

Jamming: The Inclusive Hands-On Learning Experience for Every Student

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Abstract

This paper presents two Finnish cases that demonstrate different approaches to incorporating jamming as a method of experiential learning within University of Applied Sciences education. Jamming, an intensive, hands-on format grounded in human-centred and service design methodologies, offers students a supportive environment in which to experiment, take risks, and view failure as a valuable aspect of the learning process. The skills and mindsets fostered through jamming are transferable across a range of professional contexts, enhancing students' readiness for post-graduation employment. The two case studies explored in this paper illustrate how jamming can be integrated at varying scales: one within a single subject course, and the other as a broader, cross-institutional initiative involving wider participation. Both examples highlight the pedagogical value of merging practical, design-led activities with classroom-based knowledge, rather than treating them as separate modes of learning. The findings suggest that embedding jamming into curriculum development enables students to engage in innovation and co-creation practices in meaningful ways, offering them concrete experiences of real-world development processes before they enter the workforce.

Keywords: jamming, curriculum, experiential learning, service design, innovation

1. Introduction

Jamming is a form of experiential learning that intentionally time-constrained to create a more intensive hands-on educational experience. It draws upon the principles of service design and design thinking and places equal emphasis on structured reflection. In this model, students are first introduced to service design process, its methodology and its rationale, before they are guided through its application. Upon completion, the students are provided dedicated time for reflective practice, encouraging a deeper learning and critical analysis of the process.

Jamming typically involves forming multi-disciplinary (or diverse) teams to develop innovative solutions to challenge. The challenge can be broadly defined or intentionally abstract. This approach fosters creativity and autonomy, as teams interpret the theme and define their own problem space where they will work. This allows participants to engage with the challenge in their own meaningful and diverse ways.

In educational contexts, jamming has been adapted across a range of disciplines. For example, jamming appears in music curricula, which is fitting given that the concept originates from music and the performing arts. The term was adopted by the creators the Global Service Jam and the Global Government Jam (Global Jams, n.d.) drawing on the idea of musicians collaboratively creating music together through musical experimentation and improvisation. Beyond music, the jamming approach can also be found in game design evident in the proliferation of Game Jams worldwide, and in various forms of improvisational practice.

Although the term ‘hackathon’ is sometimes used interchangeably with ‘jam’, the terms differ significantly. Hackathons are notoriously competitive, technology-led events that aim to develop functioning prototypes within a fixed timeframe. By contrast, jamming emphasises creativity over competition, and prioritises user-centric solutions over technical implementation. Jamming encourages the discovery of new, meaningful solutions that are grounded in real user needs and contextual understanding. This exploratory, non-linear process is a key reason why design thinking and service design methodologies underpin the jam format.

As a pedagogical approach, jamming exemplifies “learning-by-doing”. It enables the students to apply theoretical knowledge in real time, engage in iterative experimentation, and benefit from immediate feedback from educators and mentors. The opportunity to try, fail, adapt, and improve within a supportive environment strengthens the learning process and fosters resilience, collaboration, and creative confidence. Putting their classroom learning into action immediately as it requires the students to learn at the same time as the event happens. This immediate feedback loop reinforces learning.

2. Research context

What constitutes a course is very education system centric. It can also be institution centric. Having worked and studied in multiple national systems, I know that it can be hard to translate what works well in one system to another system.

I have worked and studied in many ways in various systems. Each system has their challenges and opportunities. As an individual teacher, it may be difficult to change how you build and engage with the courses that are created. Each system can also limit itself in its narrow definition. What constitute a course, a programme, a class may all be different. Even what a credit comprises of is different in different contexts. But one thing is becoming clearer each day, skills need to be built more quickly in general, there is a major push in many places to be able to make education easier to access and in more bite-sized pieces. Rigidity can hinder not only inter-institutional collaboration but also internal experimentation and innovation in learning experiences.

