Enabling distance design students' wellbeing

"Mental health is a bit of a difficult one because it's like Christmas every day, you wake up to surprise and you don't necessarily know how the day's gonna play out." (Charlotte)

Summary

Retention and attainment of students with a mental health disability on Design modules is poor compared to other qualifications in Engineering and Innovation, STEM. Understanding changes to student wellbeing on design modules in a distance higher education setting is difficult. Previous research suggested that environmental, study- and skills related barriers impact on the wellbeing of learners at the distance.

This study sought to understand the experiences of barriers and what enabled design students' wellbeing at a distance.

Design education relies heavily on problem and project-based learning and design projects also tend to become more complex at higher levels of study.
The project aimed to:
- Gain a deeper understanding of the specific issues (barriers enablers and tensions between those) experienced by Design students with mental health disabilities throughout their study.
- Develop recommendations that could inform the learning design of modules in production and positive interventions in presentation to reduce the awarding gap and facilitate progression in Design.

We were particularly interested in how the intersecting factors of discipline, personal circumstances and support received during their studies from the OU and elsewhere impacted on the retention and attainment of students with a mental health disability on the core Design modules at levels 1 to 3: specifically U101, T217 and T317.

The study identifies avenues to balance tensions between conflicting experiences of studying design and maintaining wellbeing that our participants disclosed in a longitudinal, qualitative study using repeat interviews, experience sampling and a diary study. The findings provide insights from the learners' perspectives. Students reported strategies on how to deal with open-ended design projects and how to cope with feedback. They revealed how they currently seek and receive support for design work and wellbeing. We uncovered how learners keep to deadlines and how they approach social learning. The study also exposed enabling study rhythms to facilitate creative flow and how creative environments are set up in the learners' homes.

Background

The Office for Students reported in 2019 that students with a mental health disability have lower continuation, attainment, and progression. An analysis of E&I's awarding gap data in Oct 2019 revealed the priority to address the pass rate gaps for learners with mental health (17.7%) issues, physical disabilities (18.6%) and other disabilities (18.9%). Looking at specific modules in E&I, we noticed that Design students with a Mental Health disability have the worst pass gaps, between 15 and 45% at level 1, between up to 30% in level two and between 6 and 34% in level three courses Figure 1.
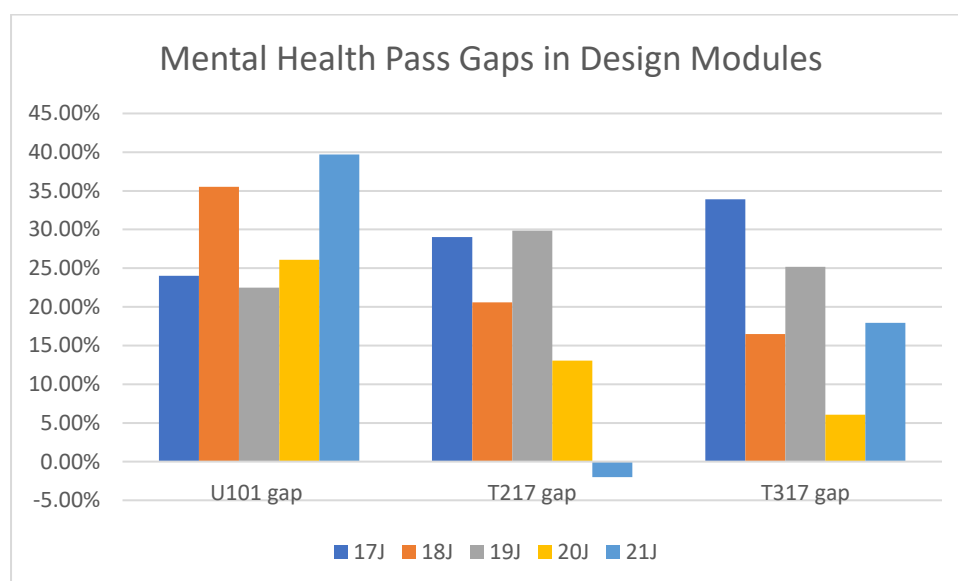

Figure 1 Mental health pass gap in design modules between academic years 17/18 and 21/22

The tables 1, 2 and 3 give a more detailed picture on the numbers of students with a mental health disability and completion and pass rates across several presentations.

Table 1 Level 1 Design Thinking Mental Health pass rate and gaps

Module Presentation	# Students at 25% FLP	Total Complete	Total Pass	Start to 25%	Completion from 25%	Pass Rate	Pass Rate Benchmark	Gap
U101_22B	39	15	14	92.9%	38.5%	35.9%	62.7%	26.8%
U101_21J	56	20	16	90.3%	35.7%	28.6%	68.3%	39.7%
U101_21B	56	12	11	87.5%	21.4%	19.6%	65.3%	45.6%
U101_20J	75	34	34	89.3%	45.3%	45.3%	71.5%	26.1%
U101_20B	39	17	17	84.8%	43.6%	43.6%	66.9%	23.3%
U101_19J	59	29	29	86.8%	49.2%	49.2%	71.7%	22.5%
U101_19B	29	15	15	82.9%	51.7%	51.7%	66.7%	15.0%
U101_18J	37	13	12	86.0%	35.1%	32.4%	67.9%	35.5%
U101_17J	31	16	14	93.9%	51.6%	45.2%	69.1%	24.0%

Table 2 Level 2 Design Essentials Mental Health pass rate and gaps

Module Presentation	# Students at 25% FLP	Total Complete	Total Pass	Start to 25%	Completion from 25%	Pass Rate	Pass Rate Benchmark	Gap
T217_21J	35	24	24	97.2%	68.6%	68.6%	66.6%	-2.0%
T217_20J	26	15	15	100.0%	57.7%	57.7%	70.7%	13.1%
T217_19J	18	8	8	100.0%	44.4%	44.4%	74.3%	29.9%
T217_18J	13	6	6	100.0%	46.2%	46.2%	66.7%	20.6%
T217_17J	11	4	4	91.7%	36.4%	36.4%	65.4%	29.0%

Table 3 Level 3 Design Innovation Mental Health pass rate and gaps

Module Presentation	# Students at 25% FLP	Total Complete	Total Pass	Start to 25%	Completion from 25%	Pass Rate	Pass Rate Benchmark	Gap
T317_21J	16	10	9	100.0%	62.5%	56.3%	74.2%	18.0%
T317_20J	14	11	10	93.3%	78.6%	71.4%	77.5%	6.1%
T317_19J	14	9	8	100.0%	64.3%	57.1%	82.3%	25.2%
T317_18J	10	6	6	100.0%	60.0%	60.0%	76.5%	16.5%
T317_17J	13	8	5	100.0%	46.2%	38.5%	72.4%	33.9%

While these gaps are high, there are also large variations between years as well as between levels. To understand the reasons behind this data, this study sought to:

- Gain a deeper understanding of the specific issues (barriers enablers and tensions between those) experienced by Design students with mental health disabilities throughout their study.
- Develop recommendations that could inform the learning design of modules in production and positive interventions in presentation to reduce the awarding gap and facilitate progression in Design.

