next. Sharing this messy aspect of our work can often be a way to unlock co-creative potential. You may even discover new perspectives that you couldn't have imagined on your own.

We advise teachers to use silent coaching and to let peer feedback guide learning. This means facilitating peer-to-peer feedback by simply asking bridging questions that connect ideas and perspectives in the room. Being silent can sometimes be challenging.

Sketches and visualisations are also important to show and share progress. Instead of showing gorgeous highly-refined concepts, try sketching your concept and the value being created in the simplest of line sketches. Don't worry about colour or shading - focus on what value is being created and for whom.

“Do not display only the masterpieces of the Faculty, introduce Professors not only by their awards and biggest achievements. Instead, present and display average results. Show the earliest/worst work of a highly respected professor and show the early prototypes of now-successful product. This way, students see it is normal and expected to start with sub-optimal designs to grow as a designer. Currently, students live with the misconception that successful people and successful designs were already successful from the start, and they expect the same of themselves.” — Academic counsellor

EXPLORE
ACTIVITIES



BE REFLEXIVE TO PERFORMANCE CULTURE



Balance your desire to excel
with the ability to zoom out
and see your progress from
a different perspective

Like the job markets our graduates will enter, education institutions are competitive environments. Students are encouraged to get high grades by the glamour of awards, recognitions and job prospects, such as Cum Laude. A performance culture follows where students increasingly compete with one another. In these environments, it's easy to lose sight of what really matters - deeper level learning about one's own purpose and identity enabled by designerly knowledge and practice (See principle 1 to 4).

In workshops and observations we find that many students are often fixated on their performance in relation to their peers. Students work hard to please - rather than being bold about their own design processes, outcomes and learning. We have shared our findings with leading design educators from around the world, who have echoed our concerns about the erosion of deeper student learning in favour of a focus on performance.

Principle 6 challenges designers to remain resilient to performance culture by establishing a healthy relationship and benefitting from a desire to excel, yet keeping enough distance to know when to disconnect. Importantly, as one student states, the resilient designer is able to somehow celebrate failure as a powerful act of learning.

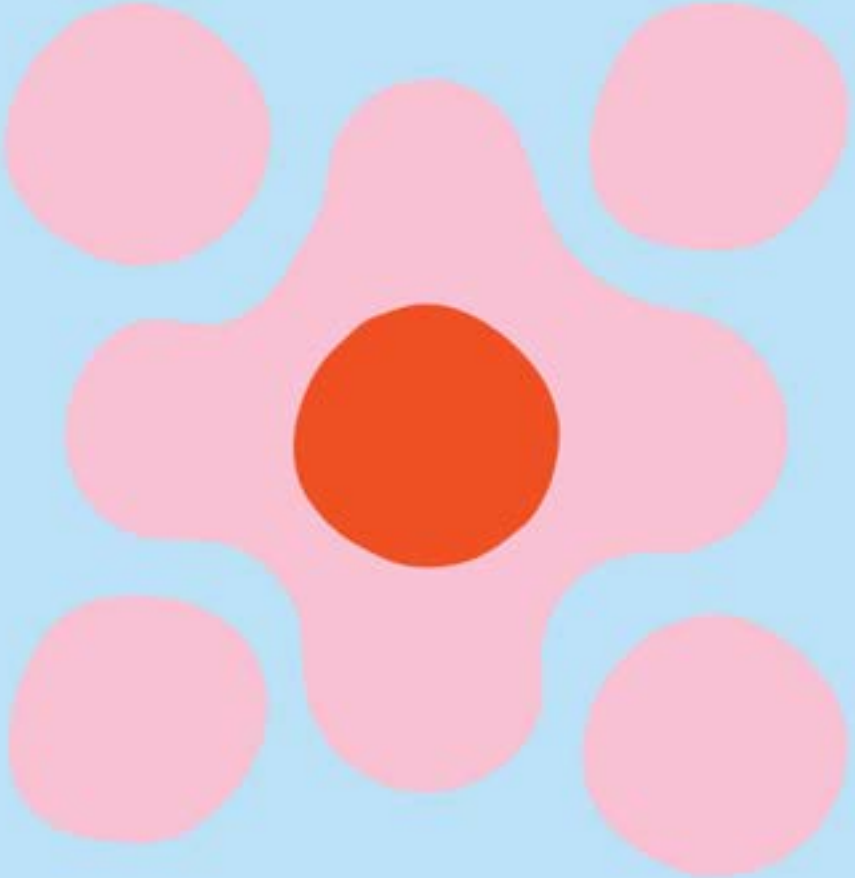
A good activity to establish this reflexivity is to map out why a performance culture exists, using systems mapping.¹⁴ Start by mapping the key actors and structures. Draw lines to show how these actors are connected. Think about soft structures such as power, pressure and expectations, as well as financial relationships. What pressures within the system mean that good student grades are valued in higher education? What pressures are there on higher education institutions to perform? Ultimately, you see that a performance culture is a function of many relationships. Knowing more about how this environment works will help you to step back when you need to support your own authenticity or lean in and embrace a competitive edge to drive excellence in your work. For more on this approach, follow the work of Dr. Josina Vink.¹⁵