This jamming method relies on experiential learning theory in the process of learning through experience and reflection and the hands-on learning of being able to implement the theoretical learning soon after learning it. These rely heavily on Kolb's 1984 Experiential Learning Theory and the four stage Experiential Learning Cycle and Basic Learning Styles from that book which go between concrete experience and abstract conceptualism to active experimentation and reflective observation. The students move between these four states through the course and jamming experience combined. According to Smart and Csapo (2007), most experts agree that when employing experimental learning, interactive learning, or learning by doing these learning methods result in positive outcomes for the students. This is because it is expected that students take an active role in the learning process and this, in turn, optimises the student's learning.

Making sure to combine Kolb's model above with Potinkara's Pedagogy of Enthusiasm and Risk-taking, we were able to make sure that the students understood why they were learning these different skills and the design thinking process.

“This model is based on the idea that enthusiasm comes from the personal relevance of learning. Relevance is created through understanding the relationship between what is learned and the student's personal dream, i.e., what they want to achieve. When this connection is clear, all learning provides purpose, meaning, reason for learning, and awareness of what the learned information is needed for” (Potinkara, 2018: 16).

These lessons and the Jam allowed them to see the relevance immediately which supported their enthusiasm for learning and participating even when there were challenges in the teams. An additional strategy used in jamming is timeboxing. Timeboxing is important because the point of jamming is to activate students in a short period of time. Usually, students have up to an entire semester to work on a project and turn it in. But this is not the case with this specific experiential learning technique. Jamming requires a team to work together for a singular goal to be accomplished usually anywhere from 2 days to 2 weeks. This is a productivity tool that is used to make people more effective in their work and to make sure that they reign in any perfectionist tendencies and to limit the time given to a specific activity. This helps people to move forward in a project and to make sure that they do not overcommit to specific parts of a process. Harvard Business Review has run articles on the usefulness

of timeboxing on multiple occasions (Kirpalani, 2021; Zao-Sanders, 2018; Zao-Sanders, 2023).

In this article, I will present two different courses that incorporate jamming as a learning methodology in two different ways. Both these courses required me to begin with what outcomes could be expected from the course that was designed. The system will determine how many teaching and contact hours there needs to be and what kinds of assessments will be required. Once you have your “design brief” (the set of requirements that your outcome must fulfill and a recognition of the constraints), then you can begin to figure out what you want your jamming experience to be.

3. Case Study One: Nursing Leadership and Development in Finland

3.1. Course Context and Objectives

Metropolia University of Applied Sciences (Metropolia Ammattikorkeakoulu in Finnish) in Helsinki, Finland has developed a taught master's degree programme in Development and Leadership of Nursing in English. The fact that this course is in English means that it is primarily populated with international students who are qualified nurses in the countries that they are from. It is a hybrid degree which means that it primarily takes place online but there are contact weeks. Roughly half the students currently lived in Finland, and some lived in other countries; not necessarily the country that they are from.

Metropolia University of Applied Sciences has roughly 17,000 students, 1000 staff members (50% teaching staff and 50% non-teaching such as administrative staff, experts, and professional services staff), and has 10 Schools.

I am employed in the new Emerging Technologies and Entrepreneurship unit in the Innovation and Entrepreneurship team as an expert. My expertise is service design and entrepreneurship. I also have the pedagogical certification required to teach at this level of education in Finland.

The students are required to take a course titled: ‘Developing Quality of Care, Leading Development Projects, and Utilising Service Design in Nursing’. This course had 12 students including 2 Finnish students. The students are expected to also be working while they study. Many of them were working in Finland with some doing so with the intention to move at the end of their studies. One of the students was working in the UK.

The objectives of this course are to teach the service design methodology with service design tools to methodically and collaboratively develop care services in clinical settings. For this to happen, we wanted to make sure that not only did the students have time to learn the method and tools in a traditional lecture setting but have time to put them into action as soon as possible to get a better idea of how they work.

