

Design thinking in education

Episode 5

Daniek Bosch - Host

In this final episodes, I talk with Emily and Mavi about their experience in the tackling inequalities class. They share their project stories and what they've learned in this design thinking process.

Welcome Mavi and Emily, Nice to have you here in the studio. And nice to be talking today about your experience in the tackling inequalities class that you took last year. We've already heard about it from your teacher Bram and I'm very curious to hear your perspective. But first maybe Mavi, can you introduce yourself?

Mavi Chincúra

Yeah, of course. Thank you so much for inviting me. First of all, my name is Mavi, I am from Brazil, but I'm also partly Dutch and I am studying international relations and organizations here at Leiden University, The Hague campus, I am in my third year, I just started it now, so very exciting. And I did the inequalities in the 21st century honors class. And yeah it was great.

Daniek Bosch - Host

Curious to hear more about it. And how about you, Emily.

Emily Oxenaar

My name is Emily. I'm half American, half Dutch. I just graduated from a degree in Arts, Media and Society from Leiden University. And I just began a pre Master's in Education and Child Studies. I also was part of the inequalities class together with Mavi. Also a great experience.

Daniek Bosch - Host

Great. And you both worked on different projects. Maybe Mavi, can you start by explaining what the project was and how you went through all the phases.

Mavi Chincúra

Yeah, of course. So the whole course was basically set up as we were divided all of us into groups of, I think like four to five people. And each of us got a challenge to work with. My challenge was called the fenestra challenge. And fenestra is the name of the body within Leiden University. And that body is responsible for the students with disabilities. So they make sure that students with disability get extensions on their assignments or help them out with housing or with arranging a psychiatrist here in the Netherlands and stuff like that. So with that challenge, mostly what they wanted was help with redesigning their website because their website, they were a very new body, I don't know how old they are but they wanted help with, you know, getting better communication with the students and being able to get a more efficient results of what their work is. So having students better communicate with them and better knowing what they are and who they are. Because yeah, they are still very small. Yeah.

Daniek Bosch - Host

And how did the design thinking process help you in dealing with this challenge?

Mavi Chincúra

Yeah, it was actually a great way of dealing with the challenge because it was very structured. So we had all the phases like the empathy and define and everything.

So in the empathy phase, what we did was we send an e-mail being like, oh, we're looking for students to interview and evaluate what the process has been with fenestra.

And we were like, Oh my God, no one's going to answer these like no one's going to want to do it. But fortunately, we were lucky that I think like 50 students answered us but we couldn't interview 50 people. So we interviewed 30 students that had been in contact with fenestra already. And the interview process was actually like the part that I love the most about the whole design thinking process.

It was great to just talk to them and actually see what they thought the problem was. Because of course we see it from the, the institution side and sometimes we don't see what actually is the problem, but we also don't know why that is a problem.

And talking to them was really great because we learned what they were actually experiencing and what they would think that was a better way to do it and how they experienced the whole thing. And then what we did after the interviews is we got mostly during the interviews into many phrases. So I don't know, we basically made a bunch of sentences that summarize what that person had said in the interview. And then we made a

whole table, with all the phrases. And we made like a frequency table basically like how much each problem was spoken about. And from that we were like, Okay, these are the problems that need most attention. So we're going to focus on this. And then from there we were like, okay, some of these are just, you know, we wouldn't ever be able to do it, we are only like four people here, you know, for bachelor students. So then we focused on the ones that were feasible and needed most attention.

And then from there, for, for the ideation parts, we just started brainstorming and being okay, what could we do to make this work? So we went from like crazy ideas from like, you know, for example, one of the things that we noticed that was a big problem was awareness because as I said, fenestra was, is still like a small body.

So we had to make sure that people knew what fenestra was before they went to fenestra, right? So we thought about like making tote bags and t-shirts and all like things as crazy as that. And then for the website of course, which was a big thing, like the thing fenestra wanted us to do and reform. We also like thought about making like quizzes and turning the website into a quizz. The whole thing. Yeah.

Daniek Bosch - Host

Sounds like really creative ideas for this. Nice.

Mavi Chincúra

Yeah, thank you. We really went crazy there. And then of course we went just cutting out like, when we got to a point where we were like, Okay, this is never going to happen. Or we don't have the resources for this, or we don't even know how to do this. You know, like in case of the website, for example, we didn't have the knowledge and how to turn the website into a quiz. So we were like, okay, what can we do, you know, extrapolate that much.

But then we came into mostly the prototypes we got to were flyers to put out or to distribute during the introduction weeks for Leiden University. And also for the website. We basically took inspiration from other university websites and build our own with like an easier way for people to find what they need in the website.

