Research and Innovation Podcast

Episode 50 - Rethinking situated learning

Speakers: Dr James Brooks, Professor Irena Grugulis and Dr Hugh Cook.

[00:00:00] **James:** A warm welcome everyone, to our Research and Innovation Podcast. I'm James Brooks and I'm a lecturer in management consulting at Leeds University Business School. And I'm absolutely delighted to be joined by Irena and Hugh to discuss our paper "rethinking situated learning".

[00:00:25] **Hugh:** Hi, I'm Hugh Cook, and I'm an associate professor in employment relations and human resource management, here at Leeds University Business School.

[00:00:35] **Irena:** And my name's Irena Grugulis and I'm professor of work and skills here at Leeds University Business School.

[00:00:42] **James:** So, what we'd like to share with everyone is our paper, which is entitled, "rethinking situated learning - participation and communities of practice in the UK fire and rescue service". And you'll find a link to our paper in the episode show notes. And we are going to refer to some of the findings from our research during our podcast.

And what we explore and what we're interested in is the idea of how UK firefighters learn within communities of practice and in particular, the concept and the idea of situated learning within communities of practice.

Now we're mindful that some of you may not necessarily be familiar with those terms or perhaps what they mean or how you can relate to them, but they are of significance in relation to the research that we've conducted in the UK fire and rescue service. By way of context, we are fascinated by how firefighters learn and how they learn within communities of practice.

So I will pass over to Irena just to outline and explore what we mean by situated learning and what we mean by communities of practice.

[00:02:09] **Irena:** Thank you, James. The term communities of practice was coined by two anthropologists called Lave and Wenger back in 1991. And they looked at small groups of skilled workers, so Yucatan midwives, butchers, as well as recovering alcoholics. And what they wanted to find was the way that people learned from each other while doing tasks.

And they called the groups of communities that they observed communities of practice. And when new people joined, when novices joined these groups, they started offer as peripheral members and they would do very basic tasks, like watch others at work or hold the coats or make a drink for people. And as time went on, they would have been encouraged to join in, doing simple tasks to help out - holding instruments, passing things to the skilled workers. And as they became more skilled themselves, they would gradually take on more and more complex tasks until they learned the skills in full. And this process through which novices moved from the periphery to the centre of these communities, they called legitimate peripheral participation.

In all of these communities of practice, knowledge was situated. In other words, it was placed into a context and to understand it, the novices and the experienced workers had to be very familiar with what that context was in all its riches and in all its complexity.

So here, we're talking about a very different sort of learning to didactic theory-based, classroom-based learning when pupils do not participate, they passively receive knowledge.

Now there's been an awful lot of studies of communities of practice over the years and the way that work structures more broadly influenced the way that people learn and how they learn it. So we have had studies focusing on what happens if experienced workers are not visible to the novices. And of course this damages the learner.

We have had studies on what happens if corporations strip down and if middle managers are made redundant. We wanted to look at something a little different. And what we've looked at in this study is what happens if the novices are stripped out and that's quite unusual, because normally in the learning literature, novices are considered to be passive. They are acted upon rather than acting. And our findings suggest that in fact, in an active community, they play a rather more important role. And I'm going to pass on to Hugh now to talk about the firefighters.

[00:05:51] **Hugh:** Yes, thanks Irena. So this research was located in the UK Fire and Rescue Service. This was really an ideal profession in which to study the behaviour of communities of practice, because firefighters, they work together in watches, And that is a group of people, a group of professionals who perform their daily tasks together. They work together, they train together, they almost live together in the fire station when they are on watch.

There were two phases to this research. So firstly, as a part of James' doctorate, he did an ethnographic study of Northern fire and rescue and a number of watches and spent time observing firefighters, observing how they learn, how they train and how they transfer knowledge.

But importantly, in this first phase, there was an absence of novices, and this was due to, austerity and a reduction in recruitment. The second phase of the research, we conducted two years later, and this did include novices. So this allowed us to look at firstly the situation without novices, and what the lack of novices did to the skills and I would say skill deterioration, within watches, and then how the re-introduction of novices, rejuvenated these watches, and contributed to an increase in skill.

Before I move on to some of our findings, perhaps James would like to say more about, little bit more detail about his ethnographic observations and, rich participative, observations in Northern fire. James.

[00:08:02] **James:** Thank you Hugh. So one of the things that we really wanted to do, as Hugh has alluded to, was to really understand the lived experience of frontline firefighters, and how they learned, how they shared knowledge and how they worked within communities of practice as Irena has defined. And in order to do so, we were influenced by some classic ethnographic texts like Julian Orr's "Talking About Machines", for example, and Paul Willis's book "Learning to Labour". And one of the things that I did at the end of the fieldwork was participate in a live burn. So a live burn is effectively a simulated fire whereby firefighters go into a simulated fire in a huge container and try to extinguish that fire. And no one can leave until that fire is extinguished.

And I participated in a live burn and wore the breathing apparatus equipment that firefighters wear during that process. And the whole point of doing so was really to have this immersive, ethnographic approach to research to really try to understand the perspective of firefighters and dive into their world.

So I'll pass back to Hugh now in relation to some of the findings from our research.