3.2. Curriculum Design and Pedagogical Approach

This course consisted of two online learning sessions that lasted 2 - 3 hours each. After these 2 sessions, there was a whole day set aside for the Jam. As previously mentioned,

this degree programme is a hybrid model in the sense that there is a 2-week period in which the students physically come together for intensive lessons. One of these days was set aside for the Jam. The other days were for other classes that were being taken concurrently.

It was important for the students to be able to understand the service design method and some of the most important tools quickly because the limited amount of time set aside in the course. Service design is a process that is actively done and therefore, it was important that the learnings were put into action as soon as possible. This was determined to be the best way to help to solidify the teachings from the online classes.

3.3. The Online Learning Sessions

Before each online session, there was a pre-assignment to go through articles and a podcast that helped to put service design into the healthcare context for the students. Due to the demographic makeup of the students, it was important that these case studies reflected different cultural contexts and national systems. Service design is not a process that requires any specific kind of features or cultural or national context. It can be used in any country, any company, or any service. It was vital that the students did not think that it was only relevant to the local context or to one specific context.

The first online session was preceded by using two written articles (from Australia and the US) and one podcast (from the US) for this pre-assignment. Utilising Padlet, the students were required to give comments and ask questions through Padlet, and we used these comments and questions in the online classes to direct discussion. The topics covered in the first part of the lesson, the lecture portion, consisted of:

- what a service is and why it is important
- service design vs other kinds of design
- the Stanford d.School design thinking process
- the required balance between user and provider of the service
- design framework: desirability, feasibility, viability, and sustainability
- Introduction to Lou Downe's book *Good Services: How to design services that work*
- human-centred design (mindset), design thinking (process), and service design (the application).

The second online course was preceded by three written articles from South Korea, The Netherlands, and the United Kingdom. The class itself focused on some of the most common tools of service design: customer research, personas, and journey mapping. After the presentation of the tools, the discussion was about how the articles reflected real life in clinical settings and how they themselves might utilise these tools.

3.4. The Service Jam Day

Because the Jam was going to be a more compact event of just 8 hours (where a regular Jam might be roughly 18 hours over 2.5 days), there needed to be more parameters set and more pre-meditated material created to have a scenario to work from. Usually, these are very vague, and the teams work on whatever they want to but with these time restrictions, we decided to create a cache of documents to create

two different scenarios that were very familiar to the students. One week prior to the Jam, the students received the case studies, and they were assigned to a team. In this case, because the students were coming from the same subject background and where 11 of the 12 students were female, the teams were created randomly. This is not always the case but in this specific situation, the teams were assigned randomly. The 12 students formed 4 teams.

Of the two scenarios provided, it was decided on the day to just employ one of them as it was easier to help the students if they were only working on one scenario. And each scenario was roughly 8 pages long which meant that there were many places where the teams could choose to begin looking for solutions.

In the timeframe the students had, it was known that they would not be able to conduct any real or meaningful customer research and therefore, patient feedback forms, sample appointment correspondence, meeting minutes, incident reports, etc. were a part of the scenario. It was intended that the students could mine these documents for information that would help them to create at least one persona that they could be working to help and other information that would help to spot pain points.

The way this programme was designed, the students had a dedicated 2-week in-person period that was set in the schedule. The students also had multiple other courses running concurrently. So, the availability of the schedule dictated the dates of the course. In Finland, the schedule is not necessarily as repetitive (on a week-to-week basis) that can be found in many British or North American universities. At this university, semesters are split also into 2 periods and courses can be just one period long (half a semester) or any length that the lecturer sees fit.

The time between the previous online session and the in-person weeks left a two-week space. Due to the two-week gap between the previous online session and the Jam, we started with a brief review of the design thinking process and the tools (personas and journey maps) that they would need that day. This brief review allowed the students to ask any remaining questions they had.

The students then went about reviewing the case study in their teams and deciding on a pain point to re-design and a persona to redesign it for. Each of the groups went through an ideation session to decide on which problem to find a solution for. This allowed for each person in the group to have their thoughts heard by the other teammates. Making sure that different perspectives and ideas are heard and considered equally is an important part of service design and an important part of the Jam.

