

Leeds University Business School – Research and Innovation Podcast

Episode: Designing management and innovation courses for team-based learning

Speakers: Dr Lena Jaspersen and Tony Morgan

[00:00:00] **Lena:** Hello, this is the Research and Innovation podcast. My name is Lena Jaspersen, and I'm a University Academic Fellow in Innovation Management here at the Business School at the University of Leeds.

[00:00:10] **Tony:** And I'm Tony Morgan, I'm an associate professor at Leeds University Business School and I work very closely with Lena on a cluster of innovation practice-related modules.

[00:00:25] **Lena:** And today we are having a conversation about pedagogical research and business management and innovation, and how we combined our experience of working collaboratively, both in teaching and research, and how from prolonged engagement into the development of a module, we came to a really interesting pedagogical research project, which we would like to share with you today.

[00:00:45] **Tony:** So I should probably, Lena, before we get into the detail, give a little bit of an introduction to the module that we teach. So it's called "Innovation, Thinking and Practice". We've been going for six or seven years now, and we've developed it together. My background is in industry - Lena's got a lot of background in academia and research.

And we combined the two, really, to create an interdisciplinary team-based module. So we have small groups of students from different faculties, different schools, different genders, some UK, some non-UK, working together on real-world innovation projects, which we develop in partnership with local, national and international organisations.

And through a series of facilitated activities and out-of-class working, the students address their challenges, and in the final session, they pitch their ideas to a senior panel of industry and academic experts. So, it's partly about business and innovation, but a lot of it is also about key employability and life skills. So, team working, communication skills, commercial awareness. And one of the key ones for us is around resilience and managing change because, as we all know, the world is changing.

[00:01:51] **Lena:** And we were hoping to capture also the change in the sense of how students learn in our module. So, this module is not just [00:02:00] assessed with the view to having a little friendly Dragon's Den at the end of it, but students are keeping a diary about their learning throughout the module. And they're actually assessed in the end by an assignment report where they summarize their learning in different employability skill areas.

And I'm highlighting this here because it meant that over several years, we kept reading about the experiences the students made engaging with this module and what they learned. And there were really interesting accounts of almost transformational learning in the area of teamwork, like students writing about how they had always hated teamwork and suddenly they understood, actually, this is doable, this can be even fun.

Or students who felt frustrated at some point of the module because we gave them a little bit of pushback to kind of rethink their ideas and how they write about how this idea of resilience suddenly made sense and how you need to control your feelings sometimes to engage more productively.

So we sat on this treasure trove of lots of observations of how students collaborate in interdisciplinary teams. And the kind of learning they had taken away from that. And of course, this informed to extend our further development of the module. And every time we learned a little bit, every time we improved it. But it also raised deeper questions. And I think that was the point, Tony, you know, when we then had the idea of maybe doing actually some research about it.

[00:03:25] **Tony:** Yeah, and I think that's right. And I think one of the interesting things for me was, well, I think for all of us involved in the module, was the many different directions we could have gone because, as you say, there's sort of this treasure trove of student assignment papers, but weekly reflective logs and journals and so on.

So we decided to focus on a few areas. One is around reflection and some of the, sort of, transformative change that Lena's mentioned. And then there's some more of the almost practical things, if you like, about team-based learning, particularly in an interdisciplinary and diverse team context.

And from that, one of the areas we'd like to [00:04:00] discuss today, which came out was one of the techniques we use called diverging and converging, which I think is very interesting, particularly with a diverse team, different personalities, different backgrounds, different language skills, for example, and that we've found that very, very powerful.

So that's one of the areas we sort of drill down in our research. Although we've covered a number of areas, haven't we, Lena?

[00:04:22] **Lena:** Absolutely. So when we started to think about this more systematically, we engaged with with LITE, our Institute at the University of Leeds about teaching excellence, and we were lucky to be awarded a grant that would allow us to buy us our time to really look at these topics of interdisciplinary teamwork and learning and also transformation learning in the area of employability skills.

So with that in mind, and going through the usual ethics procedures and the project development procedures, we ended up with quite a structured project where we examined and analyzed in depth, I think about 60 reports and we conducted some interviews with former students we had, alumni that already left, but also those who had just engaged with us in the module.

And that was exceedingly useful to kind of see how the learning developed over time and what students had taken away from this. So, that kind of in-depth analysis brought us some kind of areas of basically evidence-based guidelines that we then started sharing with our colleagues, in particular those who are interested in working with groups and teams of students.

Because that is something, of course, we do in many modules, not just ours, but that often colleagues had reported having problems with or where student feedback suggested that students were not really fully enjoying that experience.

[00:05:43] **Tony:** Yeah, I think one of the first findings we found in terms of working in diverse and interdisciplinary teams was there are lots and lots of benefits for students. And we had such a lot of input from the students' papers and journals about the benefits of working that I've got a couple [00:06:00] of quotes in front of me: "Throughout our project I saw the benefits of being part of a diverse team with every member having different skills and experience. Everyone tackled the problem from different angles." So, you know, that's a great viewpoint.