EXPLORE
ACTIVITIES



“I strongly believe that we are not necessarily forced to compete, but that in a society where everything is possible, we CAN achieve more if we work hard enough and make the right choices. This puts a strange pressure on all the choices we make and makes us more competitive”. — Design student

FORM THE RIGHT ENVIRONMENTS FOR FEEDBACK



Construct the right environment in order to get constructive feedback

When trying to pioneer systemic reform or drive radical innovation, some resistance to change can be expected as people hold on to the status quo. In relation to Principles 5 and 6, the resilient designer is careful to design the environment in which they will share work and receive feedback.

Showing work opens the designer up to harsh criticism, which may be based on prejudices or biases. You may have had an experience where you showed your work and received no constructive feedback, only criticism. This probably felt particularly painful, and it may have taken a few days for the negative feelings to subside.

Throughout our research, we were particularly inspired by one PhD candidate who took great care in managing meetings with his supervisors. He would carefully plan the agenda of a meeting, share his work and ask for specific types of feedback. For example, 'Today I would like you to focus on giving me feedback on positioning and scope, and not go into too much detail about my writing tone or images'. Or, 'Today you may feel some resistance to the direction I am taking, but bear with me. I want to use this session to explore possibilities - so I need openness'. This researcher understood that the environment in which his work was reviewed would have an impact on the type of feedback given, so he took care to shape that environment.

We advocate the use of role-playing techniques to expose students and teachers to likely and even extreme scenarios in which design work is shared and feedback is given. Role-playing allows students to explore practical approaches to creating feedback environments and to develop ways of dealing with receiving harsh feedback.

“Very interesting to structure how you get feedback! I remember doing this a lot with non-design professionals in my previous job. They would dive into the nitty-gritty details while presenting a still very fuzzy concept. Some people are just not as abstract as designers, I guess.”
— Design student

“If someone reacts negatively to your work, ask yourself why. What pressures are they under? Treat their negative feedback as a system performance (see Principle 6) rather than a personal one about you as a designer.” — Design student

EXPLORE
ACTIVITIES



TRUST AND DRIVE THE PROCESS



Work toward progress
and remember that
perfection is an illusion

Design is a tricky profession. We constantly dance between developing concepts we see value in, prototyping these and iterating toward a next concept.

We observe and find through workshops that students often aim for 'perfection'. However, we know that in design, perfection is an illusion. Rather designers work to satisfice a combination of constraints toward outcomes that are valuable. There will always be improvements to be made, and the designer respects this possibility in their own work.

“Yes, very much true regarding our push for ‘perfection’ [sic]. We aim for perfection. User interviews we do are more there for confirmation that we created the perfect concept [sic] rather than to make interventions better. There is a sort of idea that the first thing we come up with has to be perfect otherwise we are a personal failure.”

— *Design student*

In design, the inability to progress from a concept you prefer is called fixation¹⁷. This blinds the designer to all the other possibilities available and stifles the value creation process. By contrast, 'stuckness' is when the designer feels they cannot progress in their design process, a sense they 'do not know how to progress'.

