Discovery Grants for Education Innovation: Supporting the Adoption of People-centred Design in HE One Step at a Time

Sarah Dyer University of Manchester, UK

*Kerry Deacon*University of Exeter, UK

Abstract

In this reflective paper we describe an approach for supporting university educators to adopt person-centred design which heavily scaffolds and 'chunks' stages of the design process. Having run these 'Discovery Grants' in two UK universities, we reflect on our experiences and the conversations we have had with grant holders. Design is a radical departure from taken-for-granted ways of working in HE both in terms of individuals' professional identities and practices, and institutions' processes and resource allocation. We explore whether our approach can support adoption of these new ways of working. Through exploring the scholarly literature on design curricula and pedagogy, and barriers to design-informed approaches to working in organisations beyond HE, we identify useful frameworks for making sense of our practice. Given that our approach is relatively resource-light and creates value for educators, we suggest this approach as potentially useful for others.

Keywords: University Education, Service Design, Design Thinking, Continuing Professional Development, Organisational Change

Received: 28 July 2023 Revised: 25 Aug 2023 Accepted: 4 Oct 2023 ISSN 2056-757X

https://doi.org/10.18646/2056.102.23-018

1. Introduction

In this reflection piece we describe an approach to supporting university educators to adopt person-centred design which 'chunks' stages of the design process. Universities have been described as places of 'pedagogic frailty' (Kinchin et al., 2016, p.1); institutions with a lack of adaptive capacity where the response to problems is the requirement for educators to "just do more and do it faster" (p.4). Whilst adoption of people-centred design has huge potential to build much needed capacity and adaptability, our own experience is of knotty barriers that are not straightforward to overcome. The challenges identified by the editors of this special issue certainly resonate. Design is a radical departure from taken-for-granted ways of working in HE both in terms of individuals' professional identities and practices, and institutions' processes and resource allocation. The approach we are discussing in this piece, of 'chunking' and heavily scaffolding, was developed iteratively over several years. We have found that it is an effective intervention which creates immediate value for educators and, as we suggest here, is likely to build individual capacities for personcentred design as well as suggesting opportunities for wider culture change. Furthermore, we identify frameworks which are insightful for our agenda of developing person-centred design in HE. Given that it is relatively resource-light, this approach could be employed as a 'sneaky little experiment' of the type espoused by the D School bootcamps, a small change undertaken in the spirit of experimentation to understand potential (D School, 2020).

This special edition provided a welcome prompt to reflect on our evolving practice. Our experience is as a two-person team who ran the University of Exeter's Education Incubator from January 2022, when Kerry joined as project manager, to November 2022, when Sarah stepped down as its inaugural director after five years. During this time we introduced the intervention which is the focus of this article - 'Discovery Grants' - based on previous experiences of incorporating people-centred design into our work supporting education innovation projects. One grant cycle has been completed at the University of Exeter, UK. Another cycle has been completed in the University of Manchester's Faculty of Humanities, which Sarah joined in Jan 2023 as their Faculty of Humanities' Associate Dean for Learning and Teaching (flexible and digital education). In this piece we describe and retrospectively evaluate our experience, reflecting on conversations with grant holders and each other in light of wider scholarship, in order to inform our own and others' future practice.

2. What are 'Discovery Grants'?

We were motivated to create Discovery Grants as a means for educators to try person-centred design approaches without needing to 'buy-in' to it philosophically or as a whole process. We wanted to create an 'on-ramp' and build systems capacity by having these tools in circulation. Grants of £300 are available to run workshops as a means to support educators to use design tools to conduct user research. In practice this means money to pay for catering, 'thank you' vouchers in recognition for non-university-employees' time, and room hire if off-campus rooms are needed. Discovery Grants are tightly defined and 'chunk' the design process: they provide the option of three possible tools, each of which provides a workshop plan and templates to be

completed. At Exeter, grant holders could choose to complete an empathy map, a user journey map, or a prototype test (two of the three). At Manchester, they could choose from an empathy map, a user journey map, or a systems map (again, two of the three). The activities are scaffolded, with shared resources designed to be used 'off the peg' and with little or no prior knowledge of design approaches, although in both institutions additional support was available as information sessions or one-to-one conversations. In both institutions, the Discovery Grants addressed 'real' challenges and existing governance structures. Applicants needed to identify the problem they wished to understand and why it was important. Applications were judged, in Exeter, by the Faculty Associate Pro Vice-Chancellors (Education) and, in Manchester, by the School Directors of Teaching and Learning. In both institutions reports are circulated to the funder and the 'appropriate' governance committee. Reports consist of a completed template, which asks educators not only to describe the process and outcomes but also to reflect on their own learning from undertaking these activities, and copies of their completed maps.