Then there was another one: "There have been elements that have taken into the working world with me." So this came from quote from one of the alumni interviews, and the student, the alumnus goes on to say about the team working element, the cultural differences, the stakeholder awareness.

And then finally, another one: "it was beneficial to work in a team with people from different disciplines because it was very teamwork orientated. It taught me collaboration skills and how to innovate collaboratively." So that was one of our first findings, if you like, and recommendations to our colleagues in Leeds and elsewhere is actually, wherever you can, try to get the students to work on some team-based activities. And if you can, make them diverse, whether that's within a school or as in our case, interdisciplinary, because the students really value and benefit from that.

[00:06:59] **Lena:** I think, indeed, many students told us that this is the first time ever they studied together with others who were not on the same program and brought in like different skill sets and brought in different perspectives. And it made us reflect in that process also about how there are other elements of diversity that sometimes we may not pay attention to an awful lot.

So, of course, we have lots of students who come from abroad, where the language is not their mother tongue. We have students from very different cultural backgrounds and teamworking suits some of them more than others. So, as Tony has already foreshadowed earlier in our conversation, we got more and more interested in terms of what are the methods and techniques that help these diverse teams to kind of gel and to come together and to also enable those who are a bit more introvert or who have some language problems to really make the contribution and be part of the team that they would like to make.

And that was kind of the second bigger area where we developed findings, [00:08:00] mainly showing that the technique of diverge and converge can be used very, very helpfully with a view to enabling those who are otherwise often silenced in teams to actually make a more active contribution.

Tony, would you like to explain that a little more?

[00:08:14] **Tony:** Yeah. So, the problem is very much as Lena was saying. One of the challenges is that team-based learning is fantastic, but some students find it very challenging for a number of reasons. So one of the approaches we've taken to address that is using an approach called diverging and converging. And in the diverging, the first step, everybody's encouraged to provide input into a task. It could be generating ideas or understanding a stakeholder or many other activities individually in silence. And that stops the conscious or unconscious bias from other people. So if somebody, you have a group discussion, a confident person might say, "Oh, I've got this great thought about something". Maybe the other people won't say very much, but also, even if they want to speak, their thinking has already been unconsciously biased by that discussion that's already happened. It's stopping them coming up with their input. So by diverging in silence and getting all the students to provide their input, what that's doing is allowing every student to have a voice.

And from our research, we found a number of benefits of that. One of the key benefits we find that this really enables inclusivity in that when the students are providing their input diverging, not being influenced by others, every student has a voice. So we encourage everybody to provide input. And some of our research shows this is particularly important for students who may be less confident, didn't want to get involved in the conversation at the beginning, maybe worried that they will be judged. Students who are more introverted. And the other area of students we found this was really useful for was students where English wasn't their first language.

And then when we come to the second step, converging, because everybody's ideas are listened to. [00:10:00] This is where everybody does have a voice and we were finding lots of students reporting that, you know, "I didn't really want input into the conversation. Or maybe I don't consider myself a creative person but I felt so good that the team took on my idea. Now my idea is moving forward. I feel much more confident to provide input in future". So this diverging and converging really, I think it's made a big difference for a lot of our students. What do you think, Lena?

[00:10:26] **Lena:** Absolutely. And I think it's interesting to see in the reports also how they signposted that they used the same technique in the workshops they organized themselves and how they were planning to kind of use these methods also in future when they work in professional teams.

And to me, it also raised questions learning about this - what kind of research is it now that we are actually doing here? You know, on the one hand, you could argue, "well, you applied a method and now you see it's working well, that's very nice for you". But on the other hand, I think there is value in learning on a deeper level what this method actually does and how it actually helps students to have a better experience.

And I think there is a lot of value in driving our thinking about how we engage, for example, with students from different backgrounds in the classroom, and how we can actually improve inclusivity by giving those who have language barriers the time to really collect and express their thoughts. And I think from that perspective, there is almost a blurry boundary in pedagogical research that is this informed teaching practice, which is very much within our teaching portfolio and research, which may not be the most advanced postmodern methodology that we can possibly dream of, and yet still delivers structured insights that can actually help us moving forward.

And for me personally, as a qualitative researcher it also opened up opportunities to even theorize to a degree. So, as we [00:12:00] moved on in our analysis, we found that there were actually temporal patterns in the way these teams develop over time, and that there are different trajectories they can take in their learning, depending on the division of labour they agree internally.

So, while I'm still grappling with the analysis of these diaries over time and the kind of pattern analysis that is within that, that, of course, kind of finding is the more abstract finding that, you know, we would try to position in a very academic journal. But then there are the findings that by and large we have shared now and are distributing, which are more like evidence-based guidelines, maybe not as theoretical, but very useful. And when we took them to the Advance HE conference, we had really good, feedback on that as well. Tony, would you like to add to that?

