Design thinking in education
Episode 3

Daniek Bosch - Host

In this episode, I talk with Bram Hoonhout a coordinator of the Honors College of Leiden University. We talk about the challenges for teachers in teaching design thinking, but also how you can use design thinking to design your life. Welcome. Let's dive in with the first question. Can you give a short explanation of what your course tackling inequalities in the 21st century was about.

Bram Hoonhout

Thank you. Yeah, sure. So this was an honors class for bachelor students revolving around various types of inequality, such as race, ability, gender, and education. And the way in which these different forms of inequality intersects. As an economic historian, I was always fascinated by the work of Thomas Pickety a on economic inequality and how this is sort of baked into our society. And the work of Wilkinson and Picket on how this economic inequality has all sorts of social effects as well. But I thought I need to broaden this to include other dimensions of inequality as well.

So my aim was to let students learn about the relation between these different forms of inequality, but also to make a contribution to reducing inequality. So they're not writing a paper that it's all bad and that someone should do something about it. But they could experience what it's like to be involved in reducing inequality at a small scale.

So I invited range of guest speakers, both from the university and people with practical expertise to talk about their experience, as activists or teachers or whatever. To tell about their experience. And the students then worked in groups on a challenge that was provided by societal partner, such as Leiden Municipality or the Diversity and Inclusion expertise office of the university or the fenestra office, or an equal opportunities in education project that's currently running in Leiden. And the students use design thinking to tackle these societal challenges.

Daniek Bosch - Host

And can you give a concrete example of what a challenge was that the students worked on?

Bram Hoonhout

For example, one was from the fenestra Disability Office, which is the office that provide students with learning disabilities or other special needs at the, at the university in succeeding in their education. And there the question was, how can we improve the information flow for students? Because students sometimes have difficulty finding the information that they need or even being aware of that something like fenestra exits to support them or well to get in contact with the right persons. So the students set out to talk to a lot of students currently involved in fenestra and having various types of learning disabilities. To figure out, so what is that they encounter? What does that they need? And for example, they learned that students with dyslexia often prefer to read things by underlining it, or read things from a screen in a dark mode. But that's not possible at our current university websites. So then they had to improvise and see if they could find other ways. So they offered a set of reading tools that can be implemented at the fenestra website. But they also came up with a new division of the websites to make sure that people can find their help for their specific situation much more quickly and don't have to scroll to endless pages of texts before they can find what they need. So I think they made it much more accessible. And that's the feedback that they got from the students as well.

Daniek Bosch - Host

Sounds like a good improvement that the students introduced for other students.

Bram Hoonhout

Yeah, exactly.

Daniek Bosch - Host

And I'm curious to hear about what inspired you to integrate design thinking in education. Or how did you come across design thinking?

Bram Hoonhout

Yeah, this is always a bit by accident, of course how these things happen. I learned about it through Annebeth Simonsz, a former colleague of mine at the honours academy because she had been using design thinking in a class in a pre-university program that the honors academy also offers. I was inspired and I started to do some research.

And i thought this can be a very interesting way of approaching problems, particularly these kind of societal entangled, wicked kind of problems. And while I, I had always enjoyed teaching when I was a lecturer at history department.

And I thought, well, cause an inequality is a very current theme and that would be nice too if I could teach that in the honors program as well. So then I put those two together. So I think design thinking was the kind of methods that would suit course like this. Because what often you might think that you know the solution to a certain problem.

But I really appreciate in this method that you are, you need to talk to the people first to really understand what the issue is about. And then design something together that is meaningful for the people rather than something that you impose on them as the one with all the wisdom.

Daniek Bosch - Host

So other teachers inspired you to, to adopt this approach also. Yeah. What kind of classes do you think fit this kind of methods in teaching?

Bram Hoonhout

Yeah, well, it depends on the goal you have for your class. If it's more project-based, if it's aimed at while making a societal contribution. I think those kind of classes are very well suited to use design thinking. Problems that you don't know the answer to beforehand. And that involves talking to people to find out what it's really about. It's a different way of thinking than the sort of research thinking that we often do at university.