Table 1: Nature of our Discovery Grants

	·
Aims	 'On-ramp' for educators to use people-centred design approaches Building systems capacity through familiarity with people-centred design outputs.
Characteristics	 Low stakes A 'chunk' of the design process Tightly defined Scaffolded 'Off the peg' Addressing 'real world' challenges Tied to existing governance structures Requiring reflective review

These grants are the most recent iteration of a long-held commitment to using design approaches to support university education innovations. The University of Exeter's Education Incubator was established 2017 to support innovation in education practice and has undertaken a suite of activity including year-long and shorter innovation grants for educators and students; training events and programmes for educator-innovators and student-innovators; workshops and conferences for our wider community; community of practice network support and writing retreats; creatives in residence; visits to local social enterprises; and wider community engagement. The Education Incubator has built capacity for education innovation in the University of Exeter community and built-up expertise in supporting such innovation. Creating meaningful and sustainable changes in education practice is both a pedagogical and an organisational challenge (Dyer, 2021) and people-centred design was introduced into the Incubator approach in 2018 as a means to navigate these challenges.

In 2021 the Incubator ran a 'service design' programme to support 28 people who had been awarded three-month innovation grants: The Innovation Lab. There were five

defining characteristics to the Lab. It was: a structured service design programme; with real world settings; the cohort included educators (academics and professional services) and students; participants had designers as coaches; and The Lab was itself a pilot (Dyer and Kuzmina, forthcoming 2024). It was resource-intensive to run and to participate in. Moreover, we experienced points when a desire to critically engage, and the enormity of the difference between this and accepted ways of doing things, seemed to act as barriers. This prompted the desire to experiment with approaches which are aligned with people-centred design but don't require educators to learn or buy in to it theoretically or as a whole process – the hope being that this removes a barrier to educators experiencing its usefulness. 'Less talking, more doing' (Stickdorn et al., 2018) may well be a rallying cry for designers but it isn't a disposition that comes naturally to (many) academics.

Across the two institutions we have awarded 22 Discovery Grants. Grants have included curriculum-based challenges, such as problems of differential experiences of international students on a work experience module, and how students learn prescribing in clinical pharmacology. They have also included wider learning and student experience-based challenges, such as assessment literacy in a department, and supporting neurodiversity. Of the 22 grants awarded, all but one successfully ran workshops using design tools and submitted an end of project report.

Table 2: Characteristics of Discovery Grants awarded in 2022/23 (N=22)

Awarded at Exeter (E):	13	Awarded a	t Manchester (M):	9
Awarded to an individual:	7(E) + 3 (M)	Awarded to	a team:	6 (E) + 6 (M)
Curriculum based:	8 (E) + 4 (M)	Wider based:	learning/experience	5 (E) + 5 (M)

3. Reflective prompts - what do we want to understand?

We developed Discovery Grants as a means to create low-stakes engagement with people-centred design approaches. We wanted to create both an 'on-ramp' for educator-innovators and wider capacity building and audience receptivity by having design tools 'in circulation' in the university. Therefore, we are interested in understanding the extent to which we have achieved these aims after this first iteration in two institutions. It is important to assess whether grant holders see the tools as having value and whether we can identify which characteristics of the grant have been important in any success. Moreover, we are keen to understand our practice in light of what is already known. Therefore, in this section, we develop our scholarly 'lens' (Brookfield, 1995), turning to two areas of literature in the field of people-centred design. Our intention is not to provide an exhaustive and systematic literature review, but rather to look for insights which can serve as reflective prompts. The first area concerns formal 'design thinking' and 'service design' education. We want to understand how service design educators support people to learn these approaches. The second area of literature reviews the use of 'design thinking' in organisations. We want

to understand the barriers to using people-centred design approaches in organisations beyond HE.

