



## Outi Haatatein

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**Annalies Corbin:** [00:00:12] Welcome to Learning Unboxed, a conversation about teaching, learning, and the future of work. This is Annalies Corbin, Chief Goddess of the PAST Foundation and your host. We hear frequently that the global education system is broken. In fact, we spend billions of dollars trying to fix something that's actually not broken at all, but rather irrelevant. It's obsolete. A hundred years ago, it functioned fine. So, let's talk about how we re-imagine, rethink, and redesign our educational system.

**Annalies Corbin:** [00:00:47] So, today, Learning Unboxed is once again on the road, and in this case, overseas because we are going to have a wonderful conversation today about a really, really cool program that's happening in Finland. And joining us today is Outi Haatatein. Did I get that right?

**Outi Haatatein:** [00:01:06] Pretty close.

**Annalies Corbin:** [00:01:07] Pretty close.

**Outi Haatatein:** [00:01:10] Hello, everybody. I know it's a very difficult name, yes.

**Annalies Corbin:** [00:01:13] Oh, well. And we even practiced beforehand. So, my apologies, but I'm very excited to be having the conversation with you. Outi is with the University of Helsinki. And interestingly enough, for those on the program, when we were talking about really amazing, transformative education, it's not, all the time, that we talk to somebody who's tied to a chemistry background. So, you're with the Chemistry Department at the University of Helsinki and a doctoral candidate working on a program with the LUMA Centre Finland around a program called the StarT. And we're going to just dig right in. So, welcome to the program.

**Outi Haatatein:** [00:01:54] Thank you, Annalies and thank you for the invitation. I graduated as a teacher of chemistry and mathematics before I continued my path at the University of Helsinki as a doctoral student. And I started working at the research team of my supervisor and professor, Maija Aksela, who is also the director of LUMA Centre Finland, and she actually was instrumental in establishing the first LUMA Centre almost 20 years ago here at the University of Helsinki.

**Annalies Corbin:** [00:02:27] So, why not, for our listeners who don't know, before we get too far into that, tell us about what exactly is the LUMA Centre? What does it intend to do?

**Outi Haataein:** [00:02:35] Yeah. LUMA Centre Finland is a network of Finnish universities, and Finland itself, a small country with over five million people. LUMA Centre Finland is a network of Finnish universities. Almost all the universities are involved in what we do. And the aim, what we want to do is to inspire and motivate children and youth into mathematics, science, and technology. And we do this through promoting the latest methods and activities in a way. It can be informal, the science clubs, or something like that, or through formal education. And this is something that we do, in a way, with the StarT program.

**Annalies Corbin:** [00:03:24] And did you envision the StarT program that this is really sort of your brainchild or is this something that sort of already existed and you're just doing additional work through it and on it? So, help us sort of understand that progression as well.

**Outi Haataein:** [00:03:39] Not only do we want to inspire, motivate children and youth, but we also want to support lifelong learning of teachers. And we want to support teachers in a way from early childhood education to university. So, all the levels of education. And this is something that we started to do with the StarT program and it was initiated in 2016. I started to work at the StarT program in January 2017. So, pretty early on.

**Annalies Corbin:** [00:04:09] Pretty early.

**Outi Haataein:** [00:04:10] So, in a way, I can say I was already there from the first season on, already, in a way, doing it with Professor Maija Aksela, who is, in a way, the inventor behind the idea of starting this program as something we want to offer through our LUMA network, internationally and nationally. So, I've been here doing this and I was very happy to start working at the StarT program because, really, if you think of what I wanted to do when I graduated as a teacher, I was really enthusiastic about the idea of developing teaching. And starting, we have to have these new ideas of teaching this in a way, student-centered approach of education.

**Outi Haataein:** [00:04:58] And I wanted to learn more in a way. And I was always interested in understanding how we can incorporate these new ideas into education, and how I can do it, and how I can support others to do that. So, I was really happy when I was offered the opportunity to continue at the university and when I was offered this position as a project manager and StarT because I can develop this program together and with Maija, and under the supervision of my, and also, collect all my data and do my research under this program, so I know what it really is. It's that for me, a very good opportunity.