Literature

Wellbeing is a key concept in mental health. It describes a broader dimension of mental health (Houghton and Anderson 2017). Every individual can have or achieve a level of wellbeing, including those identified with a mental health condition (i.e., medically diagnosed). A widely adopted definition of mental health is:

> *a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community.* (WHO 2013, 1)

An individual's wellbeing can change over time, and research in wellbeing of distance learning advocates for taking a social perspective of mental health that 'holds society accountable for change' (Lister 2022, 13). Lister argues that the design and delivery of distance learning (including materials, assessment, student support) could enable or create barriers to wellbeing for distance learners. The shift in responsibility to changing the systems rather than making change as the individual's sole responsibility is significant for the conception of mental health, because it introduces the perspective that educators and institutions can actively support students' wellbeing.

Research suggests that assessment is a key threat to student wellbeing: "high-stakes assessment practices particularly threatened wellbeing by heightening consciousness and anxiety of failure." (Jones et al. 2020, 441) Design assignments can be considered high stakes as an assignment tends to be project- and problem-based. The entire design process, regardless of what is assessed at the end, takes up a large part of a course, and it involves the individual deeply. Design projects are often ill-defined and become more complex at higher levels of study. Related research on mental health in Architecture education (although not in the distance setting) revealed that:
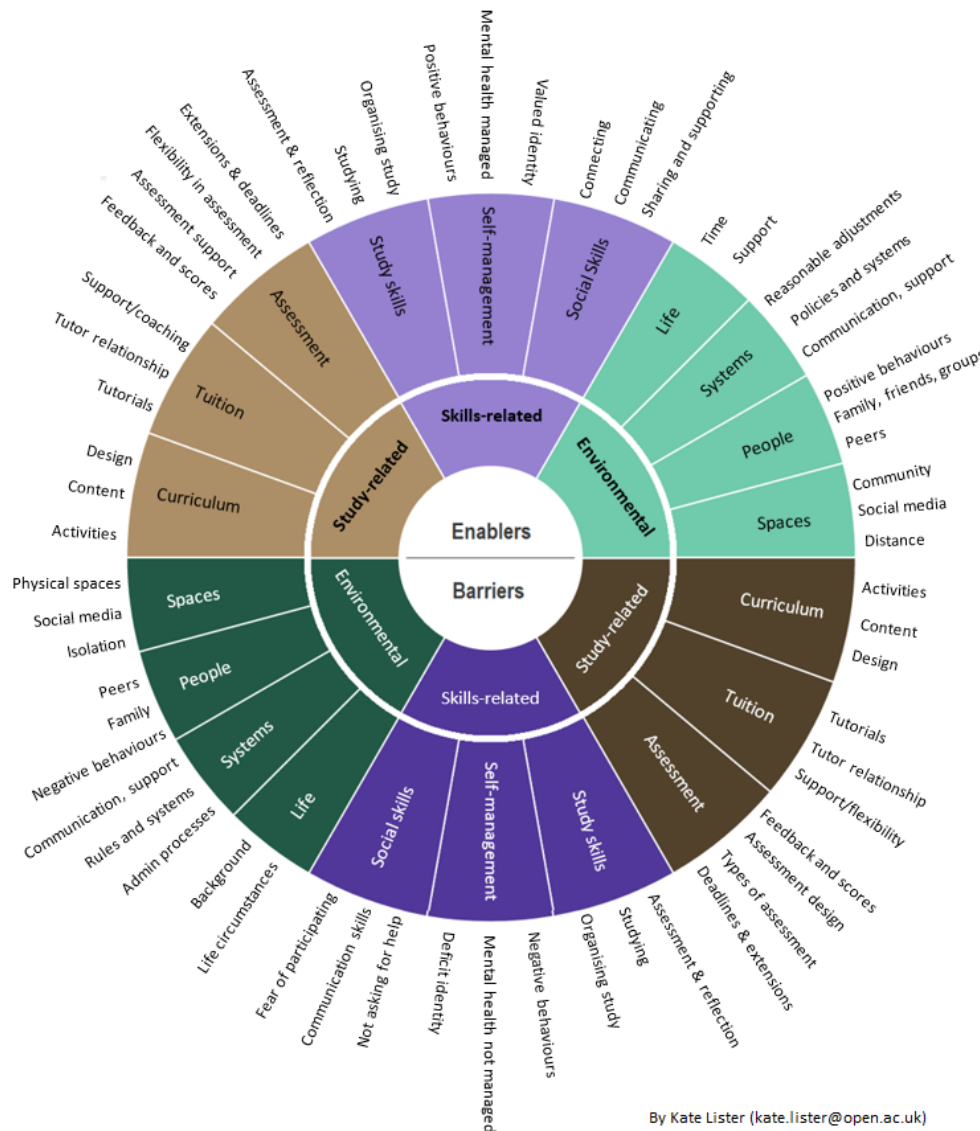
> ... students will incur stress at various times throughout the design process, the perceived levels of student stress progressively increased and shifted during the research, exploration, refinement, and finalization design phases of project solution (Gomez-Lanier 2018, 46).

Heightened uncertainty and stress offer additional challenges to learners with a mental health disability. Kendall (2016) highlights that a disabled student may face additional barriers around assessment in higher education. Distance design education attracts a large cohort of students who declare a mental health condition (between 8-10 percent on a level 1). With a population of students between 500-1000 this makes 50 to 100 students per module, and there is a much larger hidden figure of those who don't declare or are unaware. Less than half of those who register pass their first module.

Lister (2022) developed a taxonomy that offers a systemic perspective of barriers and enablers to participation and success, wellbeing in distance learning that deemphasises the dominant personal deficit perspective (Figure 1). The taxonomy covers three main themes 1) study related issues, including assessment, tuition, 2) skills related issues such as self-management or social skills and 3) environmental issues, for example, people and places. These themes and its 11 sub-categories structured our interview instrument and the findings sections of this paper.

Taxonomy of barriers and enablers to wellbeing in distance learning

Taxonomy wheel with central categories **Enablers** and **Barriers**.