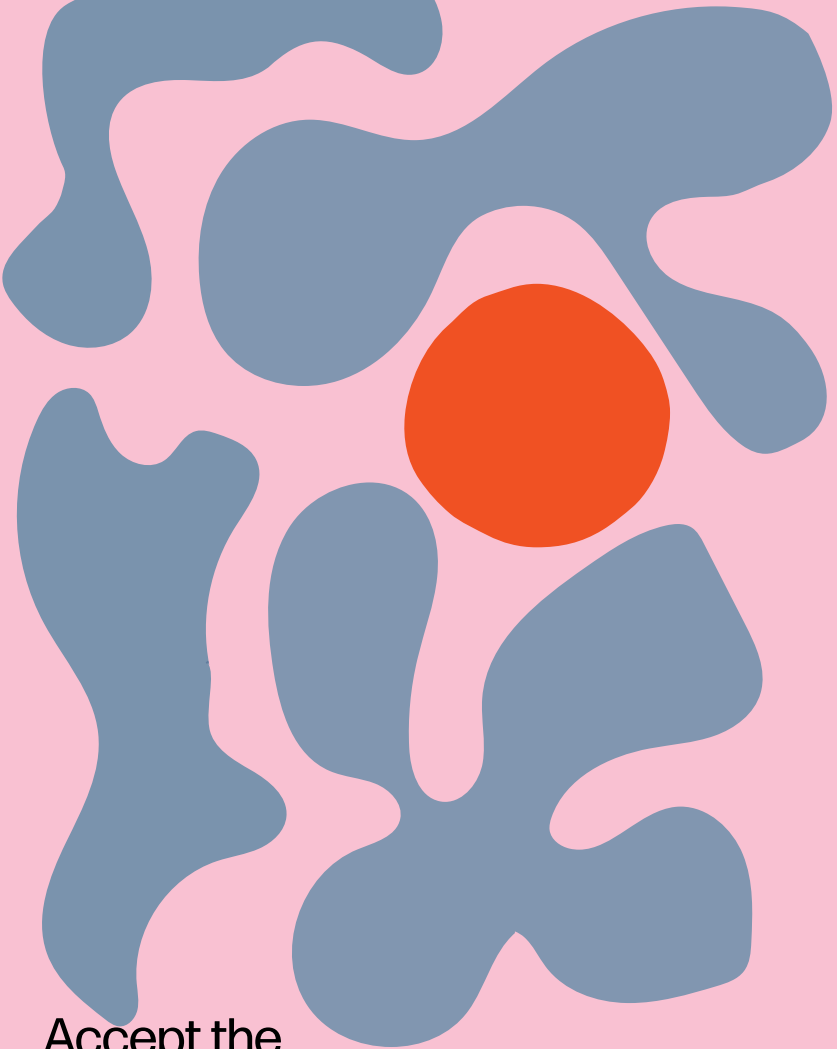
To address fixation, we advise play-based workshops that challenge the designer to radically and rapidly reframe their design projects. How do other people and stakeholders view your project? Can you design for them? What entirely new ways could you apply to approach your design project?

To address a feeling of 'stuckness', we refer to Principle 5 and 7. Of Students we have observed who have felt stuck in their projects, we see a pattern of these students not sharing their projects with experts, peers and teachers. These students do not engage the strength of the community and potential of collective conscience. Instead, these students protect their projects and pressure themselves to have all the answers by themselves.

EXPLORE
ACTIVITIES



EMBRACE THE MESSINESS OF PLURALISM



Accept the
messiness of
co-creation and
participatory design

The more we open-up our design process to new stakeholders and perspectives, the more difficult it becomes to reconcile these differences into a 'solution' that creates value for the many, not the few.

In workshops with practitioners in particular, senior designers note how stakeholder alignment drives a constant need for resilience. People have conflicting points of view and tensions occur naturally as opinions and perspectives collide.¹⁸ Managing these conflicting viewpoints or tensions is a big part of design practice requiring patience, respect and a degree of skill.