Once the teams had determined the pain point, they wanted to redesign, they moved onto the third phase of the Stanford d.School design thinking process - Ideation (Hasso Plattner Institute of Design, 2012). The ideation phase is underpinned with the foundation of not restricting any ideas that anyone might have. This allows for new ideas and concept to emerge with everyone feeling heard. A great tool for this is brainwriting. Brainwriting is akin to the more well-known brainstorming while mitigating the issues around hierarchy, quietness, and bias that can occur (Stickdorn et al., 2018). These are the same reasons why service design also tries to use the same

coloured post-it notes and the same types of pens. This is to mask who wrote the individual idea as much as possible to allow ideas to be considered on their merit rather than their author.

This part of the Jam does not require teaching, but it requires coaching skills for each of the teams. From this point on, the students worked intensively in their teams for the day. They asked for help when they needed it. The lecturer also will tour around the groups listening in to hear the conversations to make sure that a few things are happening: 1) they are sticking to the process and not getting lost or side-tracked, 2) the tone with which everyone is talking is respectful and inclusive, 3) they are using the tools that are needed at the appropriate time.

When the Jam was getting close to the end, each of the teams presented their work in the form of a pitch. They clearly identified the problem they were addressing, who was having the problem, which stakeholders were involved in solving the problem, the solution that they chose to develop, and even some of the ways that they were thinking about solving the problem but decided against and why.

3.5. Experiences and Key Findings

The students who took this course were interested to learn about service design which made the students very engaged in the content. Of the 12 students who took the course, only two of them had previously heard about service design, which meant that this was new for almost everyone. As mentioned, the work between the online classes that required them to read other case studies was very useful because it was immediately evident to the students that what they were about to learn was relevant and useful for them. Using elements of the Pedagogy of Enthusiasm and Risk-taking (Potinkara, 2018), there was no need to convince them of its relevance as they could discover it for themselves.

There were many comments through this engagement that allowed me to understand that the students were finding service design highly relevant to the current work that they were doing and how it would be in the future when they moved into more leadership and development roles in health care.

The challenges that existed in this course were more about the personalities than they were about the subject learning or the methods. As mentioned, they came together for an intensive 2-week period during their studies and this Service Jam Day was in the middle of their second week together. I was made aware of some clashes that had happened in other course days that were reflected onto the group work required on this day. These were quickly identified, monitored, and proactively approached by the lecturers as the day continued. In the end, all 4 teams were able to present their solutions.

Another challenge was the fact that this Service Jam Day was just one day. The students mentioned that they would have liked to have it extended to two days as the first day was more about figuring out the process and how to interact with each other in this process. This one-day event probably did not give them enough understanding of the actual process to feel confident in their outcomes. A second day would have

allowed them to fully immerse themselves in creating outcomes. It would have also allowed them the time to take the solutions outside of the classroom and get real feedback on them which would have not only been immensely helpful but also rewarding and reinforcing the importance service design places on user feedback.

4. Case Study Two: 10 Days 100 Challenges - A Course by and For Three Institutions

4.1. Course Context and Objectives

In 2018, Metropolia University of Applied Sciences (17,000 students), Laurea University of Applied Sciences (9,900 students), and Haaga-Helia University of Applied Sciences (11,000 students) in Finland came together and created a course called 10 Days 100 Challenges (10D100C). After the event, there was a guide created on how to design this event that was accessible to anyone (Spokes & Vainio, 2018). The name denoted the length of time the challenge would last, and the challenges reflected the different kinds of challenges the teams were going to face during those days. The number 100 was a reference to the fact that there would be many challenges along the way. These were communication challenges, teamwork challenges, technical challenges, personality challenges, subject-specific challenges, etc. Those 10 working days would be full of questions and opportunities. These 10 days do not include the weekend, just 10 weekdays. At the end of the challenge, the student teams that successfully completed the course would be rewarded with 10 ECTS (European Credit Transfer System) credits. There were no other prizes other than the accomplishment and credits.