And then we got to the testing phase, which is the last phase of the design thinking. And in that phase, we mostly went back to the people we interviewed. And we were like, would you mind, you know, spending other 20 minutes with us just evaluating what we have done. And they were all super nice and actually came back to us and we actually met them again.

And they told us what worked, what didn't work, what they liked, what they didn't like. And then we just refined the whole thing again. So basically there was just a lot of back and

forth and a lot of discussions as well because of course, everyone didn't have the same opinion.

So we had to, you know, debate within ourselves what we thought was actually the best thing to do. Yeah. So then that's what we basically did for the whole process. It was intense and a lot to do. You had to be basically focused and because a lot of things came up and you want it to help with everything, but you had to kind of focus on what your goal was basically. Yeah. So yeah.

Daniek Bosch - Host

Sounds like you put in a lot of work and that you also learned a lot in this process. Yeah, I really like that you mentioned this iterative way of working that you go back and forth, and you get the input from the people you are designing for. And you go to find all the crazy ideas and then go back to them. Do you, does this work and check? So that's really great approach and nice that they were able to provide feedback as well.

Mavi Chincúra

Yeah, exactly. I think that's one of the things that we learned the most is just, you know, *nothing comes, right the first way you do it, especially with these social challenges and everything, like it involves a lot of different opinions and everything.*

So you have to always, when you're not always right as well, you have to accept that some things you might be sure that it's going to work. But then you go and you test it and then people are like, No, no, no, this is terrible. So yeah.

Daniek Bosch - Host

So that principle of failing fast, It sounds like you experienced that?

Mavi Chincúra

Yeah, we did.

Daniek Bosch - Host

How did that make you feel?

Mavi Chincúra

I think at sometimes it made me feel like I wasn't right for doing that thing.

So like I didn't have enough experience because of course like I didn't study something that was that's specific to the fenestra challenge. I was like, I don't know what I'm doing and everything.

But mostly I was also like open to learn and just open-minded. And I just wanted what we were doing to be something that people would take advantage of later.

You know, we would, we didn't want to do something that in the end people will be like it didn't help at all. We wanted to make something that was actually going to be useful for people's lives later. So I think that's what we kept in mind and that's why it was easier to accept like that. We were wrong, you know, and also allow yourself to be wrong on the first try.

Daniek Bosch - Host

That's a kind of normal, not to get something right in the first time. And what would you think is the top thing you learned in this class?

Mavi Chincúra

So I think the most important thing I learned throughout the whole experience was that like listening to people is just what will make your project work. Because in the end, those people are the ones that are going to use your projects and it becomes a very specific thing, like very targeted to that set of people. But I guess it's going to make at least like it will guarantee a bit of a percentage that it works, you know, because those people are the ones that were doing it for. And of course, like as I said, like as if you look from the fenestra side, you see that there are problems, but you might don't really know what is happening and why this is happening.

So I think the empathy phase was the one that I enjoy the most and learn from the most. Because you could just, there were reasons for why it wasn't working that I could never have imagined.

So I don't know, listening to people and so just asking them straight up. Like sometimes people are bothered by that. But mostly if you ask like, what is wrong, like how can I help? Like what should I do? And also understand why? It makes it all much easier. And then you can actually understand and take that understanding into all of your other actions. So I think that was the thing that I learned the most, like just listening to people and actually understanding them is key to making something for that because that makes sense,

Daniek Bosch - Host

Yeah, sounds like a valuable lesson that you can also maybe take into your bachelor research project or your master thesis when you come to it.

Mavi Chincúra

So yeah, I think so too. Yeah, definitely.

Daniek Bosch - Host

And Emily, can you share with your project?

Emily Oxenaar

Sure. So I work together with the Leidse aanpak. That was our our challenge owners. And they are an organization which is, works in Leiden, I think also in the Hague. And they have an ongoing project which is trying to target the transition between primary and secondary school and having equal opportunities within that transition period. So they see that transition. A place where there can be room for certain children having more opportunity than others and they really are trying to have that be more equitable.

So the goal of their project and what they posed to us and our group was to try to help have the students and the parents have more agency over the transition because they, in their research, they found that there was a lot of weight which was just put on the students testing scores and on the teacher's selection advice.

And when the teacher's advice and the test scores is weighed so heavily, There's also a lot more room for say, bias from the teacher's perspective on that student. And then also for the testing scores to just be such a narrow way of showing the students capabilities for their future. And also because it's at such a young age, at the age of 12 and the Netherlands, it can be even more of a place where it can be inequitable and that the students don't really have a chance to show their true potential or there, yeah, their potential in the future. So we were asked by them to help the students and the parents have more agency over the, over that period.