Enablers (top): Skills-related — Study skills (Assessment & reflection, Studying, Organising study); Self-management (positive behaviours, Mental health managed); Social Skills (Valued identity, Connecting, Communicating, Sharing and supporting). Study-related — Assessment (Extensions & deadlines, Flexibility in assessment, Assessment support, Feedback and scores); Tuition (Support/coaching, Tutor relationship, Tutorials); Curriculum (Design, Content, Activities). Environmental — Life (Time, Support); Systems (Reasonable adjustments, Policies and systems, Communication, support); People (Positive behaviours, Family, friends, groups, Peers, Community); Spaces (Social media, Distance).

Barriers (bottom): Environmental — Spaces (Physical spaces, Social media, Isolation); People (Peers, Family, Negative behaviours); Systems (Communication, support, Rules and systems, Admin processes); Life (Background, Life circumstances). Skills-related — Social skills (Fear of participating, Communication skills, Not asking for help); Self-management (Deficit identity, Mental health not managed, Negative behaviours); Study skills (Organising study, Studying). Study-related — Assessment (Assessment & reflection, Deadlines & extensions, Types of assessment, Assessment design, Feedback and scores); Tuition (Support/flexibility, Tutor relationship, Tutorials); Curriculum (Activities, Content, Design).

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Research questions

1. What barriers and enablers do distance design students with a declared mental health condition experience throughout their study?
2. How do students currently balance tensions that arise through these barriers to enable wellbeing during study?

Methodology

We chose an experiential, qualitative, and longitudinal methodological approach to understand the learners' changing experiences over time. We focused on learners with a declared mental health disability and those currently studying on a design module at levels one to three. The mixed method study included repeat-interviews and experience samples and a diary study over a period of approximately four months.

Participant Sampling

A purposeful sample of eight students was selected (seven completed the study) from students with a D flag mental health on U101, 20J, 21B, T217 20J and T317 20J presentations (2 from each presentation). Sampling was informed by the examination of 44 student records provided by IET and through conversation with the tutors of those we considered to recruit. We considered students with Anxiety, Depression, Bipolar and Obsessive-Compulsive Disorders, and Schizophrenia. Sampling aimed for a maximum of diversity of types of disability and a spread of age, gender (one male one female per module, other genders were not recorded), ethnicity (BAME if possible), level of attainment in previous modules in the 8 students. With higher levels of study there were fewer D flag students and were only able to recruit one student.

Table 1 Overview of participants' characteristics, names are pseudonyms

Participant	Level of study	Ethnicity	Gender	Age range	Mental Health Declaration
Anna	3	White	Female	20-30	Bipolar, Anxiety
X	3	Mixed	Female	30-40	[didn't respond]
Harry	2	White	Male	20-30	Depression, OCD, Anxiety
Isobel	2	Asian	Female	20-30	Personality, Anxiety, Depression
Charlotte	1	Unknown	Female	20-30	Eating, Anxiety, Low mood
Ben	1	Unknown	Male	30-40	PTSD, OCD, Anxiety
Jake	1	White	Male	40-50	Depression
Zoe	1	White	Female	20-30	Anxiety

Four interviewers worked with two students each. The interviewers were not tutors to the participating student, also not tutoring on the module the participants studied on to avoid potential conflict or coercion. Interviewers received training in interviewing and mental health disabilities and how to respond to potential scenarios. Training resources were developed at the OU and in consultation with OU staff, such as Kate Lister, Neill Boddington and Emma Greenstein (Mental Health process advisors). ALs buddied up for extra support.

Methods

Repeat interviews

The interview questions aligned to Lister's taxonomy of enablers and barriers to wellbeing in distance learning (Lister 2022). The interviews focused on the intersecting factors of discipline (knowledge and skills, coursework, assessment), personal circumstances (work and family, environments, life events) and support received during their studies from university and elsewhere. We interviewed six students twice, towards the beginning and end of their modules' study. One student dropped out of the study before the second interview. The interviews took place on the computer using a video meeting software of their choice and were audio recorded. The first interview focused on getting to know the

person and their approaches to study and how they dealt with mental health challenges in general. The second interview focused more on challenging or positive experiences during study, and any support received during study.

Experience sampling and diary study

We conducted the experience sample and a diary study to understand the participants, feelings, thoughts, behaviours, and environmental factors influencing their study experience at that moment and over a short period of time (Myin-Germeys et al. 2018). Three times a day over a week during their study, we gathered the response to 4 short questions sent as text message to their smartphones regarding their experience in the moment, and a more reflective set of questions at the end of day. The subsequent diary study asked participants to record their feelings, thoughts and behaviours while completing a part of a project assignment in a format of their choice (e.g., video, audio, text, annotated drawings, or a mix thereof).

At the end of each experience sampling and diary recording period, the interviewer and participants engaged in a debrief conversation based on their responses. As the study progressed the engagement with the participants became increasingly dialogical. We held frequent interviewer team meetings to keep aligned with our methodology. Debriefs for interviewers and interviewees gave opportunity for further reflections and to validate the data we had gathered.

All research instruments are attached in the Appendix A

Data collection

All data collection took place at a distance using the computer and a smartphone. An inexpensive smart phone was offered to participants to engage in the interviews, receive prompts from the interviewer to share their experiences at that moment and keep a diary, and the phone is theirs to keep as reward token. If students prefer to use their own smartphone, then a £50 reward token was offered instead. In this case, the need for sufficient storage space on their personal smartphone to save the audio and video recordings from the diary sessions was discussed and confirmed with participants. To avoid this uncertainty, the preferred choice of receiving a smartphone from us will be stated. We sent a reminder email 2 days before the sampling started and asked the participants to have their smartphone charged and switched on.

We tried to accommodate the individual preferences as much as possible. We asked whether there were trigger words or phrases or painful memories or topics to avoid. We agreed data collection tools and formats with everyone. For example, some preferred to have video on or off, others preferred to walk while talking on the phone. We offered to split interview sessions and detailed in the attached interview information sheet, participants could withdraw at any time without giving notice or reason, which one participant did. However, we offered the participants ample opportunity to let us know if they wanted any support with whatever prompted the withdrawal. Since we had ask for an

emergency contact number from the student or their advocate's contact information, we could have followed up if any issue for safeguarding was suspected.

Overall, 10 hours of audio and video recordings were transcribed into approx. 100 pages of textual data. All personal and sensitive data was anonymised and securely stored.

Data analysis

All anonymised transcripts were loaded into NVivo for thematic analysis. Student experiences were initially coded inductively in the language the participants were using 'in vivo'. During this process, we constructed participant cases that provided background information, good study habits and struggles they encounter. While these narratives could be considered way of presenting findings in themselves, we saw them more as a vehicle to progress the analysis. We also felt that they might infringe on the participants anonymity, and hence are not enclosed in this report. After the initial coding of about half of the data, we combined and condensed nodes as well as after all the data was coded. This produced a list of 193 nodes. During the coding process, we noticed that some students reported enablers during study that other participants experienced as barriers. This is consistent with Lister's work, who identified the same themes as barriers and enablers (Lister 2022).