In both areas of literature there seems to be a recurring concern that design proper has been – or could be in danger of being – 'hollowed out' by design thinking's adoption as a 'management' technique or surface set of tools 'for people without a scholarly background in design' (Hvidsten et al., 2023, p.1). This is at the heart of our inquiry. We are attentive to the concern that this accusation could very well be made of our approach. We want to understand if there is a way to escape such a dichotomy. Can the use of design tools be a positive route to more design-led approaches, rather than its 'poor cousin'?

3a. Person-centred design: curricula, pedagogy, learning outcomes

It is useful to begin by setting out the curricula which train professional designers. We are particularly interested in understanding two issues: how formal service design education manages the relationship between learning (intellectually) and doing, and what such education is aiming at (what does successful learning look like).

The intellectual underpinning of design methods and tools is clear in conceptualisation of service design curricula. Wrigley and Straker (2017), for example, review what is taught in 51 courses - and how - in order to create an Educational Design Ladder (mapped to the SOLO taxonomy of learning) to serve future course design. They present the foundational level of Design Thinking Education to be "theories, methods, and philosophies" "explored as a highly reflective process to allow students to review and think critically about their own design processes" (376). Their second rung of the ladder is 'product focus', in which they include skills such as "sketching, physical prototyping, brainstorming, user-focused thinking, aesthetics and the implementation of a design process" (378); in other words, "practical application of Design Thinking methods and processes to tangible outcomes" (380). This is then followed by (3) Design management (project level), (4) Business management (business level), and (5) Professional development (professional level). As such, knowing about 'The Canon' or 'The Discipline' and having a professional reflective relationship with that knowledge, what we might characterise as 'designerly thinking' (Hvidsten et al., 2023), is fundamental to formal service design education. This is as we may expect. It is less clear though, the extent to which 'foundational' implies either 'prior to' or 'necessary for' attaining enough skill to use service design tools, either of which would suggest Discovery Grants are unlikely to be an 'on-ramp' and will only support a surface level deployment of tools.

However, service design pedagogy does embrace 'real world' practice (i.e. using tools) as a taken-for-granted in learning to be a service designer. Becermen and Simeone (2019, p5), review international service design curricula and describe a combination of 'hands-on' project work (often with external companies and organisations) and lectures and seminars as the "common educational thread" of service design education. This experiential project work is means to "expose the students to a design thinking approach and make them practise their abilit(ies)" with the aim of "mastery of service design tools and methods" as the essential aim (Becermen and Simeone, 2019, p5).

Interestingly, much pedagogic literature identifies issues that are familiar to us as we support educators. For example, Guersenzvaig (2011), in his analysis of students undertaking client projects, describes how some groups find it hard not to "jump to envisioning a (final) solution right away" (p.47). This suggests that, even though our cohort is different, they are struggling with similar challenges, and further review of the 'up close' pedagogy of these courses may prove productive for us.

Extending our review to include analysis of the aims of a service design education is particularly helpful. A framework of design thinking competencies and mindsets developed to assess, amongst other things, service design courses, provides a valuable means to evaluate our own intervention's impact. Dosi et al. (2018) share a validated questionnaire which assesses 84 competencies under 19 themes: tolerance for ambiguity, embracing risk, human-centredness, empathic, mindfulness of process, wholistic view, problem reframing, team working, cross-disciplinary/professional working, openness to different perspectives, learning orientated, experimentation, bias towards action, critical questioning, abductive thinking, envisaging new things, creative confidence, desire to make a difference, optimism to have an impact. Whilst Discovery Grants may not measure up to expectations for Service Design curricula – nor are they intended to – we can use this framework to assess their success as a learning experience. The real value here is that we can begin to explore this as an empirical question rather than being stuck with an a priori dichotomy between 'Real Designers' and superficial use of tools.

3b. Using person-centred design in 'chilly' climates

Turning to the second area of scholarly literature, exploring the challenges and approaches to using person-centred design in organisations beyond HE, we are keen to understand if there are lessons we could draw on in our quest. The editors of this special edition identify preferences in HE for thinking over doing and visualising, individualism over recognition of teams and collaboration, 'getting things right' over accepting uncertainty and failure, and academic insights over contextual insights (Nerantzi et al., 2023) which are misaligned with people-centred design. This diagnosis certainly chimes with our experience and this special edition is an important resource for building a shared understanding of how to work to implement design approaches despite these aspects of university culture.