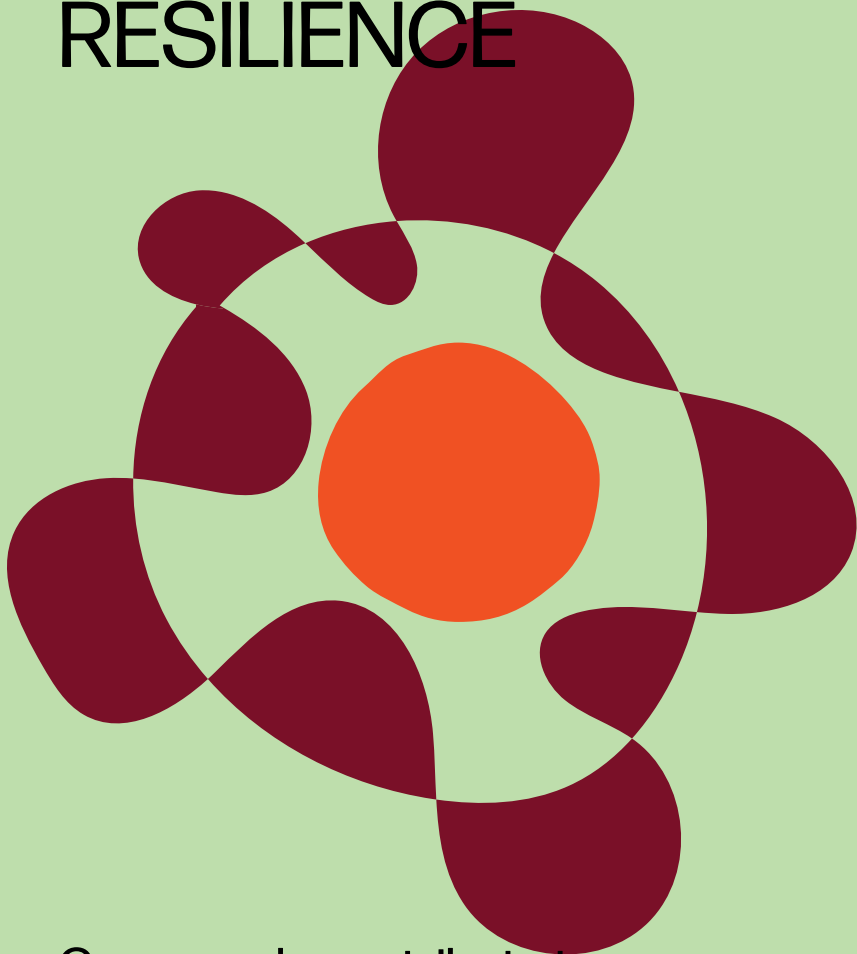
The resilient designer is one who understands that the objective to achieve 'stakeholder alignment' is more aspirational than operative. Of course, it's important to have a shared vision for the future and a team can work towards this. However, if there are stakeholders with another agenda, it's best to understand why that agenda exists and what underpins it rather than force a particular stakeholder toward superficially adopting a certain viewpoint. This departs from control-based approaches to management and asks the resilient designer to fully embrace the messiness and plurality of genuine co-creation and participatory design.

"We have to accept that we can never 'please' everyone to an equal amount. Also, best to remember that tensions can lead to interesting outcomes." — Design student

EXPLORE
ACTIVITIES



SHAPE COMMUNITY AND COLLECTIVE RESILIENCE



Generously contribute to
the success of others and
develop a community of
like-minded peers seeking
positive impact

While parts of your career might be highly successful, there will also be tough times where your motivation, confidence and skillset will be challenged.

Research shows that resilient communities better adapt to and overcome challenges such as natural disasters, i.e floods, fires, hurricanes etc.¹⁹

The resilient designer is doing more than professional networking when meeting new peers. They are actively developing a community of like-minded peers who are seeking to design for impact. Driving this community means contributing generously to the success of others. When the time comes to call for help from peers, the resilient designer is open to showing their vulnerability and seeking help from peers.

A nice activity is to draw a constellation of contacts you have in your community and annotated how you met them and what you have in common. How do people connect? And what introductions could you make to strengthen your community and support your fellow peers? What type of events could you organise or attend? How might you help somebody in need? Or, ask for help yourself?

“A diverse and rich community around you (with which you have shared experiences) will help you to overcome “traumatic” experiences. I noticed that I extrapolated my own errors and mistakes in my own mind. Talking to others and learning from their perspective helps to relativize my own self-image about something that was not experienced as badly by others.” — Design student

Tip: Reach out to your social and professional network and grow it with genuine interest in others. See your network building as beyond professional opportunities, to forming stronger relationships with people around you.