Where you often start with a problem or question and then you analyze your way forward and do experiments. And of course, you also do research and experiments and design thinking. But you start with broad idea of a problem. But the, yeah, the key thing is more to do need-finding first. And to figure out together with the users with, with people you want to design with and for what the problem actually is. And then only then you start to define what you really want to work on and then build your way forward.

Daniek Bosch - Host

Yes, So in, science, the starting points is more the curiosity of the researcher and the pinpoints of previous literature or previous research. And with design thinking, it's more the problems of the people you are trying to solve something for that, correct?

Bram Hoonhout

Yeah. I think that's a that's a good summery.

So it's a different way of approaching. It's not a replacement. I don't think you can design think a new type of mitigation. But for yeah, for specific kinds of problems, it's, it's a very useful instrument.

Daniek Bosch - Host

How do you think design thinking relates to the scientific education?

Bram Hoonhout

I think it's a different, a different way of thinking, a different tool you can have in your toolbox. I don't think it can replace the scientific education that we do at the university. Because what we train students to do research and become researchers in the specific field. But if you can offer this as a different way of thinking, as a way of stimulating creativity, as a way of engagement with society. In that sense, it can be a valuable addition to curriculum.

Daniek Bosch - Host

Yeah, and if we go back to your course, what did you think was the most challenging part for you as a teacher?

Bram Hoonhout

Well with design thinking. Of course, one of the key things is that you don't know the outcome and that it's likely that you get stuck along the way. So for me, that was no different. In a sense, it was difficult because I didn't know things would work out the way I had anticipated. And that was an experiment.

That's what we're supposed to do with the Honors Academy to foster education innovation. So there were a couple of things I think that did not go as well as I hoped. Particularly because some of the challenges when what turned out to be not as open-ended as they should have been. Which meant that some teams had to work towards a certain outcome. That's a challenge owner desired. Rather than they could free experiments and go into the direction that they wanted or discovered. And that cause some frustration. Because it felt like they had to choose between doing design thinking, right, and doing the assessment rights for the, for the challenge owner. Yeah, so that was that was hard and some they struggled. I think in the end, they succeeded in applying design thinking to certain parts are still produce an end result that was refreshing and exciting for the challenge owner, but still in the realm of what they wanted. But for me, I've learned that in the next iteration, it's important to pay really close attention to the design of the challenges. To what they want to achieve in the course.

Daniek Bosch - Host

So it's a challenge for you as a teacher to cope with the insecurity of, okay, we really don't know what the end result will look like, but that's also the challenge for the challenge owners

so that people will bringing the challenges. That this is a really different way of working where usually you think we, have a problem, this is the solution. Let's go for it. But when you use design thinking, you really start at first tried to fall in love with the problem instead of the solution to not get fixed on one solution in the beginning.

Bram Hoonhout

Yeah, exactly. And I think it's logical that for a challenge owner, that they're not familiar necessarily with the design thinking process. For them, It's an experience as well. And of course usually you have some clear goals and minds of what you want and you want a training program or you want new communication guidelines. And that's the product that you want to see, that it's a different way of dealing with it to say, well, maybe that's not the desired outcome and maybe we need to design something different.

Daniek Bosch - Host

And what was one of your favorite moments in class?

Bram Hoonhout

Well, I think the final presentations were really nice because most of the challenge owners were there and the students could present what they had done.

And then you see that even the teams that had been struggling had come up with really cool things at really put the energy and creativity and work ethic into practice. And produced some really cool results and I think all the challenge owners we're very happy with what the students produced. And I was very proud of them that they produce things that have real value that would otherwise not have come to pass.

Daniek Bosch - Host

And do you think compared to when you were teaching history and to this class, that students engage differently with this type of class?

Bram Hoonhout

Yeah, that might depend on the student as well because well, students can also be really involved and enthusiastic and go all in for a research kind of project. So that's, I think there's a similar vibe and energy that you might get with the regular academic class.

I think in this type of class, what was really motivating for the students is the they we're actually producing something that was supposed to be used and was, but there were

making a contribution to society that they are not writing a paper that will be wrapped and then put in a drawer somewhere.