Literature suggests that universities are by no means unusual as organisations which are misaligned with people-centred design (or design thinking: DT). Whilst there are particularities of HE structures, cultures, and identities which are barriers to using DT in universities, the evidence is that beyond HE "DT is often in conflict with, and different from, dominant organisational cultures and processes" (Carlgren et al., 2023, p.346). Whilst there is a 'steady flow of evidence on the benefits of DT for organisations' (Hvidsten et al., 2023, p. 5), enabling this is not straightforward. Carlgren et al., (2023) analyse use of DT in five large organisations to try to understand whether the barriers of using DT are simply those experienced by most innovation approaches. They identify seven barriers which, although they exemplify established innovation challenges, have features unique to using design thinking. These are: 1. Misfit with existing processes and structures, 2. Resulting ideas and

concepts are difficult to implement, 3. Value of DT is difficult to prove, 4. DT principles/mindsets clash with organisational culture, 5. Existing power dynamics are threatened, 6. Skills are hard to acquire, 7. Communication style is different. Characterising the sixth barrier, they identify skills such as 'knowing when you have probed deep enough in qualitative interviews, knowing when your insights are good enough' (p.355). Under the final criteria, they argue the '[c][hallenge is related mainly to presenting or arguing for an idea based on subjective data and human-orientated values, as well as the use of various visual representations' (p.354). Their analysis provides a useful framework for making sense of the difficulties of using peoplecentred design in HE. As we go on to show, their analysis allows us to highlight what we think may be points of leverage, aspects of the cultures and working practices of universities where we can capitalise on pre-existing expertise.

In the literature we find a thoughtful analysis of the process of adopting people-centred design in organisations that enables us to move away from a dichotomy between Real-Designer(ly) approaches and superficial use of design tools. Hvidsten et al., (2023, p. 5) describe the reciprocal relationship between DT tools and organisational culture. Such reinforcing relationships imply vicious, as well as virtuous, circles. However, Hvidsten et al., (2023, p.5) argue that design thinking mindsets, methods, and tools foster "learning, creativity and collaboration" within organisations, "shap(ing) emotional and social experiences important for overcoming psychological barriers understood to impede the development of said dynamic capacities". Elsbach and Stigliani (2018, p.2279) in their empirical research of companies using people centred design found "causality runs in both directions between the use of the tools and the development of the culture". Their analysis is based on understandings of experiential learning, where (1) experience using design tool leads to (2) reflection and emotional experiences, in particular supported by the physical and visual artefacts produced during design processes, and (3) an understanding of the significance of DT leading to accepting new values, norms and assumptions, which is (4) affirmed through its further use. They argue for the importance of people reflecting and reviewing to consolidate learning and also of the particular power of the "physical artefacts (e.g. prototypes, drawings, design spaces) and emotional experiences (e.g. the experience of empathy or surprise/delight)" (210, p.2279) in enabling the use of design tools to foster wider cultural change. Their work creates a framework we can use to assess our design of the Discovery Grants and their future iterations.

4. Reflections

In this section we reflect on our experience of supporting Discovery Grants. We are interested in exploring the extent to which we have achieved our aims 1. to create an 'on-ramp' for educators into people-centred design, and 2. to build wider systems capacity through familiarity with these tools. To do this we draw on reflective conversations that we have had with each other and with those who held grants throughout the grants. After the grants had been completed, we held a 'Discovery Gathering' for Exeter grant holders which we both attended and Sarah chaired. We met soon after and discussed our reflections on the whole process and our review of published blogs that grant holders have written. Here, we review how grant holders have described the value of their work, how they received different characteristics of

the grants, and the role we feel the different characteristics had in contributing to any success. We then use the scholarly lens set out above. First, we explore evidence of people-centred design capabilities (Dosi et al., 2018) in how educators undertook, and discussed undertaking, the Discovery Grants. Second, we review our experiences in light of the barriers to people-centred design in organisations beyond HE (Carlgren et al., 2023). We end our reflection by considering the potential we see our approach having and also note the value systematic research would offer for understanding this evolving practice.