EXPLORE
ACTIVITIES



HELP, A SETBACK OR NEGATIVE EVENT JUST OCCURRED

Building a capacity to cope with uncertainty and a thick skin to setbacks is easier said than done. Principle 1 - 10 can guide you to develop resilience as a designer. Yet what happens when a setback does occur? How do you react? What do you feel? How do you learn your way forward and grow?

Sometimes, setbacks seem insurmountable. You simply cannot imagine how you might overcome this period of difficulty. Perhaps you have a convergence of personal and professional setbacks. The death of a family member, coupled with a project failure and losing a client. Some say that bad luck comes in threes. Before you know it, your own health has declined as well.

It might seem overly simple, but a good way to begin to cope with setbacks is to map these events and articulate to yourself why you feel as you do. The ABCD tool allows you to deconstruct a setback and make sense of why you feel negative feelings. The matrix is appropriated from cognitive behavioural therapy and adds the 'D for design' to consider how you might approach such an event differently in the future. Better than just mapping out your experience, share and tell stories to your peers for collective resilience (*Principle 10*). For peers, practice active and non-judgmental listening: "I hear you say [xyz], tell me more about that?"

Overcoming a setback means confronting negative memories which can evoke fear. As Southwick and Charney write: "To conquer fear, one must face fear. That's what resilient people do"²⁰

A	ANTECEDENT: WHAT LEAD TO THIS HAPPENING

B	BEHAVIOUR: HOW I REACTED

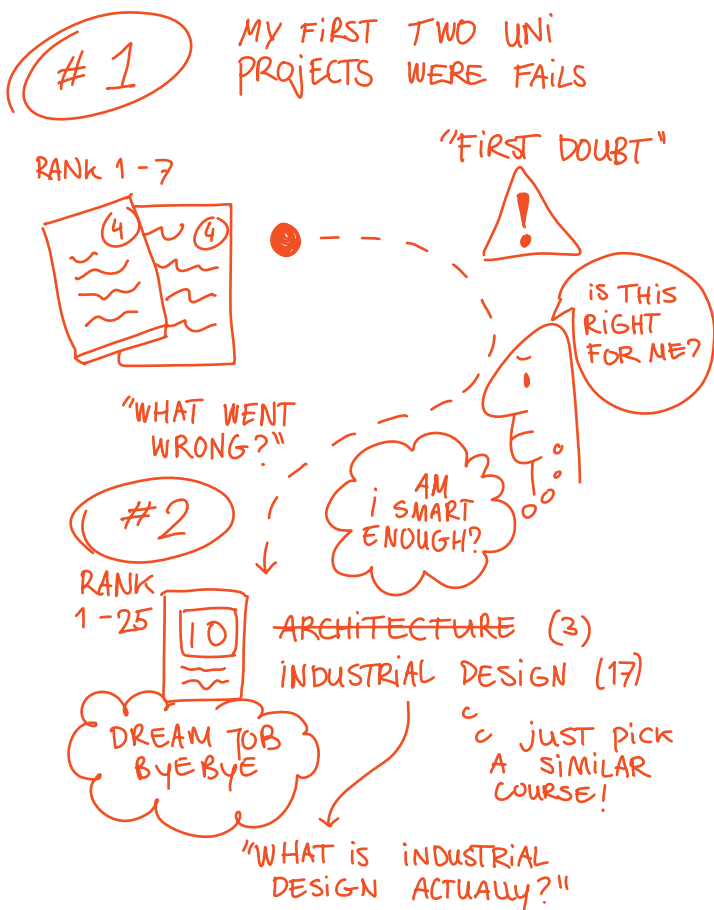
C	CONSEQUENCE: WHAT WAS THE EFFECT OF MY REACTION

D	DESIGN: WHAT I WILL DO DIFFERENTLY NEXT TIME

DRAW YOUR STORM

Another approach we have often used in our workshops is to visualise a negative experience. First, on the left side of a blank A3 page or A4 page (landscape), draw your setback visually. Annotate your drawing with themes and patterns you witness. Annotate the emotions and thoughts you experienced. In the middle of the page, draw a 'storm' or 'tsunami' or 'tornado' or whatever metaphoric crisis reflects your experience. One participant drew a 'plane crash' for example, another drew a 'stairway to nowhere'. On the right side of the page, list out how you changed as a person because of this experience. Did you change any behaviours, or techniques, or approaches? This activity is best performed in group workshops so that a rich discussion can follow.