[00:09:30] **Hugh:** Yeah, thanks, James. So yeah. What did we find? Well the importance of novices showed itself in many ways, okay. So while novices are there, firstly, to learn, novices also contribute to stimulating the community of practice and refreshing the skills of the old-timers who had been practising in that profession for many years.

So firstly, this was evidenced by the lack of novices and how these watches of experienced firefighters kind of become a bit rusty. They'd forgotten some of their key skills, and they'd not been practising them as much as they would have been had novices been there. And we saw more of this when we went back to look at these watches in the presence of novices. So, how did this work then? Well, firstly, novices, they bring a new energy and enthusiasm. So they're coming with textbook knowledge and they're coming to learn, learn from experienced firefighters.

So firstly, the experienced firefighters, they know they're going to be questioned; they're going to have to give answers. They're going to need to brush up on their skills. Secondly, the novices, they jog the memory, the collective memory of a community of practice. And they encourage the experienced firefighters to tell stories. Now, they may tell stories anyway, but as we know in a group that knows each other well, we only tell each other our stories a certain amount of times before we say, "oh, well, come on, Joe, I've heard that before, you're going over the same story again."

Bring new people into that social situation and there's new people to tell those stories to. And so this encouragement of storytelling allows firefighters to revisit collectively events and they might be specific fires such as mill fires or a specific type of traffic collision. And they go over that process of retelling stories to each other and to the novices.

Thirdly, our novices, they bring textbook knowledge, so they will have been trained at their firefighting academy and they'll have been given the most up-to-date, theoretical ideas on various types of a firefighting and rescue. And open up a dialogue between what they've learned in the textbooks with the experience and stories from existing, old-time firefighters. And again, that allows an exchange of ideas and opportunity for our old-timers to refresh their knowledge. Examples of this, different ways or new ways of unravelling a tightly packed firefighting hose and using the water pressure, to do that more quickly and more effectively, around flights of stairs, for example, in tall, multi-story buildings.

And finally, the novices may not always be at the start of their working lives. And in some situations, novices to firefighting, may have done had previous careers and worked as, for example, mechanics or metal workers, for example. So there are times when they bring existing skills and expertise, in particular, those who've worked in the motor industry as mechanics, for example, bring fresh knowledge of, for example, the structure of cars, and bring new ideas for in the field, cutting people out of cars in road collisions for example.

So that's just an idea, a basic idea of some of our findings, and I'll pass back to James to bring this together and draw some conclusions and practical recommendations.

[00:13:53] James: So, thank you very much Hugh. So I suppose, in summary, one of our central contributions or central ideas that you can apply to the workplace, not just the blue lights emergency services or the UK Fire and Rescue Service is the idea, the idea that Hugh has alluded to, and in particular, this idea of rethinking situated learning, and rethinking the way in which people learn within communities of practice. And what our paper does is challenge the idea or the assumption that this idea of legitimate peripheral participation that Irena unpacked earlier happens in a very sequential, very linear way. When actually we found that learning was more, much more messy, much more problematic, and it was a two-way bilateral process. So novices learnt from more experienced workers and workers also learnt from novices and indeed welcomed them into professional groupings.

And what was really interesting about our research, that we conducted our research during a real period of austerity and savage, governmental cuts to the UK Fire and Rescue Service, and that was one of the interesting things that we found that there was just this complete desert, this complete absence of any novices for the initial phase of the research that we conducted. So what's the significance about what, how does that play out in relation to the wider world and workplaces more generally. And what we would say is that actually we can rethink and reappraise this idea of situated learning, and reappraise how novices learn from more experienced people in the workplace.

[00:15:47] **Hugh:** Yeah, I think that's a, it's really important to, just building on your practical implications, James there, and what this highlights in terms of the risks of recruitment freezes. Which are often portrayed as credible alternatives to redundancy or to downsizing, but the empirical findings of this research really point to the dangers in that approach.

They have wider implications in terms of austerity, which is resulted in organisations being deprived of novices, perhaps deprived of some middle-ranking professionals. So hollowed out, slimmed-down knowledge firms face significant challenges in developing and retaining their skills. And not just in terms of recruiting novices.

[00:16:41] **James:** I think that's a really excellent and interesting point Hugh. And I think that what's really fascinating is, as we tip into what looks like a recession, the middle or the end of this year, or certainly as we have much more challenging economic times given what's going on in the world, it will be really interesting to see if we return to austerity light.

So although it may not be formal austerity in a way it was in kind of the, kind of coalition government of 2010, but certainly we can anticipate that there may be recession on the horizon. And of course that impacts on the number of novices and apprentices and workers that organisations take on, and therefore we may well be in a situation towards the end of this year or the beginning of next, where we have a new freeze on recruitment and therefore new novices aren't entering into the workplace, for example, it'd be really interesting to see how that plays out second time around.

[00:17:37] **Hugh:** Absolutely.

[00:17:39] **James:** And that leads us nicely into our second paper on our second podcast, which looks at the way, how UK firefighters unlearn. So once we discovered and understood how firefighters learned within communities of practice, we're also really interested in well "what does unlearning and forgetting look like?". And that's something that we are going to explore together in our next

Research and Innovation podcast when we look at and explore the concept of unlearning within the UK Fire and Rescue Service.

Thank you very much indeed for listening to our podcast. And we look forward to welcoming you again in our second podcast in relation to unlearning.