> "A key finding of this study is that barriers and enablers were found in the majority of themes, implying that aspects of the study can be both barriers or enablers for mental wellbeing and study success, depending on who is experiencing them and how. Crucially, this implies that there is potential for many of the barriers students experience to become enablers."

We decided to focus on how barriers are resolved and enable student wellbeing in the subsequent analysis of the data. Jones et al. (2021) have used the conceptual metaphor of 'tensions' between conflicting requirements in the design and delivery of learning. Tensions can either create barriers or they can be resolved and enable. Tension drafts were written in parallel to the thematic coding in NVivo. We used code co-occurrence, how often a node was coded together with another node, and the tension drafts as a rough guide to sort nodes into thematic clusters.

For example, several tensions emerged around *Assessment*. This theme was coded 271 times (our highest code occurrence). The highest co-occurrence with *Assessment* was *Doubt and uncertainty and Design evaluation, Being anxious.* At the same time, *Assessment* was coded together with *Being engaged in the study topic* and *Enjoyment.* Looking at tension drafts, we identified one tension between the appreciation of openness of creative project assignments and a fear of misinterpretation of the assignment and its feedback. The draft suggested that self-doubt whether they are on the right path led students to become apathic, to procrastinate, or become compulsive and anxious. Students didn't know when to stop designing when they engaged in open-ended project assignments. They enjoyed the assignments but where also anxious about their achievements. Examining the nodes (and

underlying data) in thematic clusters helped to refine the tension narratives, which are presented in this paper's findings section.

Ethics

HREC and SSPP approvals have been gained before we contacted our participants. We followed the Open University's Ethics Principles for Research Involving Human Participants. The project considered wide-ranging possibilities for the risk of harm of participants and interviewers. There was the possibility that discussing mental health-related challenges to learning design at the distance may be distressing for the students or interviewers. We have attempted to safeguard against this as far as possible by following the guidelines in Appendix B.

Challenges encountered

A thorough ethics review and approval process was key to the success of this study, but we learnt that the ethics approval process was only a part of the reality of being an ethical and responsible researcher when working with students with a disability. Interviewers were challenged with situations in which they needed to go beyond their role as interviewer to help participants to access the support they needed. The decision was made that student wellbeing takes priority over data collection.

For example, one student revealed experiences that their tutor and student support should be aware of. The student didn't contact the tutor, and instead only provided the issues they were facing to the interviewer as data. In this instance the interviewer, with permission of the student, mediated between the student support team, the student's tutor, and the student to make aware of the issues faced and arrange additional support.

We also underestimated how difficult the data analysis could be. The analyst was re-experiencing the issues a student was facing at the point of data collection which meant that the analyst needed to take more frequent breaks and the analysis took much longer than regular qualitative data analysis.

Findings

The tensions are roughly divided into study, skills and environment related following Lister's work, but some bleed into another.

Study-related tensions

Openness of design project assignments and the fear of misinterpretation

Barriers experienced

Design project assignments are kept slightly ambiguous to allow for a variety of creative responses. The assignments aim at increasing learners' cognitive flexibility and adaptive thinking. Students agreed that projects are a good challenge if they are in the right space of mind. But this openness causes uncertainty in students. Learners' wellbeing decreases because they don't know if they are doing it right and become anxious:

"Someone with an anxiety, you kind of – well I do at least – I go over everything that it could be in my head, so I might ask things that might seem obvious, but in my mind I've come up with twenty scenarios that it could be" (Charlotte)

"It's a good challenge if you are in the right space of mind." (Charlotte)

The unboundedness of a project brief necessitates interpretation of said brief. This also applies to the feedback given on project work. Learners overanalyse written project brief requirements as well as tutors or peers' feedback. The fear of getting it wrong leads to increased self-doubt and worsening mental wellbeing, apathy, or obsessive and compulsive behaviours. Students start to over- or underwork. They self-identify as being 'your own worst crit', or the 'brief cannot possibly be so simple' or that a 'prior good assignment mark cannot possibly have been justified'.

Resolutions that enabled
Project uncertainty is managed by keeping to a planned schedule for the course work. Planning for assignments enables learners to control or to deal with uncertainty proactively and preventatively. They study ahead; they build in time to check out multiple sources or examples and opinions to create more certainty. Students resolved uncertainty by reading the assignment feedback repeatedly and seeking additional clarification, although there were tensions who they asked for clarification (see 'Delayed but more valuable tutor feedback').

Another way to control the openness of the brief and its interpretations is to develop a passion for the topic. When students develop a sense of ownership, they may shift their perspective of success from doing what is asked to doing the assignment in a way they feel adds value. This also includes feeling enabled to reflect on their own past to motivate others:

"I did enjoy TMA 1, which was the one where it was designing a t-shirt. … Mine was taking something negative in my past and making it positive and that was my sign. … So my whole picture was to do with depression, anxiety, things that had gone on in the past and how you, the whole picture was negativity past and present and kind of being stamped out by positivity on top of it, it is hard to explain." John Student A

They may use social learning and co-design with others who are close to them to help frame, develop or evaluate the ideas or outcomes or develop skills and reduce uncertainty.

"Tomorrow I've got my mother-in-law coming round to help me with the embroidery, so I'm going to be actually learning how to embroider the T-shirt myself on a special machine, so that's happening." Nicole Student B

While learners with a mental health disability tend to be more isolated from peers, many co-designed with those who are close to them at home or work to help frame, develop, or evaluate the ideas and develop skills to reduce uncertainty.

Delayed but more valuable tutor feedback and immediacy of others' feedback

Barriers experienced

Misunderstandings can arise from using unfamiliar technical terms in written communication with a tutor. Students wouldn't question their tutor further as they fear to damage the tutor student relationship. Other reasons not to seek clarification from the tutor were the experience of delays in feedback from their tutor which creates anxieties exemplified by Charlotte: *"… it ended it up being days where I couldn't do anything, and I was just waiting for a reply."*

Only tutor feedback carries the level of expertise and reassurance that students are on the right track. Not least because tutors are also the markers of assignments. Family and friends are more readily or timely available but might not be critical enough because they haven't got the disciplinary knowledge to draw on:

> *"I would say I get a lot of support from my wife, … I will always read my TMAs to her and ask her if they make sense, like she might not necessarily understand the kind of technicalities, like the technical stuff behind it, but she'll be like, oh my god that sounds really good, or, you know, she will pick up times when there is a spelling mistake." (Anna)*

Resolutions that enabled

Activation, that is doing another useful activity while waiting for their tutor to reply, was a common resolution to this tension. It shifted a potential vicious cycle of worrying to doing something useful. Assignments that can be broken down into smaller tasks and are non-dependent on other tasks were hence seen as more enabling. The times students waited for tutor feedback were also used for self-care breaks, but this only resolved the tension if students were ahead and not close to a deadline (see 'Working towards deadlines').