FEAR OF FAILURE - DESIGN SCHOOL OF LIFE



PERSONAL STORM



① TRAIN-SELF
LEARN SKILLS IN
OWN TIME

② PARTNER WITH OLDER
STUDENTS

③ READ BLOGS ABOUT
DESIGN

④ DEVOTE TIME TO FIND INSPO

⑤ VOLUNTEER AT DESIGN RELATED
HAPPENINGS

⑥ TALK TO DESIGNERS AROUND ME

⑦ WHAT WILL I 'DO' DIFFERENTLY NEXT TIME

BUILDING YOUR OWN PRINCIPLES FOR DESIGNER RESILIENCE

The ten aforementioned principles have been developed in the context of the higher education system at Delft University of Technology, the Netherlands. The ten principles are by no means exhaustive, but are representative of the themes and patterns we identified during our research.

It is possible you have your own principles for designer resilience. Using the table below, you can begin to reflect upon your design experiences as a student, educator, researcher or practitioner. What challenges have you faced, and how did you overcome these? What are your weaknesses and how will you convert these into your strengths?

THEME: FOR EXAMPLE PURPOSE AND IDENTITY

PRINCIPLE: FOR ME, DESIGNER RESILIENCE REQUIRES ME TO...

PRACTICE:




TO PRACTICE DESIGNER RESILIENCE I USE
THE FOLLOWING TOOLS OR APPROACHES...

STORY:




A SHORT STORY FROM MY OWN EXPERIENCE
TO HIGHLIGHT THIS PRINCIPLE IS AS FOLLOWS...

NOTE TO DESIGN EDUCATORS

As teachers, we strongly believe that we have a responsibility in shaping educational environments in which all students can thrive. While safety nets such as student counselling are necessary to help students who are struggling, and preventive measures such as mental health training are important to promote self-care, they are band-aid solutions to more general concerns about student well-being. Instead, we believe that trends of declining student mental health are a symptom of an unhealthy (design) educational system and culture. While we are aware that there are many factors outside our circle of influence that might negatively impact these trends, we do think that as teachers we can shape our design education - and influence the systems and culture in which we work in such a way that it promotes flourishing of our students. Without claiming to be complete, we do present some suggestions based on our own experiences and vision for design education:

-  Make time for dialogue and reflection on designer resilience and well-being within your educational programs. We frequently facilitate workshops with students about designer resilience and our colleagues have developed courses in which reflection takes a central place.
-  If we want students to be less performance-focused and more focused on learning and experimentation, then consider reducing educational elements that promote competition and focus on grades, such as design contests within courses, student awards, 'cum laude' and other high distinctions. For example, we are increasingly using pass/fail for assessments instead of a numerical grade.
-  To promote peer-learning and a supportive culture among students, invest in shaping student communities. While such communities naturally exist within student cohorts, they are often not fully inclusive, and many students fall through the cracks and struggle to connect. We have iteratively developed a self-directed and effective 'community program' for graduation students and

are currently developing a community program that will run throughout our revised 2-year master programs.

-  Invest in developing healthy relationships between yourself and your students. Critique and feedback are essential to learning how to design. It is easier to receive and process this feedback when you know the other person cares and you can consider them a 'critical friend'. Try to make students feel like you see them by showing interest and asking questions. Show something of yourself, share your curiosity and don't be afraid to show your vulnerability. Anecdotally we once heard from students after we shared a more personal story in class that they were surprised to see that their teachers were 'human beings too'!
-  Role-model the type of resilience behaviour that we describe in this book. If we want students to ask for feedback, then ask students for feedback and show them what you do with the feedback. If we want students to look after themselves, then look after yourself. Don't send emails or announcements in evenings or weekends (or use the 'send later' option); take time for breaks for students and for yourself when teaching; take students for a walk outside; ensure sleep hygiene, especially before a busy teaching day.
-  We believe that the pervasive performance culture in academia is a root cause to many student and staff well-being issues, not just in design. While it is hard to change culture on your own, we can choose to at least refrain from perpetuating it. While culture is largely invisible and shaped by rules, norms and beliefs, it is enacted in behaviour and a material environment that we can see and change. Show respect without unnecessarily putting people on pedestals. Promote 'courage' and 'authenticity' over using words like 'excellence' and 'brilliance'. Think twice before sharing individual achievements and accolades publicly. Instead, celebrate learning, collaboration and connection. It is only together that we can shape a thriving design education community!