The institutions are part of what is called the 3AMK (3AUS in English) Alliance. This Alliance works together to provide courses that benefit all their students. The 10D100C course has been one of their flagship courses. This course was repeated in 2019 and again online in 2021 (missing in 2020 due to Covid-19). The course has continued each year for 2022, 2023, and 2024. Each time this course is run, there are between 50 and 80 students (primarily bachelor level but it is also possible for master-level students) taking part. This course has been designed so that different lecturers can take the lead each year it is run to keep the administrative burden equal between the institutions.

The 3AMK website (Toivonen et al, 2024) states that the learning outcomes for this course are:

- Carry out an innovation project applying the newest existing knowledge and service innovation and design methods
- Work in multi-disciplinary projects
- Apply creative problem solving and develop working methods
- Use [their] personal skills and abilities to work and collaborate in multidisciplinary teams
- Create a culture of cooperation and negotiation with the team members and other actors
- Use [their] skills in problem solving, collaboration and communication to support the social development and joint decision making of the team

The collaboration of these three institutions is reflected in the students that take the course as they come from all institutions and a variety of degree programmes. There are no study exclusions on who can join this challenge-based course that involves jamming. Everyone who wants to join may join if they fulfill the pre-requisite.

4.2. Curriculum Design and Pedagogical Approach

This course is very unusual in its design as it is an intensive learning experience that lasts two weeks. In 2022, it was decided that the structure would change from being 10 in-person working days to seven in-person working days. This was done by taking most of the teaching out of the in-person time and replacing that with the MOOC (Massive Open Online Course) called *Service Design Sprint* (Spokes, 2022) that was created by Metropolia University of Applied Sciences and outlines the basics of what the students were taught. This means that the three days that are not in-person still exist, but they are now done as a pre-assignment before the students are allowed to participate in the in-person portion of the challenge. This MOOC is available to anyone who wants to take it and on successful completion of the course, the user receives a certificate. This certificate is required to be sent to the organisers of 10D100C to be able to take part in the in-person event.

From this pre-assignment, it is assumed that each student now has the basic knowledge that they will need to participate in the 7-Day Jam. The Service Design Sprint MOOC consists of five Chapters: Foundations, Customer Centricity, Creating Solutions, Experimenting, and Winning Support. These five chapters go through design thinking, service design, the design sprint process, customer research methods, prototyping and testing, and pitch training.

At an early point in the organisational process, companies and organisations (such as municipalities or NGOs) are involved in 10D100C. There can be from two to five depending on how many teams you have. Their role is to prove the actual business challenges that the students will be working on. The companies will pitch their business problems in hopes of attracting the student teams to work on them. The companies are also included in mentoring the students so that more information can be provided (such as data to help them understand the problem better, answering questions that the students may have, and other needs). The companies and organisations may want to provide the students with on-site working spaces or tours.

While this may sound more like a Design Sprint (Knapp et al, 2016), it is still jamming because the outcomes are not set, just the problem. Design Sprints are primarily used to get some specific work done for a specific issue that is known in a short amount of time. The Design Sprint process is about solving specific problems in a short 4-5 days. This is made clear when the first step of the Design Sprint is to “start at the end” which means that you start with where you want to be. All the steps to get there may not be known but you need to know where you end. This is not possible when using design thinking and service design because the solution is unknown and unknowable at the beginning of the process.

The foundation of the 10 Days 100 Challenges event is that the problem needs to be explored, and a solution is unknown at the start. The solution could be something physical, a service, a process, or a mix of these that solves the problem that the team is tackling. 10D100C is also predicated on there being students from different faculties with different strengths and knowledge. This often means that the students have never met before, especially as we also mix students from different institutions. Each institution has a different set of subject areas that it teaches with only some overlap. The collaboration used to create this course means that there are students from a huge variety of study programmes. This also means that there are international degree students and domestic students (leading to language differences). We purposefully try to mix the students based on multiple bases:

- study programmes
- gender
- language of study
- institution

This allows for the most diverse teams on all these factors.