**Annalies Corbin:** [00:05:35] Well, and I think pretty exciting for the world too, and certainly, for our listeners in the US, we often look to Finland is considered a leader in global education in many, many ways. And there are some pretty distinct differences between the way the educational system in Finland and in many parts of Europe work compared to what's going on that we see in other countries around the globe. And so, I'm really intrigued around the idea of the starT program as it relates to the fact that you already have a very robust, well-developed concept of education that's very different than lots of places. So, help me understand the sort of the value add of this program versus what was happening prior to.

**Outi Haataein:** [00:06:27] Well, if we think of the Finnish education system, indeed, we have very highly educated teachers. Most have a master's level degree from the universities. And one, in a way, what is, in a way, special is the autonomy of the teachers in Finland. So, we do have a national curriculum, and actually, the newest was implemented in 2006. And in a way, this new curriculum is pretty much emphasizing the same things as everywhere, I think, around the world and internationally.

**Outi Haataein:** [00:07:06] So, we want to make the students more active learners on this student-center approach and, in a way, constructing knowledge by themselves and together. This is, in a way, what's been

happening and the reason why we wanted to start the StarT program in 2016 with a new curriculum coming. And the situation in Finland was that we have very qualified teachers and they have the autonomy to choose, in a way, their own teaching methods and teach the way they want because our curriculum is, give some guidelines, but it isn't really strict.

**Outi Haataein:** [00:07:47] So, it's not telling them what they have to do. So, they really have a lot of freedom in choosing their methods and objective, and making the course by themselves. So, with a new curriculum coming and a new idea of emphasizing a student-centered education and doing more collaboration. And this is something that is, perhaps, new to the Finnish education system we have. The research says that the teachers in Finland are not really familiar with collaborating with colleagues. So, they do their work.

**Annalies Corbin:** [00:08:24] Because of the autonomy? that they've had for so long, maybe?

**Outi Haataein:** [00:08:27] Perhaps, yeah.

**Annalies Corbin:** [00:08:29] Interesting. It's a really interesting phenomenon, though, isn't it? Yeah.

**Outi Haataein:** [00:08:32] Yeah. So, in a way, we saw this, and this is something that the professor, Maija Aksela, in a way, saw internationally and this idea, this is something that she wanted to bring to Finland, this idea of collaborating and learning together. And that's, in a way, the essence of StarT program. So, we wanted to bring that from abroad to Finland, this idea of an end through project-based learning, then how can we learn together and share what we learn. So, that's, in a way, why we have these two aims in StarT program. We want to support the teachers and make it possible for them to share their knowledge and ideas. And then, we want to promote the children and youth in what they do in their projects.

**Annalies Corbin:** [00:09:20] How does the teacher piece work then in terms of, so if a teacher or school becomes part of this program, what exactly is it that they do or how do they share? How do you grow collaboration in this environment?

**Outi Haataein:** [00:09:35] We have a few different things that, in a way, we are doing now. I think I would say that. So, do you say that it's a flagship? Something that you're mostly known for. It is the international StarT competition that we have. So, in a way, every year, we organize this competition where you can apply and tell us your ideas. And for the teachers, then they would tell their practice. They would, in a way, fill in a form and tell us what they do and how they do it. In a way, it's kind of like a teaching recipe of what they do so that the others can take it into their own teaching. And we are, in a way, promoting these throughout the year. And of course, it's a competition, then we have a jury who picks the best ones. And then, as a main prize, you can come to Finland and visit us.

**Annalies Corbin:** [00:10:38] We should apply. I want to come to Finland. I haven't been to Finland yet. So then, maybe for some of our listeners in other parts of the world, so it sounds to me, a little bit, and I could be wrong about this, so please correct me if I'm incorrect, that what you're talking about is the establishment of some type of professional learning community, this collaborative sort of approach where professionals, your educators have a cohort, if you will, or a community of practice that they can, A, provide information into, but also pull information back out of, and then directly apply it with supports into their classrooms. Is that close?

**Outi Haataein:** [00:11:24] Yeah. That's what we are trying to build more and more, and what we offer. So, in a way, it's not only the competition, like I said, it's what we're known for, but also, with our web page. And we have free online courses for teachers, in a way, where they can come together and really get the support, and also, share ideas through those platforms. So, that's, in a way, what we tried to do. And also, on a national

level and this is something that we are trying to build now, is through partner countries, so that we would not only have it in Finland, but in Finland, we have, through our network of LUMA centers, we can offer local support.