While a written response from the tutor within a day was appreciated by all students, some valued telephone appointments where *"my tutor explained things to me in a way that I could understand and just at the same time reassuring me that what I'm doing is right. (Anna)*

Small peer study groups provided similarly instant feedback on assignment tasks that provided some level of reassurance: *"… the WhatsApp group is cool because you can post in there and it is like instant." (Ben)*

Seeking advice from multiple sources, such as from the counsellor, parents or partner was also common. Although it resolves the tension in favour of speedy over expertly advice.

Support for wellbeing and on design project work

Barriers experienced

Wellbeing is a spectrum and students experience changes in their mental health during their study. A decline of physical health has a profound impact on their mental health and vice versa. For some students starting learning again can cause changes in routines which can be disruptive. Others may receive their diagnosis alongside study, which distorts their perception of and communication about what kind of help they need or seek. A tension develops when students receive mental health counselling but seek design project specific advice.

Many students with a mental health disability meet a counsellor on regular basis, in fact more often than their tutor. The therapists are then often asked to help with the challenges that are caused by design project work, including how to make design decisions under the pressures of a deadline and what to prioritise in project management. Counsellors tend to give preventative advice helping to develop good habits but may not help in the moment:

> *"I felt the advice she [DSA or counsellor] gave on the actual Uni side was more kind of I don't know like financial help or kind of more kind of like equipment you could get, that sort of thing, but that doesn't necessarily help day to day like I'm stuck with this now and I need help to kind of change" (Charlotte)*

Resolutions that enabled

The declaration of mental health challenges to the university was seen as an enabler. This triggered additional tutor communication that was more geared towards design, which was seen supportive.

> *"My U101 tutor put some time aside for me and we did have a sort of one on one for maybe 45 minutes/1 hour – and I didn't ask for it, it was the tutors' suggestion and that was quite nice because I was new to Uni and maybe wanted to ask, if that makes sense, that was quite nice!" (Harry)*

While most counsellors helped with preventing poor wellbeing, some proactively worked with the student by breaking down tasks and provided critical reading and feedback on assignment drafts.

> *So I spoke to my [DSA] Mentor and sort of said to her, I'm having a bit of a bad time and I don't know what to do and how to progress from here, ad she said OK let's make a bit of a plan – so the strategy that we came up with was to strip all the way back and start small and simple, so I was thinking of this as a much bigger problem, I was thinking of the whole problem all at once, whereas what the plan was to break it down into smaller chunks and then devise plans to deal with the smaller things and then tackle the bigger problem! (Ben)*

Likewise, some ALs receive additional mental health training or are supported by AL colleagues who are MHFA (Mental Health First Aider) trained and bridge the gap between preventative and problem-solving support.

John Student A said: "my tutor told me he knew about my MH and asked me if there is anything I needed from him. That was nice…" Later, after a period of depression triggered by continuous physical pain, the student was behind, and the interviewer (MFHA trained) arranged with the student's tutor a catch-up session:

> "…he is going to be phoning me soon because what the university has done, I think he, they want me to write down where I think I've got to and write me notes of things I know and then ask the tutor what are the bullet points of important things I need to catch up from there, which is going to be really helpful." (Jake)

A balance needs to be gained between preventative and practical support working together in timely manner to enable student wellbeing. For example, practical support is not processed if a student is unable to regulate their emotions, thoughts and behaviour causing episodes of anxiety or depression. First the triggers that caused the dysregulation and stress levels must be reduced before practical advice can be taken on. To achieve this, students employed other coping mechanisms, such as taking a walk, listening to music, playing a game, or having a chat with friends and family that turned out to be inspirational for creative project work as well.

Skills-related tensions
Working towards deadlines and adjusting study rhythms
Barriers experienced
Coping mechanisms give the student control but they can quickly become disruptive when students are spending longer on an activity than they should, and a deadline is approaching. Suddenly a coping mechanism is seen as a barrier:

> I do feel a little overwhelmed and leading to a level of anxiety due to the pressure I tend to create myself (involuntarily) for upcoming deadlines. (Harry)

In design project work, something like an idea not working the way it was anticipated can cause an episode of poor mental health. Unforeseen events such as the loss of work due to IT issues can also add to the sense of loss of control, causing anxiety or depression especially when a deadline is looming.

> "I had these basic ideas to start with, we actually just did the game. It just didn't work. And so I started getting anxious cos I've only got a couple of weeks to do this and actually in hindsight 2 weeks on the timetable timer, I was actually a little bit ahead. I knew what I was doing. I had time, but I had such a rough mental health for like 5 days, I just couldn't get up because I felt so stressed." (Ben)

While this student's coping mechanism of taking a short break worked in their favour because they were 'ahead', another student had to take a break of 4 weeks and developed avoidance-based coping mechanisms which had them nearly missed their deadlines if the MHFA trained interviewer hadn't stepped in advocating to the student's tutor on behalf of the student (see case description in Support for wellbeing and on design projects).

Resolutions that enabled

Flexibility in distance learning enabled students to keep studying without the fear of losing out because of missing a lecture or not coming to the studio. Most learners work with two alternating rhythms, one of extreme regularity and predictability and another of intensive periods of short but irregular study bursts. During days with a regular routine, students keep to hourly rhythms intersecting self-care, chores and studying. This opens the opportunity to follow a creative flow if it occurs (see 'Following the flow'), or sit out an anxious or low mood phase, and take time off if they need to, to care for themselves:

> *I need a routine but at the same time I need a couple of days a week off that routine just to change things up a bit, obviously otherwise it just becomes a bit mundane! (Charlotte)*

Students know precisely that overworking has negative impact on their wellbeing, but they plan for a break after the burst. Students use the indication of time a task should take given in the module materials to set a time limit to the study burst and to keep to the deadlines. They also use their family and partners to monitor that a burst doesn't extend for too long by sharing assessment deadlines and module workload.

Independence and social learning

Barriers experienced

Students with a long-term condition accept that they may need to temporarily interrupt their studies rather than studying on 'bad days', which creates frustrations and adds to their anxiety and stresses. This trade-off was often used to justify not to engage in social learning with peers. Social learning in design relies on learners engaging in similar tasks at the same time often in a shared space. Independent learning is a large part of the motivation to study at a distance. Students are aware of the benefits of social learning, but their disengagement can be motivated by trauma, by experiences of bias and discrimination, or social anxieties:

> *I usually prefer lone working but as a result of that preference I'm not so good at interacting with others to improve my ideas. (Harry)*

> *I don't feel confident enough to ask people for their opinion because I'm worried it's not going to fit with what I want, or you know, it is not going to be a good impression. (Zoe)*

"I'm better at working like one on one or with the tutors rather than the students"
(Charlotte)

Student with a declared mental health issue often battle with emotional (dys)regulation and don't want to commit to building social relationships with peers. High emotional states drain students. Trying to keep emotions under control les learners to prioritise coping strategies and self-care. The prioritisation negatively impacted on their motivation to study, especially on social learning tasks.