In the original version of 10D100C when there were ten days of in-person attendance, each morning would be started with lectures on the most appropriate design thinking and service design skills that would be needed at that point in the process. As mentioned, this was replaced with the MOOC, so these sessions instead of being instructional, were just quick reviews that saved a lot of time and allowed more time for essential teamwork.

4.3. Experiences and Key Findings

Once the teams had been announced and the students had some team building sessions on the first day, they listened to the presentations by the companies and organisations to think in their teams about the challenge they would like to tackle. In the 2022 challenge, there were 2 small local, food-based companies that brought 3 challenges each. They were still suffering the immediate effects of the Covid-19 pandemic and were looking for fresh eyes to help them with some of their business problems. This course had around 65 students taking part in 12 teams. It is not necessary that each team takes a different problem as there are often different perspectives in one singular problem and different solutions to the same problem.

A few issues come up in each delivery of this course. These are typical of most courses that rely on group work or teamwork: personality clashes, different expectations of workloads, differing availability during the course, illness, different understandings of the process, and different ways of working. These are often exacerbated from the mixing of subjects and even institutions. But these are all part of the process. Sometimes teams need to be split, but not often. It is an intensive 7 days of teamwork, and the lecturers and experts involved act as coaches to the teams. There are also student mentors that work certain hours to also coach the teams and hear some of these issues. If they feel that these are not solvable by themselves, their job is to bring them to the lecturers and experts.

During the working days, all students are expected to be present to work with their team but if they cannot, they need to work out this with their team. The team needs to decide how to work together and what is acceptable and what is not. They need to decide how a team member will make up missing some or an entire day. They are responsible to their team, not to us.

The assessment of this is reflected in the portfolios that they hand in by a certain date after the event is over. It is expected to reflect their time during the entire course. It should have pictures and text that record their development and the development of their solution.

This course is iterated a little each year with the feedback of the students and also those working with it (the lecturers, experts, and student mentors). This means that what is required to be in the portfolios is not the same each year. Sometimes there are peer assessments, sometimes not. It depends on who is leading the course.

This course is meant to rotate the main coordination role around the participant institutions. This has proven to sometimes be more difficult though. This is mainly because the size of the institutions varies quite a bit and so the smaller institutions have fewer people to take on the coordination. But there is great enthusiasm for this course each year. Also, each institution is responsible for their own students' enrollment and assessments. This can be difficult because in the past the bulk of the students have come from the largest institution, which means those lecturers have a lot more assessments to make from the portfolios.

Logistical constraints have not been much of an issue luckily as there are some good, collaborative working spaces on these campuses. In practice, you will need separate spaces that allow for small group work and then one larger space to gather everyone for common scheduled times, such as keynotes or these daily reviews. 10D100C started off with some funding through sponsorship which meant that the budget could include communal eating during the event but as the years went on, the funding stopped, and it is now run as a regular course.

5. Results and Reflections

Previously, I had either participated or run around a dozen jams of differing kinds all within the confines of higher education. I have done these in both Finland and Canada. The first one was back in 2015 when I was studying service design. I took part in the Global Service Jam that was hosted by the university where I studied. This was my first experience with jamming, and I quickly understood how important an educational tool it was. The amount of work that was accomplished in one weekend and the connections we made both personally and intellectually were undeniable. I have continued to seek opportunities to add jams into both official curriculum and to extra-curricular activities in higher education.

The results of the Jam that took place in the Nursing programme were very successful. By the end of the Jam Day, the students could identify the benefits of including others that may not normally be included in designing services. For them, they were looking

at redesigning the letter that confirms a clinical appointment at the hospital to make sure that the recipient could understand exactly what needed to be done before they arrived.