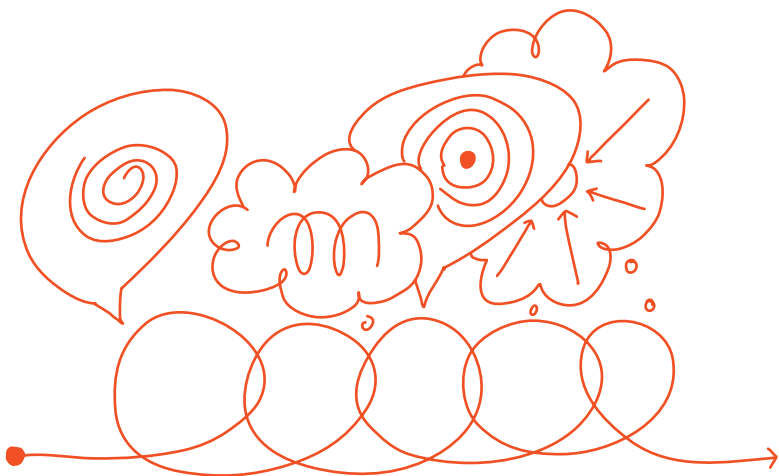
LOOKING
FORWARD:
PIONEERING
THE FUTURE
OF DESIGNER
RESILIENCE

WHERE TO NEXT FOR DESIGNER RESILIENCE?

As this is only the beginning for designer resilience. It is a big first step to challenge the design community to talk openly about the ways in which our discipline creates vulnerability.

We encourage design educators to bring designer resilience as a set of principles and practices into the studio, classroom and lecture hall. Such is our belief in the benefits of designer resilience based on our educational research, that we wish to see it integrated into design curriculum worldwide. Our future research and educational leadership will seek to do this.

We encourage individual students, practitioners, and researchers to explore and develop their own resilience. Apply the ten principles and related practices provided as a starting point to reflect on your journey to date, and what lies ahead in your future. Share your experiences with us as we look to continue to develop an understanding of designer resilience.



As this is only the beginning, it is useful to explicate future research. We see exciting possibilities in the following topics implicated by developing an understanding of designer resilience. For example:

(A) Developing a psychological survey to measure designer resilience in individuals

(B) Developing measurement protocol to assess the impact of designer resilience upon a curriculum and graduate outcomes

(C) Exploring how designer resilience creates benefits for designers outside of the professional environment

(D) Exploring how learning design can support the resilience of social groups such as children in schooling

(E) Investigating the relationship between resilient designers and the greater resilience of an organisation they are employed to

(F) Exploring the generalisability of designer resilience to disciplines such as architecture, engineering and the fine arts.

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SO, THIS IS THE END OF THE BOOK.
A SPECIAL THANK YOU TO ALL THE
STUDENTS AND PARTICIPANTS
OF THIS RESEARCH. WE HAVE
BEEN INSPIRED BY YOU. GO WELL
ON YOUR JOURNEY. IT IS SPECIAL,
BECAUSE IT IS YOURS.

The role and importance of design in addressing pressing global complexities is increasingly recognised, but the personal and professional challenges designers face in trying to change the status quo are often overlooked. As design practitioners grapple with the pressure to drive positive change in complicated and complex systems, how can they navigate the process of enacting change without compromising their own well-being?

Researchers Prof. Rebecca Price and Prof. Mieke van der Bijl-Brouwer from the Faculty of Industrial Design Engineering at TU Delft (NL) present an insightful exploration of designer resilience. Based on extensive research, this book identifies ten fundamental principles aimed at cultivating resilience within the design profession. More than just a collection of principles, this handbook is a scholarly contribution to the discourse on designer resilience and establishes an academic foundation for the topic. The book is a valuable practical resource for design professionals, researchers, educators and students alike.

For further insights, resources, and discussions, visit:
resilientdesigners.com