Resolutions that enabled

Independence was seen as enabling as it honed the student's skill of self-criticality and self-evaluation of design ideas: *"I'm quite critical but that does come in handy when you are actually trying to pick out ideas, or like disregard some and keep some."* (Charlotte)

Even though students prefer not to interact directly with others, listening into live or recorded conversations and tutorials, sometimes repeatedly, was seen as an enabler. Recorded tutorials simulate a sense of being with others. Having assignments topics and tasks explained and interpreted by a 'real person', with video on, was important.

The virtual studio could be overwhelming or not timely if students were ahead of the study plan. Although when they were asked to upload images of their work as part of the assessment, they complied. Following visual media streams on Pinterest or Instagram was seen as valuable.

Social learning within the learners' safe spaces at home, with family or partners was seen as the most appropriate resolution. They preferred to engage face to face, including face to face tutorials, if they had the option and the environment was set up for it (safe space).

Following the flow of creativity and knowing when to stop or move on

Barriers experienced

Balancing wellbeing with achievement in a period of intensive work created tensions. Following a creative flow is satisfying and creates positive emotions, especially when students are ahead in their study not nearing a deadline. The potential negative impacts from breaking study and life routine, include sleep disturbance, a messy desk, or loss of daily self-care routines, such as exercise. This creative overdrive can lead to obsessive loops when students no longer know when to stop designing. Not knowing how far to take an idea builds up anxiety leads to inefficiency and overworking, the feeling of losing control and being behind (see 'Working towards deadlines').

> *If I'm in the flow of trying to get it all together again I kind of forget where my sources have come from and trying to like add all those in and not break the flow is a bit difficult. (Charlotte)*

Creative flow also spills over into everyday life, and rather than focusing on studying and assignments, students go on tangents with their creativity:

> "creativity – it activates a lot of my creative side in my head which feels quite refreshing and very enlightening […] – the thing that I kind of get really frustrated is that, when it activates my creative side it activates everything, I can't just focus on, oh ok I need to be creative on the TMA , that's why its activated but it gets to the point that I'm trying to create what I need in the house, or what I need as a person, and what other people need becomes like jumbled up so I think that's the next question really when it gets to the flow and, it just flows! It's like a waterfall – its not just a river it's just a lot of ideas flowing and I don't know which one – I know which one to be focusing in because I'm trying to do the TMA at that time" (Isobel)

Flow also often happens at inconvenient times:
> I think, with the OCD, I guess, like obsessive loops. … Yeah, so it's like a huge flurry and wave of ideas and different things that come to me about something, you know, it could just be touches of colour or the other, maybe changing that slightly. So yeah, it does, it does definitely happen to me, for sure. I tend to find it is at inconvenient times as well, like when you're trying to go to bed at night. (Ben)

These obsessive loops and neglect of wellbeing then lead to creative inhibition and an inability to evaluate when it is time to stop and move on to another task.

Resolutions that enabled
Students break down assignments into smaller chunks to create a structure for smaller more contained flow sessions to emerge, for example:

> "I broke it down into smaller things and I knew I had lots of check marks it was I only had to get from A to B and then B to C and then from C to D rather than A-Z! which seemed like a huge jump – so it helped for me to keep that small as well, it helped – it kept the anxiety low and I tried not to put too much pressure on myself." (Ben)

Whenever they come across something relevant or produced ideas, students tried to get it out of their heads onto 'paper' or another medium, for example, they keep voice memos and, or post its or diaries everywhere in the house:

> I'll be like, in bed trying to sleep at night, and this whole wave of ideas just come ….
> So then it's like, grabbing the notebook as quickly as possible and trying to draw down as many things to give myself reminders of that stuff as possible. (Ben)

Some students insert any ideas or relevant information in their assignment template, then they sort and edit it regularly. Students' self-criticality helps to evaluate ideas from flow sessions and use the most promising idea to progress. While some students are compelled to carrying through an idea to perfection and seeing this as their main achievement (a good grade is a bonus), others realised that "you sometimes need to aim for good enough"

(Anna). Students use the recommended study time given in the module materials to assess when to stop and move on. They make use of their friends and family to monitor their progress and wellbeing (see 'Working towards deadlines').

Environment-related tensions

Study environments for practical and creative work

Barriers experienced

Small, dark study rooms in the student's home are often not conductive to creative work and flow sessions. Students needed a large, light open space to immerse in a productive mess and see inspirations around them. Students use the dining table in the living room for creative work, but this creates tensions. They cannot spread out or leave the dining table messy. Needing to be mindful of others in the house creates barriers in a period of flow when students would rather like to 'power through'. The shared home environment also offers distractions that are sometimes counterproductive, such as being reminded of chores, or being distracted by others watching TV. Partners can cause irritation being around the shared living spaces, for example making the slightest noise interrupts the flow, especially when a difficulty subject is studied.

Some prefer to make a mess in their smaller study room. They acknowledge the drawback of having no company and no spontaneous feedback from family or partner. Especially in a low mood phase, students don't want to be alone in your dark study space, they won't be motivated or inspired by what's around them. "It has been hard enough to get upstairs [small study] to do anything." (Jake)

Others cannot make use of the creative spaces at home because they are at work:

> "My better ideas are from when other people are involved; I think! They tend to come up randomly for me, especially when I'm at work – which is like the worst time to get them because there is really very little you can do about it!" (Harry)

Resolutions that enabled

Despite drawbacks, many students create their own mini 'design studio' in a larger, shared space at home. This offers opportunities for feedback from people they feel comfortable with. Some students first tidy and then curate the desk, making it accessible for this important feedback. They build the 'curating your desk activity' into their daily routines before others return. This positive side effect that students had, created chunks of study time to disrupt obsessive loops. Listening to music allows students to avoid unintended disruptions and focus on the task in the home studio. Other students, whose office is large enough, prefer to withdraw in their private working space but they build in a routine or rhythm to keep connected with others in the home, such as time for tea, or a walk, or other shared tasks. Others developed communication devices (such as a traffic light system) to signal whether they needed interaction or needed to be left alone in their study space.

Those who "tend to get the ideas whilst at work", develop them further at home! They prefer studying practical activities during the week and in the evenings and dedicate their weekend to theory, while others prefer reading throughout the week when their family is at work but do the practical tasks at the weekends when others are around throughout the day to give feedback or engage in the practical work.