[00:12:50] **Tony:** Yeah, I think it was, I think some of those practical, almost simple recommendations are really powerful and there's a research base so there is evidence behind where we're saying these things. But even simple things like you know, if you're working in a diverse team, people have met each other before. One of the things we found from our research was the teams

that gelled very quickly, that spent some time together they got into the stride and were an effective team much more quickly. So from that, recommendations around having simple icebreaker activities, or in week one of your module, making sure you're giving them space to get to know each other can be really important.

Sounds very simple, but both in academia, and I can tell you from my background in industry, that often doesn't happen. And our research shows it makes a huge difference to the way the team performs. So just a simple recommendation like that, Lena, I think can make a lot of difference.

[00:13:40] **Lena:** Absolutely. And so, for me, it was a very rewarding experience to explore pedagogical research in this hands-on way. I mean, initially, I felt a bit like "pedagogical research - will I be able to publish this?" I mean, after all, I'm an early career researcher now. I have to see where I have my publications.

I learned so much from this. A lot [00:14:00] that informs my teaching, but also I learned a lot about doing research with students and how this can add value. And it enables me to engage with a different community of colleagues who are interested, not just, but also in pedagogical research and attend conferences.

So, I would really like this podcast to be an encouragement to our colleagues to really consider whether pedagogical research, even if it's not their main area of expertise, could really be beneficial for them to make the most of the teaching they're already doing, to improve the teaching they're already doing, but also to help all of us to learn and to improve and to fill some of these demands that we rightfully put upon ourselves of, you know, we want to be more inclusive, we want to be more supportive, we want to generate a good environment, we want to enable our students to do well in a very complex difficult setting they're encountering when they leave the university.

Yeah, all of these challenges, I think it's really helpful to have the thinking time and the research time to approach this more strategically, in a more structured way, because we are researchers after all. I mean, that's something we can do.

[00:15:08] **Tony:** And there's one word that struck me as you were saying that was "empathy". And I think, you know, very strongly this research is helping us have empathy for our students. We're understanding in more detail what their challenges are and how we can help them. So we go through an annual cycle of improving our modules.

We're using this research, embedding it into, "well, we know our students had a challenge with this. So how can we help them?" Having empathy for them. And one of the things, from the research, in the way that teams work together, was encouraging the students to have empathy for each other, empathy for their teammates. And just a, a lovely little story. One of the things we say is working in a team, you are going to have challenges. You know, every team I've ever worked in has had an issue at some stage. So don't expect that you won't have challenges. It's how you overcome them that's important, to have empathy for your teammates.

[00:16:00] And one year we had a student who hadn't attended a couple of classes, our attendance is fantastic, so it's not a common problem, but the other students in the team contacted that student, not in a way of saying "why you aren't you here?", but in a way with empathy that said, "do you have an issue? Can we help you?" And it turned out that student did have an issue. It was a personal problem that the student shared with the team. The team basically almost virtually

crowded around to help that student, brought the student back. The student came to the classroom, was delighted, engaged, was so pleased that they'd approached them in that way, but also the team was so pleased to have helped their teammate.

So, you know, this empathy side of it, which did come out very strongly in our research, that when the students are working in a team, the more empathy they have for each other, the more effective again they are as a team, and the more they'll enjoy and the more they'll learn. So I think that empathy words really important, but going back to sort of pedagogic research, I think a lot of it has to be about empathy for our students. So how can we use our findings to make sure we're improving their learning, yes, but also improving their experience of education as well.

[00:17:10] **Lena:** Absolutely. And I think, If I were to restart this whole process of, in developing this module and doing the research, I think probably this is something we should have built in even earlier, the kind of idea that we could do research alongside this module and help us spread the news, help us understand on a deeper level where we are going.

But I think now that we've done that, it will remain an ongoing process. And we are still collecting new data, wave after wave, and I'm even contemplating now some sort of quantitative analysis moving forward with new colleagues, some of them joining us for some of the way, others kind of leaving and then again, different skills-sets joining us. And I think that is, that is really nice to see as well, how this is an in kind of ongoing [00:18:00] effort.

[00:18:01] **Tony:** And I know we should soon, don't make this too long, but actually, you beat me to it. You know, I was going to say that as well, that this isn't a one off piece of research, what we've realized the benefits of this, and we want to keep it as an ongoing piece. So there may be different themes each year that we focus on, but really, we've got such a wealth of data from our students that we can use in many different directions.

So this is certainly, you know, we've had some great findings and some great experience so far, but this is something we're going to keep going.

[00:18:28] **Lena:** Well, thank you so much for joining us today.

[00:18:30] **Tony:** And if you want to find out more please look at the podcast show notes. Lena and I have written a book in this area based upon much of our research as well, called "Design Thinking for Student Projects". We've got lots of websites and blogs with very practical help, tips and advice as well.

[00:18:45] **Lena:** Please do get in touch to share the joy about pedagogical research and other related projects. And thank you so much.

[00:18:52] **Tony:** Thank you.