4a. Did our educators perceive the tools as creating value? Were they an 'on-ramp'? Our overriding impression is how positively the tools have been received by the Discovery Grant holders. As with systematic research, our reflections can only draw on those grant holders who engaged with us. However, all but one of the grants were completed and those who engaged with us towards the end of their grants communicated a sense that they found the tools powerful, even transformative. They used words such as "revelatory", "insightful", and "really enjoyable" in describing the workshops they ran. Towards the end of the award period, educators identified a number of things they valued. These include:

- Recognising that we are making assumptions about our students all the time;
- Being able to ask students about their experiences;
- Being able to explore a topic that it would be difficult ethically to ask directly about (such as academic malpractice);
- Identifying stories encapsulating students' experiences which could then be shared with colleagues as an explanation of the need for change;
- Spending time with a small group of students:
- Getting colleagues together (to systems map) who work on the same issue but do not ordinarily meet or spend time together.

Certainly, in our conversations with grant holders, they judged their projects to be successes.

Grant holders described the experience as introducing new approaches that they would continue to use. None had prior familiarity with the tools in this context. One person's disciplinary research included systems-thinking, though they had not used those methods to investigate their teaching practice. All of those we spoke to said that they would use these tools again. There was no discussion of wider person-centred methods or tools. No one asked more about the tools or their 'heritage' even though we were open about them being widely used and not something we had created. We are not in a position yet to assess whether circulating completed maps into existing governance structures has created wider systems capacity. However, grant holders have experienced outcomes such as department buy-in for projects and financial support from their faculty following their output report. This question about system capacity building is something we intend to further investigate.

4b. How did the characteristics of the Discovery Grants seem to play out in any success?

The first two characteristics of the grant were that it was low-stakes and a 'chunk' of the design process. Although neither aspect was raised by educators when we were discussing the grants, we feel that being low-stakes is crucial. People needed to know that they hadn't lost much if using the tools weren't useful. We do feel that it is worth testing our assumption with grant holders, exploring whether they felt that the grants were low stakes. There is a possible tension between being 'low-stakes' and also 'addressing real world challenges' and 'tied to existing governance structures'. Knowing that a senior leader has been on the selection panel and chosen your project may well increase the pressure to perform. It may also be that educators who deviated from the workshop plans we provided (see below) did so because they felt out of their depth running such a workshop. We feel that we got the balance right in designing a low-stakes intervention, but there is certainly scope to investigate this reflection. That the grant is a 'chunking' of a wider methodology was probably invisible to the grant holders. Assessing if this approach works and whether we got the chunk right is fundamental to our review of the grant.

The next three characteristics concern the ease of using the tools with no prior exposure to design thinking: the grants are tightly defined; scaffolded; and 'off the peg'. On the whole, it seems that the structure we offered worked well. Grant holders were able to run the workshop autonomously although they were provided with additional support in the planning stages. Although links to further literature are signposted on the templates most one-to-one conversations with Discovery Grant holders focused on talking through practicalities of facilitating the DT tools chosen, especially when delivering to a small group of participants. Others asked if they could incorporate other engagement methods within the workshop (e.g. Lego), and others wanted reassurance on logistics; (where,/when to run workshops, what pay for). The workshop structure was used flexibly by grant holders. They ran workshops of different sizes, some with cohorts of students who were well known to them and others with students recruited for the workshop. There were workshops which involved educators and students. There were off- and on-campus workshops. Grant holders, at times, used the tools in ways in which we would judge to be not inline with our guidance, such as having mixed groups of staff and students complete empathy maps or having students complete empathy maps individually rather than in a workshop setting. People reported different experiences of running the workshops. Some felt that the systems map workshops were more difficult to run, given the 'messiness' of systems mapping, and said they would have liked more guidance. However, others loved the process of gathering people and creating a visual representation of the complexity of the issue they were exploring. Again, there is certainly scope for systematically investigating grant holders' experiences of the structured nature of the grants.

We did explore whether grant holders felt that these off the peg tools were 'HE ready' or should be revised for university settings. We were interested in whether anyone would suggest that 'feeling' might be downplayed in empathy or user journey mapping, given we don't often openly discuss our feelings HE. This wasn't raised. However, there was an interesting discussion about accessibility and the empathy map.

Discovery Grants for Education Innovation: Supporting the Adoption of People-centred Design in HE One Step at a Time

One of our educators had been working on understanding the experiences of visually impaired students using the university's Virtual Learning Environment. In this context, the question of what people 'are seeing' didn't sit right. For us, this prompted a desire to explore work done on accessibility and inclusivity in using design tools.