Ideas and recommendations for possible resolutions

During the study, our participants, both students and staff, suggested further potential resolutions to support student wellbeing. They fall into two categories 1) assessment and support, and 2) curriculum design. Some of the suggestions our participants make align with results from a large student survey Lister has conducted with OU students as part of her EdD research (2022 p122-127), but some seems to be bespoke to or emerge more specifically in creative project modules.

Assessment and support

Students recommended that a mixture of open-ended and well-bounded assessments should be offered in any design module to increase wellbeing and continuation. As discussed before, most design module assignments are project based. If an open-ended project assignment is important for demonstrating the learning outcomes, then the assignment should allow for maximum openness, students recommended. Defining the scope of the project becomes part of the assignment and gives scope for the individual interests and values to be embedded into the project. The management of an open-ended project should be supported appropriately by a tutor and be reflected in a flexible but open marking scheme. Increased assessment flexibility and additional wellbeing support narrowed the retention gap during the first year of the pandemic in 2020. Soft deadlines and no high stakes assessments, as well as more flexible assessment banking for students with additional needs could be imagined, which aligned with Lister's findings.

Students suggested to adopt a more dialogic approach to open-ended project assignments. This includes more frequent tutor contact to address the issues of misinterpretation and knowing when to stop designing.

> "I wish I'd have found a way to put my ideas forward to my tutor to gauge how far I needed to go with my ideas." (Harry)

Students suggested that frequent and timely feedback could be from any module tutor not necessarily their own tutor. However, the forum moderator who takes such a role on the module-wide forum in design modules was not seen as appropriate, because it wasn't perceived to be a safe space. A safe space is 'smaller'. The mini tutor group on WhatsApp one student had created was imagined as a solution with a tutor on the chat instead of peer group chat only. Instant chat gives students multiple opportunities to align with peers during a project. The solution of frequent formative feedback seems to be more unique to creative project modules.

Likewise, peer groups that bring together students with Mental Health issues might enable students to talk about changes amongst themselves in a safe space. Mixed or large groups were not perceived as safe. The safety and immediacy of small instant message groups was something that should be considered in the future. A MHFA trained design tutor or staff could be invited into this group. Such peer groups could prompt regular reflection on group members' wellbeing which was seen as something positive in the experience sample method participants engaged in. Since designing for others and with others was seen as enabling wellbeing, these peer groups could also be used for creative sessions. Students found it rewarding to consider mental health and other disabilities or marginalising experiences in their designs, and these peer groups could help facilitate this. Literature suggests that caring for others, and making a change are important wellbeing strategies (NICE, 2022; Hesketh & Cooper, 2019). However, learners should have a choice to involve partners or family in collaborative learning tasks instead of peers. We should not assess collaboration or comments received by others (which a student cannot control) but explain to students why collaboration might be beneficial to wellbeing and teach students how to collaborate with their family to provide helpful feedback.

Students understood that timely and quality tutor feedback needs to be enabled. Tutors with multiple tutor groups or modules struggle more with giving timely and helpful feedback. While Lister has not found this in her research, project-based tuition seems to bring awareness of the impact of staff wellbeing on students' wellbeing to the fore (O'Brien & Guiney, 2018)). A feedback triage system could be imagined, starting with a chat bot (which is already use in some areas of OU student support, but could be expanded using the recent developments in AI supported dialogic queries), and leading to a module tutor / forum moderator reply if the question is not resolved, and if this still doesn't resolve the issue your tutor replies. A new KMI-led Test and Learn research will be trailing such systems. Students also suggested that they could give feedback on how helpful feedback was. This emphasises the dialogic nature of project feedback and assessment, not mentioned in Lister's extensive work.

To address the issue of misunderstanding or misinterpreting instruction and feedback students suggested to make more use of the tone of voice in audio or video instructions and to highlight the important improvements to be made in tutor feedback. Design has been trialling audio feedback in conjunctions with written assignment feedback with some tutors with good results for improving student tutor relationships (Jones and Hilton, 2021). KMI has been trialling a conversational AI interface that rewords course materials to make it easier to understand for the student. In addition, instead of lecture-style tutorials, workshop or crit-based tutorials could be offered to address misinterpretation of tasks. These would need to be offered flexibly or multiple times for those who are ahead and those who are late in their study. Recording crits to enable listening in was also imagined to be enabling by students.

If no family member or partner can act as advocate, and DSA support and mentoring isn't in place yet, it may take up to 16 weeks to set this up with a new student, a special tutor could. Proactive tutor support was seen as supportive by students. A tutor advocate could

speak and act for you some participants suggested: "when you are so down you can't do anything anymore". While friends, family, and partners help students to regulate or monitor their routines, not everyone has this kind of support. A tutor advocate could spot changes in participation using the early indicators dashboard when they monitor student with a declared mental health issue but who have not declared an advocate. They could also build bridges between students and their tutors. While proactive support is important tutors also found that students need to be better supported to contact them, they need reassurances that it is okay to ask for help. Supporting D-flag students does take more time and empathy, tutor appraisals and module time allowances need to reflect the additional student time needed in a tutor group, to support a tutor's wellbeing.

Curriculum design

Design focused wellbeing activities would be ideally placed in curriculum and VLE tools to activate new behaviour through designing and creativity, and this could be supported by a design tutor in tutorials and by a tutor advocate. Materials should highlight that certain creativity techniques are also enabling wellbeing, such as taking a walk for inspiration, gamifying learning elements or using social learning for evaluation of ideas and decision making. Learning materials should make aware of the problems over-criticality can bring and that it can sometimes inhibit decision making. The instructions could introduce a positivity evaluation routine, encouraging the student to identify at least three positive points about an idea, design, or task etc, before they criticise or worry. In addition, a routine to set aside 10 min a day in which students can worry about everything that didn't go right can help to get the negative thoughts out of their heads and limit obsessive loops. This is supported by literature that recommends putting aside a time to worry and reflect on your wellbeing each day, but not to focus on it any other time to disrupt cycles of continuous worry or low mood.

> *"The research has been quite helpful to me too actually - I don't know why but it somehow keeps me more focused answering the questions every day." (Harry)*

Following such activation-based approach, materials could encourage and reward students to do something quickly, badly, or lightly. A routine of completing small, active tasks fast without worrying about quality could encourage quick evaluation without encouraging being overly critical. This in turn highlights the positive aspect of iteration in design. This could even be applied to design project assignments where formative feedback is given more prominence.

The course materials could dedicate more time to discuss the study space and routines in students' home learning environments. It not only encourages students to think about how study spaces impact their learning and wellbeing, but it also teaches design concepts around the built environment.