Another team chose to redesign how a patient who has arrived at the hospital gets from the front door to the clinical appointment. From their multiple starting points and the persona that they built, they could see what would work for this type of patient and what would not. By making sure to always keep their patient at the centre of their thought process, they were designing for a person that was not intimately knowledgeable about the hospital as they might normally when explaining it from their own perspective. Their ability to get inside the problem and to create a persona to work with, one that came from their experience and the case scenario, they were able to think empathetically about the problems faced by the patient.

The Jam was only one day, and as mentioned, this was the biggest challenge that the students faced. It would be preferential that they could have two full days to work on their challenges and this is what I would recommend for the next time that they run this course. There were also only two online meetings before the Jam, which was technically sufficient for going over the process, but it would have been preferential to have more time to go through relevant case studies and allow more conversations that spoke about the impact of using service design and of widening a usually quite narrow stakeholder group when creating fixes or changes in the system. Service design is also about balance between what is good for the user but also for the provider. Without this balance, good services cannot be created.

What is most important when you are teaching service design is that the students understand that this is a mindset shift that directs shifts in actions. It is a shift from always trying to fix things on your own to understanding that you may not have the answer, and it is important to bring other stakeholders into the process. It is also important to understand that service design is a repeatable process. This allows the person to know what needs to happen next. It helps the person seeing the problem or pain point to be able to quickly identify who else might need to be brought into the discussion to begin the process of designing an impactful solution.

In the student feedback, you could see this process of identifying that change needs to be collaborative:

‘Service design in nursing inherently promotes interdisciplinary collaboration. Engaging with healthcare professionals from different specialties ensures a holistic view of patient care. This collaboration leads to more comprehensive care plans, integrating insights from various fields such as medicine, psychology, and social work.’

Another student’s reflection work talked about how the Jam specifically helped them understand what needs to happen better for transformation to occur:

‘Our journey of exploring service design was one of transformative discovery, learning, and growth. This group work has changed my views on problem-solving and innovation, as well as collaborative working, providing me with

essential understanding and tools for dealing with challenging issues in my workplace in the future.'

If one day of collaborative jamming can have students beginning to change how they feel they should be performing their jobs in the workplace, this is a very good use of time. If a course were to include two days of jamming or a week-long Jam, then it is possible that the outcomes would be even more significant.

6. Discussion

The shift in mindset that can happen with even just a short experience with jamming, as shown by the nursing students, is significant. Including these more experiential and hands-on learning experiences in classes and incorporating them into the curriculum can go a long way to developing innovative mindsets. This helps the students to understand that everyone can be involved in transformation and innovation. It also allows them to experience truly collaborative work which they can take into whatever organisation, big or small, after they have finished their studies. It makes companies and organisation more capable of being innovative and in being able to innovate at different levels of the organisation.

In terms of curriculum, experiencing jamming can set different standards for what is considered acceptable assessments and skills developed. By using the performance of the learning outcomes, instead of just a theoretical demonstration of them, allows the students and the lecturer to really see what is needed to perform these skills. This goes back to the proverb: Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for life. This is exactly what happens in jamming. You are teaching the students to work collaboratively, to understand the process of design thinking and service design, you are teaching them how to talk to people and ask good questions, how to gather insights, how to turn those insights into actions, and how to turn ideas into something tangible. These lessons are not just from a book or lecture, they are now lived experiences.

Jamming belongs in almost every subject curriculum. Where are the skills of teamwork, understanding needs of users, presenting ideas, gathering feedback, asking good questions, etc. not needed? These are life-wide skills that everyone needs. I believe that there is a space in every degree programme where jamming opportunities can be incorporated. And even better, they should be included in interdisciplinary platforms, just as 10 Days 100 Challenges is accessible by every degree programme. Diversity, just like in other areas of life, is a strength when it comes to innovation and designing services for people.

7. Conclusion and Recommendations

Incorporating jamming into areas of the curriculum where it usually isn't allows for students who would normally not be exposed to these methods and concepts. But the skills that they endeavour to develop should not be gatekept for any specific subjects. These are life-wide and profession-wide skills that need to be shared as they will only add value to someone's skillset.