The next two characteristics connect the Discovery grants to the everyday work of the university, in that they address 'real world' challenges and are tied to existing governance structures. These were important to us because we have a sense that innovation often happens apart from 'business as usual' and it is then difficult to reintegrate it. The later characteristic wasn't discussed by our educators, but the former was very important in their accounts. Educators had a variety of reasons for applying for the grants. These opportunities included additional funding for an ongoing project, a way to explore a niggling concern that had bothered them for a while, wanting to understand the needs of a changed student cohort, and exploring the beginnings of an idea (note they used 'idea' to mean a possible solution rather than problem definition). We doubt that educators' judgement of the tools would have been quite so positive if they hadn't provided insights into a problem that was real to them.

The final characteristic we designed into the Discovery Grant was a report which included both the outputs of the workshop (the completed maps) and a reflection on the experiences of undertaking them. As educators, we see reflective review as fundamental to learning. This is reinforced by Carlgren et al.'s (2016) analysis. We are also trying to facilitate collective learning about using these tools. We found reflection to be more evident in our conversations with grant holders than it was in their written report. This may be because of time pressure or unfamiliarity with such a requirement. It may also be because the report was shared with 'existing governance structures', and this felt inappropriate or uncomfortable.

4c. Capability building: Mindsets for person-centred design

In order to make an assessment of whether undertaking Discovery Grants offers relevant experiential learning, we reflected on our discussions using Dosi et al.'s (2018) design thinking competencies/mindsets. To be clear, we are not able to say if undertaking a Discovery Grant creates a person-centred design mindset, rather we are examining evidence that the grants were an opportunity to practise these mindsets. We believe that the chance to practise each skill and bring it together with other capabilities represents meaningful experiential capability-building for the individuals involved.

We found strong evidence of the following mindsets: human-centredness, empathic, problem reframing, cross-disciplinary/professional working, openness to different perspectives, learning orientated, team working, critical questioning, desire to make a difference, and wholistic view. As an illustrative example, Dawney et al. (2023)'s blog demonstrates the first three of these mindsets in framing of academic malpractice as arising in part from "culturally specific orientations to knowledge and ownership...[and] authorial voice" rather than because of a deficit in international students' academic abilities. We saw similar empathetic reframing across all the projects. Their project also strongly exhibited cross-disciplinary and team working.

Discovery Grants for Education Innovation: Supporting the Adoption of People-centred Design in HE One Step at a Time

The team was formed from applicants in different disciplines who had made separate applications for grants on near identical topics. We saw many examples of team and cross-disciplinary working and openness to different perspectives, be these within the team or in the experiences shared by students and other colleagues in the workshops. Grant holders put forward wholistic views of the issues they are investigating after they have undertaken the workshops which integrate these empathetic and diverse perspectives.

We found some evidence of incidences of the following mindsets: tolerance for ambiguity, mindfulness of process, embracing risk, bias towards action, envisaging new things, optimism to have an impact. Although the final of these is perhaps implicit in undertaking a grant at all. If we take the example of another project's blog, we can see some of these elements exhibited. Kilner (2023, n.p.) sets out that she isn't seeking a definite solution that will work in all contexts nor that she has a sense yet what the possible solutions will be. She opens up her process, both by sharing the link to the working documents and by inviting people to get in touch and inform the ongoing process. One of the project teams, which explored academic malpractice in online exams, described a sense that the framing of the tools, as being about an imagined 'user' enabled them to have conversations with students that it would be otherwise really hard to have (given that they would have needed to act on any disclosure of cheating). The revealing nature of the conversations which were then had about the imagined users - what that described as 'saying the unsayable'- gave a sense of feeling edgy for people. They were processing how this new sort of conversation needed to be treated and shared.

Finally, we found little or no evidence of the following mindsets: abductive thinking, experimentation, creative confidence. This is not to say they weren't present, but we didn't see evidence of them which satisfied us. To some extent this may reflect the fact that we were primarily dealing with problem definition tools and these mindsets may be more present in later stages of a design thinking approach. It may also reflect that this was people's first encounter with these tools.