Wellbeing can be built into the online spaces the students use, specifically the VLE tools. The time and workload management in practical work and social learning can vary widely from student to student. Students suggested to indicate or label in the study planner where in the week is a focus on theory and practical work, social or independent learning, so they can

adjust or tailor their study patterns. It was recommended to show workload in study planner in addition to the study materials.

Technical language and module jargon can be difficult to interpret for students. A VLE based design language glossary of terms with examples of use could introduce consistency in language not just throughout the module but also the Design Qual. This was identified in parallel by the Design Curriculum Interns in 2023 and is now being implemented by them.

Reflections on methods

Students reacted positively having engaged with the daily experience sample and diary prompts and debriefs of those methods.

> *"The prompts were fine, and it was nice to have a bit of a diary going and a bit of a reminder of, you know, what you are doing and so it was quite nice at the end actually to read back over and see the progress that had been made and the fluctuation of the variations and stuff..." (Charlotte)*

In the final de-brief, one student commented about working with the interviews, the diary and the experience samples responses by saying:

> *"I enjoyed it more than going to therapy and I know myself better now."* (Anna)

Debriefings were extremely important, both between participant and interviewer and between interviewers. De-briefs build trust through more informal conversations and helped to overcome some of the limitations as an interviewer. They also helped retain participants. The success of the debriefings inspired a change in the second interview method be more conversational. Flexibility of approach was key in this study, timings and format of interviews and recordings for the in the moment responses and the diary messages. If we were to repeat this study, we would change the design of the study to be much more dialogical, co-constructing, aiming at building a rich story from the onset. We would also maintain the debriefing approach during analysis of the data, as the stories are re-lived by the analyst again and again, which can slow the analytic process.

Regular communication seems to be key to support wellbeing in our students. This can be achieved in different ways. Like Huxor and Philcox's (2023) finding that a weekly postcard sent to students keeps them on track. An AL who attended the STEM Mini Teaching Conference in 2023 commented in the chat about the successful use WhatsApp messages in postgraduate modules in a tutor group of up to 6, but they could not imagine it being done with a tutor group of 20 students.

Impact

Short cases and tensions were used in curriculum design workshop with the Design and Innovation Qualification team. They informed feedback in critical reading of teaching material drafts and helped to rewrite the assessments for U101 for 23J. The findings fed into changes for the U101 tuition strategy.

We have disseminated this work at the OU, across STEM at eSTEeM conferences and in a workshop for WELS. In a recent eSTEeM conference workshop, many participants voiced that they have either observed or can relate to the tensions, which indicates a wider applicability beyond the creative subjects and project-based modules.

Nationally, we have presented this work at the Advance HE EDI conference in 2022. The findings informed further research and an international conference paper at Design Research Society conference in 2022. We have submitted this work to a special issue in the International Journal of Art and Design Education, which has been accepted with just minor revisions in will be published this year.

This work also informed a research bid in 2022 (HYDI), unfortunately unsuccessful, but rated 5* by the reviewers. The project bid sought to research the impact of accessible distance education on the employability of designers with a mental health challenge in the profession.

Discussion and conclusions

The study has presented a series of barriers and enablers experienced by distance design students with a declared mental health condition. It focused on how these students currently balance the tensions they face to enable wellbeing during their study. Many of these tensions might be resolved differently in a traditional design education setting, e.g., through ongoing tutor and peer discussions in the studio. The participants in this study have tried 'traditional' learning settings but were failed with a lack of flexibility in these settings. The open supported learning model of education offers access to education and flexibility during education at scale (Cross and Holden 2020). However, comparing distance to traditional studio design education (e.g. Gogu and Kumar 2021) support the premise that tutor availability to give frequent formative feedback could possibly be one of the most effective ways to decrease the barriers to progression of learners at a distance not just for those with a mental health disability.

The dominant tension in design education of being uncertain about what is required is resolved through social mechanisms in traditional studios. Glavenau (2022) argues that the creative process of turning not knowing into knowing is fundamental to learning. But he continues that if we don't know for too long, anxieties emerge, and learners feel more vulnerable and uncertain. We must acknowledge that the traditional social and face to face design education paradigm may not enable learners with a mental health condition. They harbour a strong desire to avoid uncertainty due to emotion dysregulation that can go with it (Zielińska and Karwowski 2022). Because of the social risk or the perceived embarrassment of sharing ideas with their peers or other people, they may prefer to hold back (Erez and Nouri 2010) or only share ideas with the people they trust such as friends and family. The experiences point to the need to create more trust in distance education systems and support structures such as timely tutor feedback and safe online spaces for peer interaction. As reported by Orr (2022) in a study of female distance learners with

depression, careful consideration should be given to increasing peer interactions. Kotera et al. (2021) suggested supporting social learning in disabled distance learners through peer mentoring rather than peer collaboration to ease the learners' fear of further stigmatisation. When other systemic uncertainties are controlled for, learners may focus on creative uncertainty which was argued to bring out originality (Boden 2003) and motivate students rather than creating additional barriers (Zielińska and Karwowski 2022).

Comparing our insights from linking barriers to enablers with Lister's extensive work (Lister 2022), the topic of self-management brought out an interesting contrast. While Lister found self-management much more strongly related to barriers, the development of study skills was seen as an enabler by students. Our findings suggest that project-based assignments enable the building of study skills around self-management. Design projects are frequently open-ended, and there is often no single perfect solution to a problem. Knowing when to stop designing because a satisfactory solution has been developed, also called satisficing (Simon 1956), is a core self-management and decision-making skill for developing designers. The way design is taught might contribute positively to learning self-management skills.

Without a physical design studio and its embedded rhythms, learning to control rhythms of regularity and irregularity - or creative flow - are possibly key enablers for wellbeing in distance design students. Csikszentmihalyi's work on flow (1990) and later work with Seligman emphasised the 'building of positive qualities' from their own regular routines or from the people around them (Seligman and Csikszentmihalyi 2000, 5). The study routines for a distance student are tied to the positive relationships and safe spaces at home. But we also saw that routines embedded in learning materials, in tutorials and assignment feedback, can have a positive effect on student wellbeing.

In summary, dealing with uncertainty, learning satisficing, and managing creative flow were the key aspects to consider when educating design learners with a mental health condition and to enable wellbeing. Finally, our participants in this study have offered numerous ideas of how distance learning environments could be improved, many of which align with Lister's suggestions of future support or change projects at the OU, while some where more specific to creative project work, such as dialogic and formative assessment, which we are currently exploring in our curriculum development. Future work will focus on working with students and educators as partners to change project-based learning to facilitate wellbeing.

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Appendix A Research instruments: interviews, experience sample and diary study

Appendix B Safeguarding