And in a sense that motivated them to put a lot of hours because I think students really worked hard for the five EC that they receive for this course. And that's why that's not always the case in the course that you teach. And sometimes students complain that they have to work hard and I think some of them complained as well in this course. But still the fact that they were working on something real motivated them.

Daniek Bosch - Host

You have now got a bit of design thinking bugg and already also integrating it into a next project. Do you want to share something about your comenius grants for the Designing Your Life project?

Bram Hoonhout

Yeah, sure, yeah, So when I was researching this design thinking idea, I came across this idea of designing your life because there's a TED Talk by Bill Burnett from Stanford University that you encounter quite quickly if you do some research. Because this, this project at Stanford, one of the most popular courses, I think there, called

Design your life in which they use design thinking to apply to your future. So students they empathize with themselves to figure out what is it that gives them energy or drains energy? Define the problem. So what are the things that I would like to work on. They ideate, they brainstorm about different futures, different varieties, different lives they could have in which they would be happy. And then they prototyped the different futures.

Because they say, well, the idea is that there are people living the future that you might want. Because there are people who are, I don't know, Policy Adviser at the government or people who are a VET or they are working in a hospital and you can you can talk to them and figure out, well, what is it that you're doing as a policy advisor and what are the hardest part? What it's what's nice about it. How did you get here? And in that way, get a taste of what their possible future could look like. And the ideas that, well, by applying this method of design thinking students will be less stressed about their future. Because what you often see is that students work incredibly hard at well for attaining a fantastic CV with all sorts of extra curricular activities and be super competitive for the job market. On the one hand, but on the other hand, are still anxious about the job market and stressed about it, or will I get the job that I want? What if I don't? If I choose one thing while I not close off all the other interesting options that are otherwise might have, how do I choose? Yeah, it can be quite daunting and stressful. And often that means that students don't really do a lot of preparation for the future. And then it's just graduating and then jumping at the first

opportunity that they have. And that's what, that's not the best way of designing your life. So this way we try to make it less stressful and build the confidence final, setting the bar low, succeeding. Building your creative confidence that you will be able to go to design your future. And in that sense, have students face the future with more confidence. Basically says,

Daniek Bosch - Host

It sounds like a way to give students more direction into where they want to go in the future, tackling this insecurity of what will my life looked like after I graduate. I think them already be inspired by other people who've done it before them.

Bram Hoonhout

Yeah, and of course,

this question, what do you want to be when you grow up is something that we've all been asked a lot and I still don't know what I want to be.

And I think that's an answer that changes every well, maybe five years, a few years, whatever it can change all the time. So if you can hand people the tools to navigate their way, I think it can be a very powerful contribution.

Daniek Bosch - Host

I'm curious to hear more about when it's running. And to round up what advice would you have for teachers who want to use design thinking or design thinking mindset in their class?

Bram Hoonhout

I think that like all educational innovation, it takes some time, of course, to redesign your course to launch this for this new methodology. But I guess it's most important that you make sure that Design thinking is the right fit for what you want to do.

As I said, it's great for working on a societal topic. But it's no use if you want to teach statistics or my field previously. If you want to know more about the history of slavery, for example.

You might be useful if you want to investigate how the history of slave we can best be remembered or best be taught, what it means to certain people then you can use it, but otherwise, perhaps not so much.

So you need to be sure that it fits, fits the goals of your course. And of course, you have to be willing to let go of the control and accept that questions might change along the way that the product is something that you cannot predict.

So you have to embrace the process and accept that it's messy and chaotic. But I think that's a nice element as well because that's where a lot of the learning takes place too.

Daniek Bosch - Host

Yeah for you as a teacher and for the student.

Bram Hoonhout

Yeah, exactly. Because of course, the things that students will be working on once they graduate are often complex and messy problems, rather than them neatly defined problem set. So in that sense, it's a good preparation for the future career.

Daniek Bosch - Host

Thank you for your insights into the course tackling inequalities in the 21st century. I hope we've inspired some teachers to take a first step with design thinking in their courses.

Bram Hoonhout

Yeah, thank you.

Daniek Bosch - Host

In the next episodes I will talk with Annebeth Siemensz about the pre-university where High School students tackle societal challenges with design thinking.