Dosi et al.'s (2018) design thinking competencies provide a useful framework for exploring the mindsets which grant holders practiced during their Discovery Grants. The framework could usefully be used in systematic research to understand mindsets pre and post intervention. It also provides a heuristic for reflecting on the experiences of grant holders and exploring if those mindsets we saw less – or no – evidence of, could be better supported.

4d. Barriers to using people-centred design: opportunities for universities

In order to make an assessment about the value of Discovery Grants as a means to introduce – and spread – people-centred design approaches in universities, we reflect on our experiences in the light of the barriers identified by Carlgrenet al., (2016). We are interested in understanding how these barriers seem to play out given the nature of universities as institutions. To be clear, we are not seeking to hide or downplay any difficulties but look for opportunities and ways forward.

Our sense is that Discovery Grants are pretty effective at side stepping three of the first four barriers Carlgren et al., (2016) identify: 1. Misfit with existing processes and structures, 3. Value of DT is difficult to prove, 4. DT principles/mindsets clash with organisational culture. Although at the point we designed them we hadn't come across this analysis, we had four years of experience of using these approaches with educator-and student-innovators. Universities are incredibly devolved institutions and educators have autonomy to apply for grant such as these which are an 'add-on' to existing processes (and workload). When we ran The Innovation Lab in 2021, the time commitment it required from educators acted as a barrier to them effectively 'adding it on' to existing commitments. Moreover, we designed Discovery Grantsto be undertaken without the need to 'buy in' to proof of the value of people-centred design. As we detail above, it is our assessment that the characteristics of Discovery Grants were effective in achieving our aims. However, for proof, we would need to see sustained interest in applying for grants as well as impact from undertaking them.

We are not in a position to comment on two of the identified barriers: 2. Resulting ideas and concepts are difficult to implement and 5. Existing power dynamics are threatened, although for the former, grant holders discussed their sense how powerful the narratives they collected would be in influencing colleagues to bring about the changes they sought. As with other areas of this reflection, systematic research could be used to get a more comprehensive understanding.

In reviewing, the final two barriers to the uptake of people-centred design in organisations: 6. Skills are hard to acquire, 7. Communication style is different, we identify three opportunities for universities. In these areas barriers may be present but the nature of universities - the diverse skills and outlooks that exist across the organisations - also offers potential ways forward. Discovery grants were heavily scaffolded and the resources we provided to grant holders resembled lesson plans which were broadly familiar to academics. Grant holders were therefore broadly comfortable facilitating these workshops, drawing on their skills and experiences as educators. Although these tools facilitated new types of conversations, educators were familiar enough engaging with students and delivering workshops. These pre-existing skills and familiarities provide a foundation from which universities could – if they wanted to – undertake people-centred design engagement quickly and at scale.

In addition, other pre-existing skills offer solutions to commonly experienced barriers to employing people-centred design in organisations. Universities are organisations staffed by people with many different specialisms and skillsets. So whilst Carlgren et al., (2016) suggest that the qualitative skills of undertaking user research interviews/workshops and analysing data are commonly under-represented in companies, this is not the case in universities. Some of our grant holders are well-seasoned qualitative researchers. For others who are not, there is the opportunity to make those skills available to them either through their disciplines or through interacting with other grant holders. Finally, another skill which Carlgren et al., (2016) identify as challenging is communicating visually. In one really interesting discussion, grant holders from the biological sciences who had undertaken systems mapping described how they had gone for support to colleagues in their department who map ecosystems. The ecosystem biologists had helped them present the system map they

had produced. For us, this was really exciting, not only because of the value brought to the Discovery Grant, but also because it introduces the idea of mapping education/university systems to a wider audience.

Carlgren et al.'s (2016) analysis of common barriers to people-centred design in organisations provides a useful framework for examining interventions such as ours. Their work confirms much of our thinking as we designed Discovery Grants. We suggest that the structure of universities and the inherent diversity of expertise offer promising opportunities.

5. Conclusion

We have been encouraged as we have reflected on the Discovery Grants we ran over the academic year 2022/23. We are sure the grants create value for the educators who undertook them. In reviewing the scholarly literature we have a sense that the grants create opportunities for the kinds of experiential learning that is important in influencing wider cultures. These may be small steps but they are steps forward and in the right direction. We are encouraged to take a similar approach to later stages of people-centred design methodology – utilising the same characteristics. When we do this we will be attentive to ensuring our grants support both the emotional experience and the creation of physical artefacts as well as the opportunity to reflect on the process.