**Outi Haataein:** [00:12:08] So, really, teachers cannot only virtually be on the course and share their ideas, but also really meet each other on a local level, collaborate. And we have this, in a way, we call them StarT festivals, where you can come together, and celebrate, and share your learning, and share your ideas. And this is something that, in a way, we see. It really is something that always is the highlight of the year for everybody participating, because when you go to a festival, and it's a celebration of what you've in your school, it's also for the students and for the teachers, in a way.

**Outi Haataein:** [00:12:48] And you see others who have done similar things and have kind of like made their own projects and have other ideas about teaching. So, it's very motivating and very inspiring, these happenings. So, this is something that we are hoping that we can share and have in other places, too. And for this, we need to build, in a way, a network of partners. And we have a couple of countries where we have this kind of collaboration nowadays. And so, the teachers can come because it's available, this online platform, to do the training. So, can the teachers come from anywhere in the world?

**Outi Haataein:** [00:13:30] Yes.

**Annalies Corbin:** [00:13:30] Anywhere in the world. And so, that's a really interesting research phenomenon. So, I'm putting on my doctoral hat, right? And I'm thinking about all the variables that come to the table when you have sort of an open call around practice, and you're studying this. And so, that's a big lift from a research standpoint to sort through all of those components to really understand where the influencing mechanisms are coming from. So, I applaud you for that, because I'm in awe, actually, because that is, in fact, a big lift.

**Annalies Corbin:** [00:14:03] Typically, when we think about research-driven projects, we're trying to keep tight control on a small endeavor so that we can fully understand it. But I suspect, certainly, from my own biased mind, that that entire sort of ethos that you laid out sort of embraces what I always attribute that the folks in Finland in education, they're fearless. And so, I think this particular research piece sort of embodies that for me. So, that is absolutely awesome.

**Annalies Corbin:** [00:14:36] How does the StarT program and the work that you're doing with the teachers that are coming in, how does that then translate back into the families in the communities? Because part of what I was reading about the materials that you sent, it's really clear to me that there is a very family community at the student's sort of impact and approach outcome and desirability about this. So, how does what happens inside of the professional community really find itself at the ground, I guess, if you will, with the teachers, and the students, and the families, perhaps?

**Outi Haataein:** [00:15:13] Yeah, it is through the StarT program. What we do, it's project-based learning and what they do, in a way, they can do it, what we promote, we call them learning communities. And we promote this idea and support the idea of everybody participating and doing projects in a group. And this is a threshold-level of work in a way. What they do, if it's at the teachers, the teachers do with their students this kind of like projects. And what we try to promote is really through examples made by others, or other ideas, what we have in the learning, and then in the courses.

**Outi Haataein:** [00:16:04] So, we offer ideas and support in a way to participate, like you said, parents and other organizations in the near community. So, we have this kind of idea because to do things together, so really what we want to promote, in a way, this kind of skills to collaborate on different kind of levels. But as I

said, it really is, in a way, what we can do. And what we can do to make it is to keep the support, in a way, and give the examples.

**Outi Haataein:** [00:16:38] But it really is the teachers and everybody, they want to go to somebody who's organizing this in a learning community. Usually, the teachers, that really is the driving force on the threshold-road level to making it happen. And that's why, in a way, for us, it's so crucial to support that person. Most of this is really, StarT participants are schools and students, but we also have families ,and helping groups or participate in progress. Science clubs, for example, participating and doing these projects and participating.

**Outi Haataein:** [00:17:15] I would hope that we would get that more and more to really—to us, in a way, it's something that to have more support for them to—because most of the participants are coming from schools, at various-level schools. So, we have a lot of support and colleagues, can share ideas for the school system, for the families, and helping groups. I really hope that we get more participants from them, too. So, really, the more participants we have, the more ideas and more support in a way. And we get that community, we have to share ideas and do things together.