More research into the experience of people who take part in innovation challenges, including jamming, should be done to figure out what long-term learning effects are present is needed. In my own research, most of the data that I have collected during my experiences have come directly after the event. Participants have sometimes been quite euphoric about their experiences. But it is also very interesting to see how those learnings develop. Do they deepen? Are they just short-term? Are they able to recall them when needed in future situations? What are the longer-lasting learnings that can modify behaviour in problem-centred situations?

For those who are interested in including jamming into their curriculum, it is advisable to find someone who has done it before as it can be a big undertaking if you are not familiar with the process and the outcomes that you are looking for. It is especially important if you are not an expert in the process. So, co-creating the curriculum is a great place to start to make sure that the experience is as rewarding for all the stakeholders as possible. But underlying all of this is that it is better to start and iterate, just like in the design process, than to not start at all. Jamming is a learning experience for everyone involved.

8. References

1. Global Jams (n.d.), available at: <http://globaljams.org/> (accessed 7 February 2025)
2. Hasso Plattner Institute of Design. Stanford d.School (2012), *An Introduction to Design Thinking PROCESS GUIDE*, available at: https://web.stanford.edu/class/me113/d_thinking.html (accessed on 2 January 2025).
3. Kirpalani, N. (2021), “What’s the #1 Productivity Tool? For Me, It’s Timeboxing” *Harvard Business Review Online*. September 29, 2021, available at: <https://hbr.org/2021/09/whats-the-1-productivity-tool-for-me-its-timeboxing> (accessed 1 February 2025)
4. Knapp, J., Zeratsky, J., and Kowitz, B., (2016), *Sprint: How to solve big problems and test new ideas in just five days*, New York: Simon and Schuster.
5. Kolb, D.A. (1984), *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice-Hall, Inc.
6. Potinkara H. (2018), *Dare to be enthusiastic! Teacher’s guide to entrepreneurial skills*. Published by the Federation of Finnish Enterprises, available at: https://www.yrittajat.fi/app/uploads/public/2021/11/sy_teachers_guide_to_entrepreneurial_skills_web.pdf (accessed on 18 December 2024).
7. Smart, K.L. and Csapo, N. (2007), “Learning by doing: Engaging students through learner-centered activities”, *Business Communication Quarterly*, Vol. 70, No. 4, pp. 451-457. <https://doi.org/10.1177/10805699070700040302>
8. Spokes. P. (2022), *Service Design Sprint*, available at: <https://servicedesignsprint.fi> [MOOC] University of Helsinki Mooc.fi.

9. Spokes, P. and Vainio, T. (2018), *10 Days 100 Challenges: Handbook*, Helsinki: Metropolia University of Applied Sciences, available at: <https://urn.fi/URN:ISBN:978-952-328-127-1> (accessed 1 February 2025).
10. Stickdorn, M., Hormess, M., Lawrence, A., and Schneider, J. (2017), *This is Service Design Doing: Applying Service Design Thinking in the Real World*, New York, NY: O'Reilly Media.
11. Toivonen, J., Harmoinen, P., and Wallenius, L., (2024) *10 Days 100 Challenges* [course], 3AMK, available at: <https://www.3amk.fi/en/springsummer-2024-studies/10-days-100-challenges/> (accessed on February 10, 2025).
12. Zao-Sanders, M. (2018), "How Timeboxing Works and Why It Will Make You More Productive", *Harvard Business Review Online*. December 12, 2018, available at: <https://hbr.org/2018/12/how-timeboxing-works-and-why-it-will-make-you-more-productive>, (accessed on 1 February 2025).
13. Zao-Sanders, M. (2023), "Project Managers, Unlock the Power of Timeboxing", *Harvard Business Review Online*. October 23, 2023, available at: <https://hbr.org/2023/10/project-managers-unlock-the-power-of-timeboxing> (accessed on 1 February 2025).