Acknowledgements

We are grateful to the educators who have undertaken Discovery Grants for both their work and sharing their experiences.

6. References

- 1. Brookfield, S. (1995), *Becoming a Critically Reflective Teacher*, San-Francisco: Jossey-Bass.
- 2. Becermen, B. and Simeone, L. (2019), "Exploring the landscape of service design education: A preliminary review of current programmes in higher education". *International Association of Societies of Design Research Conference*, pp. 369-383.
- 3. Carlgren, L.; Rauth, I. and Elmquist, M. (2016), "Framing design thinking: The concept in idea and enactment", *Creativity and innovation management*, Vol. 25, No. 1, pp. 38-57. https://doi.org/10.1111/caim.12153
- 4. "D School (2020) "Keeping People at the Center in Virtual Teaching and Learning", *University Innovation Fellows Blog*, Available at: https://universityinnovationfellows.org/tag/faculty/ (accessed 18th October 2023)
- 5. Dawney, L,. Strawbridge, S. and Watson, A. (2023) "Building Integrity and Good Academic Practice in the Context of Cultural and Social Diversity: Learning from International Students", *Exeter Education Incubator blog*, available at: https://uoeeduinc.blog/2023/05/24/building-integrity-and-good-academic-practice-

- <u>in-the-context-of-cultural-and-social-diversity-learning-from-international-students/</u> (accessed 28th June 2023)
- 6. Dosi, C., Rosati, F., and Vignoli, M. (2018), "Measuring design thinking mindset", presented at: *DS 92: Proceedings of the DESIGN 2018 15th International Design Conference*, pp.1991-2002. https://doi.org/10.21278/idc.2018.0493
- 7. Dyer, S. (2021), "How can we support innovation in teaching practice?", *Times Higher Education*, available at: https://www.timeshighereducation.com/campus/how-can-we-support-innovation-teaching-practices-within-universities (accessed 12th April 2023).
- 8. Dyer, S. and Kuzmina, K. (forthcoming 2024), "The Innovation Lab: learning from a service design programme to support education innovation." In: Newton, R., Doherty, M. and Mutton, J. (Eds), *Person centred Design for Higher Education*, London: Routledge.
- 9. Elsbach, K.D. and Stigliani, I. (2018), "Design thinking and organizational culture: A review and framework for future research", *Journal of Management*, Vol. 44, No. 6, pp. 2274-2306. https://doi.org/10.1177/0149206317744252
- 10. Guersenzvaig, A. (2011), "Teaching Service Design to Design Students", *Touchpoint*, Vol. 3, no. 1, pp.46-48.
- 11. Hvidsten, A., Rai, R. and By, R.T. (2023), "Design(erly) Thinking: Supporting Organizational Change and Leadership", *Journal of Change Management*, Vol. 23, No. 1, pp. 1-11. https://doi.org/10.1080/14697017.2023.2172762
- 12. Kilner, T. (2023), "Neurodiversity and Universal Design for Learning: engaging students and educators", *Exeter Education Incubator blog*, Available at: https://uoeeduinc.blog/2023/07/05/neurodiversity-and-universal-design-for-learning-engaging-students-and-educators/ (accessed 18th July 2023)
- 13. Kinchin, I.M., Alpay, E., Curtis, K., Franklin, J., Rivers C. and Winstone, N.E. (2016), "Charting the elements of pedagogic frailty", *Educational Research*, Vol. 58, No. 1, pp. 1-23. https://doi.org/10.1080/00131881.2015.1129115
- 14. Nerantzi, C.; Hammersley, J., and Lopez, I. (2023), "Special Issue: Exploring people centred design in the context of curriculum and learning design in higher education", *International Journal of Management and Applied Research*, https://doi.org/10.18646/2056.cfp010
- 15. Stickdorn, M.; Hormess, M. E.; Lawrence, A., and Schneider, J. (2018). *This is service design doing: applying service design thinking in the real world.* Canada: O'Reilly Media, Inc..
- 16. Wrigley, C and Straker, K. (2017), "Design Thinking pedagogy: the Educational Design Ladder", *Innovations in Education and Teaching International*, Vol. 54, No. 4, pp. 374-385. https://doi.org/10.1080/14703297.2015.1108214