**Annalies Corbin:** [00:17:53] So, I just want to make sure that I fully understand, because it sounds to me like an awful lot of what happens inside of that professional community is that it's very participant-driven. So, the teachers are coming in with ideas, they're sharing those ideas. But from a sort of foundational level, is the StarT program, so the folks teachers can come in, they can take a course online. What's the gist of what the program itself is teaching its participants versus what the participants are bringing into the program? I guess I'm just trying to understand sort of the nuts and bolts of the—you mentioned project-based learning.

**Annalies Corbin:** [00:18:29] We advocate that a lot. Everything that we're doing with STEM, for example, we know that that very applied, hands-on, very learner-centric approach is the best approach. And so, what is it when a teacher comes into the course? What are they getting through that course in addition to the collaborative environment? That part I understand, but what are the foundational pieces that the StarT program itself is trying to advocate for, train with, or provide some additional understanding for the practitioners, I guess? That's what I'm asking.

**Outi Haataein:** [00:19:01] For the online course, there's a lot of research-based information and knowledge, and in a way, that's related to how you can do project-based learning?

**Annalies Corbin:** [00:19:15] Okay.

**Outi Haataein:** [00:19:15] Because a lot of research shows it. And it seems that even though we are doing this, project-based learning, in a way, it's a very promising method. There's a lot of challenges with it. And that's something, in a way, what we want to give to the teachers and how to avoid the biggest challenges in a way and to be aware of them so that what you do, actually, is then feasible in a way and it's less laborers, I guess. And yeah, you get better results with what you're doing, with the ideas you have.

**Outi Haataein:** [00:19:58] So, that's, in a way, what we want to promote with this, to offer them the research-based knowledge on how to implement project-based learning. And then, as we have hundreds of participants, and nowadays, we've had participants from over 50 countries, we have a wide variety of different kind of ideas. Well, I think it's one of the main ideas that most participants get, because there are different kind of ideas from different places and different countries, that you always learn something new and you have new ideas where you can develop your own teaching then.

**Annalies Corbin:** [00:20:45] Yeah, absolutely. And that is the beauty of the sort of diversified professional learning group, right? Because, again, you get so much. You can learn from absolutely everybody around you. And we train a lot in problem and project-based STEM as well. And I agree with you, it's, once you get good at it and you get your mind wrapped around that this is the way I want to, not just that I should, but I want to, the majority of teachers who work through those constraints and how hard it is because it is hard to get started that way, oftentimes, right?

**Annalies Corbin:** [00:21:19] But once they get there, what we have seen universally is that most teachers won't go back to the way they taught before because they recognize that it's more fun, it's more engaging, the kids could learn so much more. And quite frankly, it's less work for the instructor in many ways. Not always. So, there's that balance. But to your point, it can be tough to get there on your own. And I would think that the support structure, if nothing else, of the collaborative cohorted community makes all the difference in the world.

**Annalies Corbin:** [00:21:49] So, I'm really curious, since this has been going on for a couple of times, can you share with our listeners a few of what you think are some of those really great big ideas or implementations that you've seen that just make you go, oh, this is why I'm doing this, this is why I'm studying and researching this because something amazing happened as a result. It's kind of a loaded question. I can let you think about it for a minute. But listeners always would like to say, well, give me an example. What are you talking about?

**Outi Haataein:** [00:22:20] What amazes me are those projects, in a way, where the teacher really has the courage to step back and really let the students work. And you give them the freedom to explore the idea by themselves. You just support them and you get these amazing results. For example, we've had this weather ball or weather balloon.

**Annalies Corbin:** [00:22:52] Weather balloon?

**Outi Haataein:** [00:22:53] Yeah, weather balloon idea of sending them into space with these students and with the schools. And they started collaborating with the university, and then also, this organization to really build this kind of like weather balloon that can take measurements and pictures up there in the atmosphere. And they had to really research it. And they started to primary school students. But for the science, as it was, in a way, more secondary school science, they started to collaborate with secondary school students who actually made those kind of like preliminary measurements, and then they contacted to actually send the balloon up in the air. They had to contact the, well, how would you call this organization controlling the air traffic?