So then we went into design thinking and we use for the empathy phase. We also did a bunch of interviews, tried to reach out to students and teachers and parents. And what we found is it was really difficult to find, to reach parents.

That was the hardest demographic to reach. But we did reach students and teachers through just reaching out through our own network. So asking like friends who'd been through the Dutch system or for some of us who knew a lot of teachers, we got in touch with teachers.

And then we're also lucky enough to work with a few researchers who are at the Leiden University who are working together with the Leidse aanpak. And they had done a bunch of interviews with students in the transition period. So they were generous enough to share those interviews with us and we were able to watch those and also use that as part of our empathy phase. And what we found when we kind of put all those things together was that, that was like the define phase of the process where we tried to define like, Well, okay, what is the problem? What did these different people need?

And what we found is that the teachers were also very motivated a lot of time to like they saw the problem, they wanted to help, but they just were so overburdened they were already over worked. They didn't had a ton of time. There really wasn't place in the budget to do anything. But they were motivated a lot of them.

And then for students, what a lot came back with was that they yeah, they didn't feel that there was enough of themselves that was shown in the selection process. And really another important thing was that the language barrier was a huge, So like understanding of Dutch language and reading and writing was a big barrier because if you don't have a reasonable grasp and you're graded on the test and you're graded on a selection. That's a huge barrier in the way where you might have other sorts of talents or skills. And that's just not coming through if that's in the way. So we saw those things and we tried to kind of brainstorm how we would come up with something because we saw that there was communication was lacking between students and teachers.

We needed something that was kinda efficient for teachers. And also that would show the student's point of view more.

So we kind of, we came up with one idea that was like, oh, maybe we could, They could, the students could write sort of a letter to themselves as a way of reflecting and like also showing more of themselves. But then we also, but that doesn't really have the communication aspect. Then we kind of thought, oh, well maybe we could what if we made the letter also part of like material for an existing meeting between students and teachers.

So that was how we kind of came up with this idea for a letter. That was also a tool for communication. And we actually ended up iterating on that and after a few different versions, we went into our final one with that. So what we did was we constructed a few guiding questions for the letter.

So and that was what we did in combination with the teachers that we were interviewing and then also with our challenge owners, like what do you think would be helpful and what kind of questions to ask. And then that would form the basis for the students writing the letter. And importantly, we wanted to make a written and an audio version of the letter so that students could either choose to read the letter or to listen to it. And then also that they could

give free form responses so they could write it, they could make an audio version, they could draw, they could do mind maps. So as to kind of give them more freedom to show the different parts of themselves.

And so this letter, they would, the students would write the year before the transition period. And then they would open it before they had a meeting with their teacher. And then in the meeting with the teacher, the teacher would use that letter as kind of just material for asking the student questions about themselves with the hopes that then they would have more insight into the student when they're making their selection advice. And then the letter hopefully would be like we encourage the students to take the letter with them throughout each year of school so that they can continue to look back and reflect their performance and just on themselves and their desires and their hopes and their potentials for themselves.

Yeah. And that was kind of our whole yeah, we let it be tested like we just showed it to the different teachers and students and then tried to refine as much as possible from there.

Daniek Bosch - Host

Well, it sounds like a really cool process on a nice solution to very, very complicated problem.

Emily Oxenaar

Yeah,

Daniek Bosch - Host

I like that you also saw this as an opportunity to tackle this problem of making the transition and the selection easier. But also something that the students use when they move on to secondary school. And they want to reflect on where was I in when I left elementary school and use it for themselves as a way that they can see how they've grown in the, in the last few years.

Daniek Bosch - Host

And what was the most memorable moments for you in this class?

Emily Oxenaar

Well, I think I have to agree with mavi that the empathy phase was for me my favorite part and the most memorable. It's something that I'd never done in school before. And I really appreciated it like you had to be very proactive about it. You know, you had to reach out to

people. You had to really go for it. And then also just listening to people was so I mean, I was really grateful for people who shared their experience and you just learn so much from it. And it's a skill that I think maybe is not valued enough or taught enough in university and it was I really, yeah, you learn like, especially when we're talking about inequalities, we learn about the kind of overarching problems.

And you look at the different graphs of what's, where and how is this and all that. But when you really talk to people, it's also, it's, it's personal and it shows up in very personal and emotional and social ways. And that was really eye-opening for me to see and to experience.

Daniek Bosch - Host

In the guest lectures you had this really the broad overview of the topics around inequality and all the research and the theories around it. But when you did your project really at the micro level, personal interactions, people who are Experiencing the problems that are described in those big theories.

Emily Oxenaar

Yeah, I mean, we were also lucky to have every guest lecture. We had an academic guest lecture and then a practitioner. So that even in that, you know, you had this kind of balance between learning about the theories and the methods, but then also having someone who was working in the field and could say, this was how this one person experience or this was how I, what I faced when I tried to face this conflict or work with this conflict. And then with the design thinking, we got to actually face them and, and apply certain stuff. So, yeah, that was really great.

Daniek Bosch - Host

For the final question. What would your advice for teachers be when they give a course with design thinking? And also, what's your advice for students who take a course with design thinking?

Emily Oxenaar

I guess for teachers, I would say like stay flexible with the idea of how you would, how you would work with it. I think that there's a lot of different, even just elements from design thinking that can be beneficial even if you're not going to use the whole thing. I think there's a lot of elements like even like the empathy phase or like the practice of trying to take on different perspectives, I think is just a really valuable method of approaching a topic.

And I think that, that even for teachers who say, Yeah, I like the idea, but it's a, it's a huge thing to just put, apply a completely different method in my class. Like maybe even if you just applied a few elements or took inspiration from a few elements of the design thinking. That could be, that could be really cool.

For students. I guess I would say also, like stay open-minded with it.

I think like Mavi mentioned and I also face is that it can be really intense and it can be like time-consuming and it can be difficult. And you often feel like you're failing and you don't really have, especially when you're dealing with more complicated issues. You do feel like, well how I'm just not equipped to do this, but I think that's also a good lesson that like you also said, Mavi, is that like you're not going to solve the whole thing. You know, you're not gonna solve the whole problem. But there is something maybe that you can, that you can provide that's helpful.

Do you have something to add to it.

Mavi Chincúra

When it comes to teachers. I would say like, I agree with Emily. Like even if you get just some elements from design thinking and include that in your, in your class would already be great. But if you're trying to make the whole thing you know, so like make, turn your whole class into a design thinking class. Then I would say, my advice, what based on what I saw, what Bram did was

be a guide mostly. So every group did experience a very different design thinking process, I guess like within the whole course, none of the groups had the same experience, of course.

And so he had to basically be there and guide each group through what each group was needing at that point. So for example, he would have we would have the classes, of course, every week or every two weeks. I don't even remember every week. Yeah. But we would also have meetings with him like that, just a group and him. And then there we could tell him like, What was going right, what was going wrong? What was our plan for the next few weeks? What like what were we doing? If he's he saw that it was just going great, he would just be there and like help us and comment when he needed. But mostly he would just also help like when we were feeling stuck. Because sometimes like I heard from some groups that like getting interviewees. So getting people to interview in the empathy phase was very hard. So like he had to help in that sense. So are also like when it came to the prototype, for example, we didn't know how to do a website, right? So when we asked him, like, do we really need to make a website because we have no idea how to program stuff. So, the solution

we came up with was basically put the design in PowerPoint, which is like, it doesn't work, of course, but it was a prototype. So, you know, he just had to help us and make sure that we were doing Okay.

So I think if you are a teacher that wants to invest in design thinking, basically be there as a guide and let students also flow.

Because I guess

My advice for the students is like be as proactive as possible.

Because with design thinking, it's not like, you know, the teachers just going to put everything on you and you're going to just have to filter all of that knowledge and gather all of that. Like you're going to have to go after it yourself. So you're going to have to find a way to contact people to interview. You're going to have to find a way to meet the group, to have a brainstorm about the ideas that you're, that you want to prototype. So you have to be very proactive in the sense that you have to go after the whole process. And of course, the process is going to guide you through it as well as your teacher, but you have to kind of go after it yourself.

But I think in the end it's very rewarding because you're looking back at what everything that my group and I did. I feel very proud of it

because I just, I'm like, wow, like we actually, because it wasn't out of nothing as well, like we gathered knowledge and did something. So in the end you feel very proud of what you do. But as we already said, like it's a very intense process and you feel like sometimes you feel like you're not suitable for it or you just, you know, you're like, Oh my God, this is never going to work. But mostly in the end it works out and you find a way out and I think is just you just have to kind of persist and go after it. Like I think it's just super nice in the end.

Daniek Bosch - Host

Great. Yeah, I hope that encourages students to keep going even when they get stuck in the process. Thank you both so much for this nice interview and you sharing your experience on the course

Emily Oxenaar

Thanks for having us here.

Daniek Bosch - Host

This was the fifth and final episode in this mini-series on design thinking in education. I hope that these conversations have inspired you to use some of the design thinking

principles in your own class. On the CFI websites, you can find more information and resources to start your own design thinking journey.