**Annalies Corbin:** [00:23:40] Yeah, air traffic control and all of those things.

**Outi Haataein:** [00:23:42] Controlling something sort of things. And they were really enthusiastic and wanted to help them. And then, they got this kind of some donation to really build the materials and the measurements and the good camera to take the pictures. And so, in a way, that kind of project where you can see that the idea comes from the students, and then it grows and grows. And you have this collaboration between students and other organizations. Everybody gets involved, who are enthusiastic, and learn from each other. It's not just students learning from each other or from the teacher, but really, it goes on and beyond their own environment. And really, everybody learning from each other and getting enthusiastic about something like this. So, that kind of thing really gets me going. And I really love this state, in a way.

**Annalies Corbin:** [00:24:40] From that teacher hat, yeah, that's the joy, like you said. That's really exciting. I've seen, many times, examples just like that. And you're right. That's exactly what happens. When you give the students the space. And I love that you started that with the teachers having the courage to step back

because that's the thing. It's not a message that you, as a teacher, can't lead that. You obviously can. You went to school, you have the expertise, all of that sort of thing.

**Annalies Corbin:** [00:25:11] It's really more stepping back and letting your students, A, explore, but also, making it okay, that if they don't get it right, to ask a different question, to get there from another side, and to learn, and to fail, and to modify along the way. But I've seen that as well. When you're able to do that and you can do that with confidence, and it's tough to do that the first couple of times, you've got to trust the system.

**Annalies Corbin:** [00:25:36] But you're right, the kids, the projects go from this to this because they're thinking, and they get excited, and they start asking questions you didn't even plan for, anticipate, and suddenly, it goes from a small little query to this endeavor that can be incredibly powerful and life-changing for the participants. Everybody, the adults and the kids in that scenario. So, what about that same question? And now, I'm going to ask you to put your researcher hat on. And from a research standpoint, what have you seen that you thought, wow, we have to continue in this work because what we're learning is so powerful as it relates to our practice?

**Outi Haataein:** [00:26:19] Well, what I'm doing is, I'm interested in this idea of integrated education, really, where it's not a new idea, making learning meaningful and really getting the learners active in a way of preparing them for the life. And school is not a test of bubble, but really, it should be connected to the society around it. And project-based learning seems to be a promising method for this kind of education, for science education. And if we think, especially in Finland, science, it's not a science subject, what we teach here. We teach chemistry. We teach physics. We teach biology.

**Outi Haataein:** [00:27:03] So, we have these different subjects that, in a way, they're not really connected. And so, especially in Finland, I think, we need this information on how can we make this kind of interdisciplinary learning and integrate learning to become more meaningful. And with the StarT program, I'm looking for the feasible models and methods. I get a lot of different kind of answers to that question, in a way, how can we do this in a meaningful way? And I get results from many, many different kind of educational systems from different countries. And like you said, I think I've got more questions than answers at this point, but that, as a researcher, I think it's more motivating than anything because you have this, who might this be behind some of these things?

**Outi Haataein:** [00:28:02] And how about these things that I've seen from this example and these results that I've gotten from here? So, really, I think as I'm starting, in a way, in my career as a researcher, it's mind-blowing to see this kind of the differences we're getting and the things that I can compare all these different methods and things to really get some answers from this. So, I think what is so motivating for me personally with this StarT program is because it really speaks to both level of things that I'm interested in, in a way, the teacher in me and my desire to promote this kind of collaborative learning, and then also, my desire to get answers, and really, research things.

**Annalies Corbin:** [00:28:57] Well, it's very exciting and it's a really intriguing program. And I wish you and the program nothing but a lot of luck. And I'm hopeful that as folks listen to this, they're going to say, hey, I want to go sign up and be part of that collaborative community. And we'll definitely make sure that we provide the links and resources, and hope that folks do that. But, Outi, thank you so very much for taking time out of your day and sharing what's happening in Finland with the rest of the world. So, thank you for being on today.

**Outi Haataein:** [00:29:31] Thank you. And I hope we get a lot of participants sharing their new ideas because that's, in a way, what we are about, to have new ideas and to share new ideas for everybody. So, thank you very much for this opportunity.

**Annalies Corbin:** [00:29:47] Oh, you're very welcome. Thank you. Thank you for joining us for Learning Unboxed, a conversation about teaching, learning and the future of work. I want to thank my guests and encourage you all to be part of the conversation. Meet me on social media @AnnaliesCorbin and join me next time as we stand up, step back, and lean in to re-imagine education.